

# The Nutrition and Hydration Digest

Improving outcomes through  
food and beverage services

**3rd Edition**



# The Nutrition and Hydration Digest 3rd Edition

Produced by the Food Services Specialist Group in consultation with the British Dietetic Association.

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# Foreword

Welcome to the third edition of this valuable, evidence-based resource aimed at preventing and treating malnutrition in healthcare. Malnutrition is a major public health issue. Approximately three million people in the UK are malnourished or at risk of malnutrition.

This document is for everyone working within the healthcare food service setting. To reduce the incidence and prevalence of malnutrition, there must be a multi-professional and multi-agency approach to delivering high quality, nutritious, appropriate and safe food and drink services.

The Nutrition and Hydration Digest is a vital resource that supports the new National standards for healthcare food and drink. The third edition has been updated to reflect the increasing importance of the role of the food service dietitian and incorporates new higher protein targets for hospital meals.

It is pleasing to see sustainability has also been included within this update, reflecting the role we all must play in working towards a more environmentally sustainable future.

I would like to take this opportunity to congratulate those who have collaborated on this edition and to thank all of you who work so hard and care so much about providing excellent nutrition and hydration for the people within your care.

**Liz Stockley**

CEO, British Dietetic Association

# Introduction

The BDA's Nutrition and Hydration Digest is a fundamental resource for all involved in the provision of food and drink services in healthcare. It is now part of the National standards for healthcare food and drink, meaning that all NHS Trusts in England must comply with the nutrition standards outlined in the Digest as part of the legally binding NHS standard contract. The Digest provides expert knowledge and support for professionals working in the healthcare food service sector.

The review of The Nutrition and Hydration Digest for the third edition commenced in February 2021 with the formation of a working group of 35 dietitians and caterers from across the UK. The working group came together to review and update the Digest to ensure it reflected recent nutritional evidence and the current operational challenges in healthcare food service. This included a stakeholder consultation event in July 2021 and a British Dietetic Association (BDA) member poll in May 2022 to ensure that any considered changes were warranted and achievable.

Another aim of the review was to improve the layout of the document, ensuring its workability as a reference guide with better online accessibility and links to key information.

## **Some of the main updates for the third edition include:**

- 
- A new chapter on sustainability
  - Updates to the nutritional standards to meet the latest evidence, including a higher protein target and menu code
  - Business case guidance to support the implementation of new food service dietitian roles
  - Alignment with the new National standards for healthcare food and drink
- 

The new edition of the Digest has seen further legislative and best practice developments in healthcare food service since the previous edition. It is recognised that positive changes are gaining momentum in this sector and further updates are likely to occur prior to the next review. To ensure the Digest is kept as up to date as possible, a new online version has been published. We encourage our readers to access the live document rather than using a hard copy, wherever possible (also in support of our sustainable focus!).

We want to thank our colleagues for all their hard work on this document and hope readers will appreciate the input from such a wide range of specialists and professionals, knowledgeable in the field of healthcare food service dietetics.

**Megan Hughes and Elise Kelly**

Co-Chairs of the Digest Review Working Group

# Glossary

## A

**AHP Allied Health Professional**

**AIDS Acquired Immuno-Deficiency Syndrome**

**ASD Autism Spectrum Disorder**

## B

**BAPEN** British Association for Parenteral and Enteral Nutrition

**BDA** British Dietetic Association

**BMI Body Mass Index**

## C

**CAMHS** Child and Adolescent Mental Health Services

**CIEH** Chartered Institute of Environmental Health

**CoE** Council of Europe

**CoFID** Composition of Foods Integrated Dataset

**CPU** Central Production Unit

**CQC** Care Quality Commission

**CQUIN** Commissioning for Quality and Innovation

## D

**DEFRA** Department for Environment, Food and Rural Affairs

**DH** Department of Health

**DHSC** The Department of Health and Social Care

**DRV** Dietary Reference Value

**E**

- E Menu code for higher energy**
- EAR Estimated Average Requirement**
- EFAD European Federation of the Associations of Dietitians**
- EHO Environmental Health Officer**
- ERIC Estates Return information Collection**
- EU European Union**

**F**

- FF Menu code for finger foods**
- FIC Food Information to Consumers**
- FM Facilities Management**
- FODMAP Fermentable Oligosaccharides Disaccharides Monosaccharides And Polyols**
- FoP Front of Pack**
- FSA Food Standards Agency**
- FSS Food Standards Scotland**
- FSSG Food Services Specialist Group**

**G**

- GBS Government Buying Standard**
- GF Menu code for gluten free**
- GHG Greenhouse Gas**
- GHGP Greenhouse Gas Protocol**

**H**

- H Menu code for healthier eating**
- HACCP Hazard Analysis Critical Control Point**
- HCA Hospital Caterers Association**
- HFS Health Facilities Scotland**
- HFSS High in Fat, Sugar, or Salt**
- HIS Healthcare Improvement Scotland**

**HRS Healthcare Retail Standard**

**HSCT Northern Health and Social Care Trust**

**I**

**IBS Irritable Bowel Syndrome**

**IBW Ideal Body Weight**

**ICS Integrated Care System**

**ICU Intensive Care Unit**

**IDDSI International Dysphagia Diet Standardisation Initiative**

**ITT Invitation to Tender**

**K**

**KLBD Kashrut division of the London Beth Din**

**KPI Key Performance Indicator**

**L**

**LID Low-Intake Dehydration**

**M**

**MUST Malnutrition Universal Screening Tool**

**N**

**NACC National Association for Care Catering**

**NARF The Natasha Allergy Research Foundation**

**NGCI No Gluten Containing Ingredients**

**NHS National Health Service**

**NI Northern Ireland**

**NICE The National Institute for Health and Care Excellence**

**NPSA National Patient Safety Agency**

## O

**OJEU Official Journal of the European Union**

**OPMH Older People's Mental Health**

## P

**P Menu code for higher protein**

**PAL Physical Activity Level**

**PAM Premises Assurance Model**

**PENG Parenteral and Enteral Nutrition Group**

**PGN Promoting Good Nutrition**

**PHA Public Health Agency**

**PIN Prior Information Notice**

**PLACE Patient-Led Assessments of the Care Environment**

**PPDS Pre-packed for Direct Sale**

**ppm parts per million**

**PQQ Pre-Qualification Questionnaire**

## R

**RCN Royal College of Nursing**

**RI Reference Intake**

**RNI Reference Nutrient Intake**

**RS Menu code for renal suitable**

**RSPH Royal Society of Public Health**

**RTE Ready to Eat**

## S

**SACN Scientific Advisory Committee on Nutrition**

**SANSI St Andrew's Nutrition Screening Instrument**

**SQ Selection Questionnaire**

**STAMP Screening Tool for Assessment of Malnutrition in Paediatrics**

**T**

**TM Texture Modified**

**V**

**V Menu code for vegetarian**

**VG Menu code for vegan**

**W**

**WHO World Health Organisation**

**WRAP The Waste and Resources Action Programme**



# Executive Summary

## **Chapter 1: The Significance of Nutrition and Hydration**

Many patients are at risk of malnutrition and dehydration, which adversely impact their health outcomes. Food service provision in the healthcare setting is essential in the prevention and treatment of malnutrition and dehydration. This chapter highlights the causes and effects of malnutrition and includes strategies to ensure optimal provision of nutrition and hydration to meet the needs of patients.

## **Chapter 2: The Role of the Food Service Dietitian**

Food service dietitians drive improvement through food and drink services that are good quality, safe, nutritionally adequate, patient-focused and represent good value for money. They are the link between the many stakeholders involved in healthcare food service. This chapter covers the multitude of responsibilities held by a food service dietitian, including staff training, menu planning, service provision and procurement. It also provides support and practical advice for all healthcare settings to access input from a food service dietitian.

## **Chapter 3: Key National Food Legislation and Standards**

Healthcare food and drink services are influenced by a broad range of legislation and standards, which are outlined in this chapter. Understanding these influences supports effective planning of appropriate patient focused nutritional care. Recent significant developments include the 2022 National standards for healthcare food and drink, which now form part of the legally binding standards in the NHS Standard Contract. The BDA Nutrition & Hydration Digest is a core part of these standards.

## **Chapter 4: Environmental Sustainability**

This chapter provides an overview of environmental sustainability, the role of the multidisciplinary team and some practical guidance for hospital food service to make impactful changes. Sustainability should be considered in all aspects of healthcare food service due to the environmental impact of the whole food supply chain. Food service dietitians and catering teams have a unique opportunity to be agents for change.

## **Chapter 5: Staff and Visitor Wellbeing**

Over half of all the food provided in NHS hospitals is served to staff and visitors, providing a prime opportunity to support staff and visitors to make healthier choices. Having access to healthier food options in the workplace has many benefits for staff, including reducing the risk of developing multiple lifestyle related diseases and improving physical and mental wellbeing. A healthier, happier, more engaged workforce leads to better performance for both individuals and the organisation. This chapter outlines the benefits of providing healthier options for staff and visitors, some potential barriers to making changes and key recommendations based on national standards.

## **Chapter 6: Food Procurement, Service Systems, Safety and Waste**

Food is a precious and expensive commodity; therefore, it needs to be used efficiently and wastage minimised. Dietitians have a crucial role to play in food procurement, service systems and waste management, and should be actively involved with colleagues in providing expert advice. This chapter outlines the key aspects for consideration.

## **Chapter 7: Catering Specifications and Tenders**

This chapter defines how to ensure the catering specification meets the nutritional and wider needs of patients, staff and visitors in the healthcare setting, the dietitian's role and relationships in a contracted-out catering service and the tender process. It also explains how to interpret the documents and processes involved.

## **Chapter 8: Nutrition Analysis and Food Labelling**

Nutrition and allergen information must be readily available for all items on a healthcare menu, regardless of whether they are bought in or prepared on site. A nutrition analysis of all food and drink items on a menu is the crucial first step in analysing the capacity of a menu to ensure it can meet the nutritional needs of patients. This chapter explores the different methods used to complete a nutritional analysis, what a food supplier is expected to provide in their product specifications and other food labelling requirements.

## **Chapter 9: Menu Planning and Design**

Catering and food services must be capable of providing food and drink suitable for all patients in their care. This chapter focuses on the process of planning a menu. It also looks at menu design and food-based guidance to create menus that meet the dietary needs of patients and the nutrition standards outlined in this document.

## **Chapter 10: Nutrition Standards**

All healthcare menus must meet the nutritional requirements of and provide choice for both nutritionally well and nutritionally vulnerable patients, who may have very different needs. This chapter outlines the nutrition targets that must be met. It also explains the concept of menu capacity and the application of the 'day parts' model which is used to ensure patients' nutritional needs are met over the entire day.

## **Chapter 11: Menu Capacity Analysis**

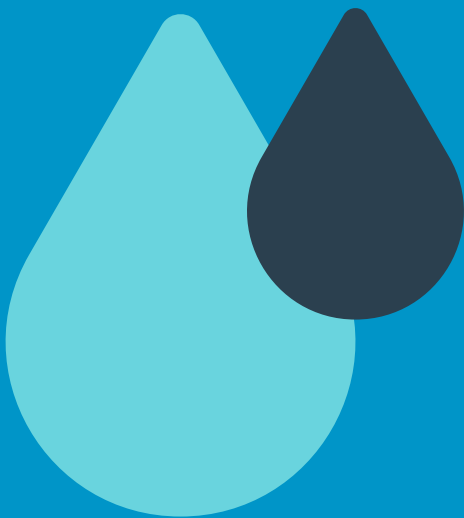
A menu capacity analysis provides evidence that a healthcare menu can meet the needs of both nutritionally well and nutritionally vulnerable patients outlined in this document. The step-by-step methodology in this chapter can be used to evaluate the range and capacity of menus used in a healthcare setting. Worked examples are also provided.

## **Chapter 12: Menu Coding, Therapeutic Diets and Patient Groups**

This chapter provides specific guidance on meeting the nutritional needs of patients with special dietary requirements. It covers menu coding commonly used on a standard healthcare menu to help patients make an appropriate meal choice. It also details the considerations for providing food that meets different religious, cultural and lifestyle-based dietary requirements, catering for different therapeutic diets, and the dietary requirements of specific patient groups.

# 1

## The Significance of Nutrition and Hydration



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“The developmental, economic, social and medical impacts of the global burden of malnutrition are serious and lasting, for individuals and their families, for communities and for countries.”

World Health Organisation

Good nutrition and hydration are essential for all. It is of the utmost importance throughout the entire lifespan, from in utero to older adults (1).

This document provides guidance on best practice and auditable standards, with the aim of ensuring nutritional requirements of all individuals in healthcare settings are met.

Food provision is essential to the prevention and treatment of malnutrition. The term 'malnutrition' includes undernutrition (wasting, stunting, underweight), inadequate/excessive vitamins or minerals, overweight, obesity and diet-related diseases (2).

Patients can be classed as being either nutritionally vulnerable or nutritionally well. To meet the nutritional needs of all patients, healthcare menus must be able to cater for both the nutritionally well and the nutritionally vulnerable. Assessment of the nutritional content of healthcare menus is essential. See Chapter 11 for how to analyse a menu's capacity to meet the nutrition standards (outlined in Chapter 10) for both nutritionally well and nutritionally vulnerable patients.

### Definitions of 'nutritionally well' vs 'nutritionally vulnerable'

#### Nutritionally well

An individual with normal nutritional requirements and normal appetite or those with a condition requiring a diet that follows healthier eating principles.

#### Nutritionally vulnerable

An individual with normal nutritional requirements but with poor appetite and/or unable to eat normal quantities at mealtimes, or with increased nutritional needs.

The purpose of this chapter is to highlight what makes individuals nutritionally vulnerable and outline what food services can do to support this patient group.

## Prevalence of malnutrition

The World Health Organisation (WHO) states that globally 1.9 billion adults are overweight or obese, while 462 million are underweight, giving rise to economic, social, developmental and medical burdens (2).

**3M** people affected by undernutrition in the UK

**1.3M** are aged over 65      **93%** of these are individuals living in the community

The British Association for Parenteral and Enteral Nutrition (BAPEN) 2018

BAPEN Nutrition Screening Week Survey (4) in 2021

**60%**

of patients admitted to care homes are at risk of malnutrition

**30%**

of patients in their own home are at risk of malnutrition

**34%**

of patients in community/rehabilitation hospitals are at risk of malnutrition

**38%**

of patients admitted to hospital are at risk of malnutrition

The National Institute for Health and Care Excellence (NICE) Clinical Guideline CG32 (5) states that nutrition support should be considered in individuals who are malnourished, as defined by any of the following:

- A body mass index (BMI) of less than 18.5kg/m<sup>2</sup>
- Unintentional weight loss of greater than 10% within the last 3-6 months
- A BMI of less than 20kg/m<sup>2</sup> and unintentional weight loss of greater than 5% within the last 3-6 months



## Causes of malnutrition

Malnutrition often results from consequences of malabsorption of nutrients, altered food intake, increased nutrient losses, or altered metabolic demands (6). There are many social, physical and medical factors which contribute to an altered food intake (Table 1.1).

**Table 1.1: Factors that increase the risk of poor nutrition/nutritional vulnerability**

Social Factors	Physical	Medical
<ul style="list-style-type: none"> <li>• Living in isolation</li> <li>• Limited knowledge of nutrition</li> <li>• Limited cooking skills</li> <li>• Alcohol or drug dependency</li> <li>• Poverty and economic circumstances</li> <li>• Limited mobility or lack of transport resulting in difficulty accessing food</li> </ul>	<ul style="list-style-type: none"> <li>• Poor dentition</li> <li>• Loss of appetite due to loss of smell or taste</li> <li>• Physical disabilities which reduce an individual's ability to cook or shop for themselves</li> </ul>	<ul style="list-style-type: none"> <li>• Conditions causing a lack of appetite (such as cancer or liver disease)</li> <li>• Mental health conditions</li> <li>• A condition that reduces the body's ability to absorb or utilise nutrients</li> <li>• Dementia</li> <li>• Dysphagia</li> <li>• Vomiting or diarrhoea</li> <li>• Eating disorders</li> <li>• Multiple medications</li> </ul>

If an individual is unable to provide themselves with adequate nutrition and becomes malnourished, they are more susceptible to disease. This can cause further deterioration, impairing their recovery. This vicious circle is demonstrated by the 'Malnutrition Carousel' (3) (Figure 1.1).

## Consequences of malnutrition

There is evidence to show that patients who are malnourished have higher mortality rates and stay for longer in hospital. This can be due to a number of negative effects that malnutrition and dehydration can have on the body, which can include (3):

- 
- Muscle mass loss and deconditioning, leading to an increased risk of falls
  - Reduced ability to fight infections and impaired wound healing
  - Inactivity and reduced ability to self care
-

They may also have psychosocial effects including apathy, depression, anxiety and self-neglect (6). All of the above have an impact on both the individual's quality of life, as well as the quality of life of their families/carers.

Swift action is necessary to prevent an individual's physical decline secondary to decreased nutritional intake. This decline can be exacerbated by illnesses and any associated clinical interventions. Malnutrition can be life-threatening if poor nutritional intake or an inability to eat persists for several weeks (5).

**Figure 1.1: The Malnutrition Carousel (3).**



## Malnutrition screening

Nutritional vulnerability is more likely to affect those in healthcare settings and requires early detection. Screening for malnutrition should be completed on admission to hospitals to identify high risk individuals and ensure a nutrition care plan is in place. The instigation of a nutrition care plan is a clinical role, and it should support the assessed needs of the patient (7), along with initiatives to address underlying causes (8).

There are a range of tools to support the detection of malnutrition in different groups (9), including:

- 
- Malnutrition Universal Screening Tool (MUST)
  - Screening Tool for Assessment of Malnutrition in Paediatrics (STAMP)
  - St Andrew's Nutrition Screening Instrument (SANSI) in mental health settings
  - the Patient Association Nutrition Checklist in community settings.
- 

Those identified as at high risk of malnutrition through a malnutrition screening programme should be referred for specialist Dietetic advice via locally agreed pathways. The dietitian will assess those at risk and create treatment plans based on individual needs.

## Improving nutritional status

NICE (5) states that in most cases, an adequate nutritional intake can be provided via 'good food' in combination with any additional support needed, such as physical support with eating. However, Age Concern (10) reported a lack of appropriate food provision and absence of support with eating and drinking as one of the most frequently raised issues by older adult's relatives following a hospital admission. The 2018 Adult Inpatient Survey found that 18% of patients in hospital who said they needed help to eat their meals did not receive the necessary help from staff (11).

The Care Quality Commission's (CQC's) fundamental standards (12), include good nutrition and hydration. All care settings are expected to provide individuals with adequate nutrition to sustain good health. The Malnutrition Task Force raises awareness and provides information and practical guidance to help combat preventable under nutrition in later life (13). Some initiatives to improve patient's nutritional status are listed below:

## ‘Making mealtimes matter’ or ‘Assisted mealtimes’

Clinical areas are often extremely active places with several competing priorities, which can lead to interruptions to patient meals. The National Patient Safety Agency (NPSA) (14) recommended that non-essential activity should stop at mealtimes and all meal service activities should become the clinical priority. Hospital Trusts historically have referred to this as ‘Protected Mealtimes’, but we now acknowledge the importance of not only protecting the time, but also making the environment suitable and having an adequate amount of support available (e.g., with mealtime set up and assistance with eating and drinking).

At mealtimes, all ward activity should focus on the meal service and there should be an awareness of key issues in the eating environment (15,16). Clinical staff should ensure the environment is suitable for eating before the meal is served and that the patients are alert and ready to eat.

A sample protected mealtimes policy, developed in conjunction with the Royal College of Nursing (RCN), is available on the Hospital Catering Association (HCA) website (17) and multiple Trusts have publicly available policies online.

## Adapting the mealtime environment for patients living with dementia

Individuals living with dementia may experience problems with eating and drinking. There are multiple reasons this may happen; they may forget to eat and drink, have difficulty preparing or opening food and drinks packaging, have difficulty recognising food items or have a change in taste or appetite (18). The Social Care Institute for Excellence (19) suggests some additional approaches to encourage oral intake in individuals living with dementia, including offering small frequent nourishing meals/snacks, offering finger foods, using visual aids for meal ordering and minimising distractions at meals times.

## Communicating preferences and needs

On admission, all patients should be asked about their food preferences and needs. All allergies and special diets should be noted in their medical records and communicated with catering staff on the ward. This should be recorded to ensure all relevant staff are aware and the patient is provided with the most appropriate menu or food for their needs.

Patient’s food preferences should be understood by the catering team, both on an individual level and as a wider view of population needs/preferences. This should be considered when

planning menus, as detailed in Chapter 9, to provide the most appropriate options for patients to choose from.

## Nutritional support

The fortification of food is one way to provide nutritional support to patients. Nutrient dense foods, such as skimmed milk powder, cheese, nuts and nourishing drinks can be used to enhance the nutrient content of other foods without increasing their volume. Food based methods, as shown in Table 1.2, are strongly encouraged as a first-line approach. These approaches have been shown to positively impact a patient's nutritional status (20) and can be used in a variety of settings.

Oral nutrition support should consider micronutrients in addition to energy and protein. It should be noted that when using skimmed milk powder to fortify foods there are two types: one is a 'skimmed milk powder with added vegetable fats', the other is a 'full dairy skimmed milk powder'. The full dairy skimmed milk powder will add more protein to the fortified product when compared with fortification with a skimmed milk powder with added vegetable fats.

**Table 1.2: Food based approaches**

Food based approaches
<ul style="list-style-type: none"> <li>• Aim to overcome barriers to oral intake (e.g., pain, poor dentition, need for a modified food texture, environmental and social problems)</li> <li>• Encourage small, frequent meals consisting of nutritionally dense foods. Aim to have three small meals with two to three nutrient dense snacks in between</li> <li>• Increase the nutrient density of the diet using the addition of foods such as skimmed milk powder, cheese, nuts (ground nuts or nut butter), eggs</li> <li>• Nourishing fluids should be encouraged, such as milk-based coffee/hot chocolate made with whole milk/malted milk, nourishing soups, smoothies or milkshakes</li> <li>• Consideration should be given to micronutrients intake. A multivitamin and mineral supplement may be required. If required on discharge this should be purchased over the counter from a supermarket or pharmacy</li> </ul>

## Nutrition champions

The aim of a nutrition champion role is to work with all staff to improve the nutrition and hydration care of patients. Nutrition champions are ward-based and may be either a registered nurse or clinical support worker. Nutrition champions work towards strengthening the collaboration between clinical and catering staff. They ensure that nutritional care goals are shared, understood and actioned (21).

Any staff undertaking a nutrition champion role should be offered ongoing support, both from the senior staff on the ward and clinical educators (who may be from organisational learning, corporate nursing and/or the nutrition education lead).

## Home from hospital food packages

Some Trusts work alongside local councils and charities, such as Age UK and the British Red Cross, to support initiatives that provide vulnerable patients with small food packages on discharge from hospital. These patients may be discharged to an empty home, with out-of-date food in the fridge and may not have family or a support network nearby. Food packages can often contain coffee, tea, long-life milk, soups and biscuits. This intervention can allow individuals time to organise a more substantial food supply at home.

## Home delivered meal services

Meals on Wheels began in 1943 by delivering hot meals to those who were unable to prepare or purchase their own meals. In 2022 there are now multiple suppliers of home delivered meal services, both private companies and local public authorities or charities. Suppliers may provide hot, ready to eat meals, chilled meals which are ready to be microwaved or a frozen meal service.

Such services allow individuals to maintain their independence and remain in their homes for longer (22). The global pandemic has highlighted the on-going need for this crucial form of nutritional support for this vulnerable group.

## The importance of hydration

Dehydration describes a deficiency of water (fluid) in our bodies. It is most commonly caused simply by not drinking enough every day (low-intake dehydration).

When a person does not drink enough, the individual cells in the body will start to lose fluids and not work as effectively. This places stress on all the vital organs, with the brain and kidneys being most rapidly affected.

Promoting hydration using low cost or no cost initiatives as part of all patient contact is vital. Staff must take personal responsibility to ensure drinks are always left within easy reach and individuals who rely on carers to access their drinks should be clearly identified (23,24).

## Low-intake dehydration

Low-intake dehydration (LID) is the term to help describe the most common type of dehydration affecting older adults across the world (25).

LID is directly caused by a person not drinking enough fluid each day to replace natural water loss, most noticeably in urine and invisible water vapour through breath and skin. LID is not the same as dehydration caused by diarrhoea and vomiting or heavy sweating because it does not include any loss of essential body salts.

When a person is not drinking enough to keep adequately hydrated, the concentration of body salts and waste products in the blood, tissue fluid and cells becomes more concentrated. People of all ages are at risk if they don't drink adequate fluids, but due to age related factors, such as changes in thirst, older people are most at risk.

LID is unquestionably linked to poor health outcomes and increased hospital admissions (26-30). All older adults in healthcare settings should be considered at risk of low-intake dehydration and encouraged to consume adequate fluids (25).

Table 1.3 outlines the common factors that can contribute to dehydration. Managing these factors alongside staffing issues can provide challenges to supporting and maintaining adequate fluid intake in nutritionally vulnerable patients (31-35).

**Table 1.3: Factors that increase the risk of dehydration**

Social Factors	Physical Factors	Medical Factors
<ul style="list-style-type: none"> <li>• Fear of incontinence</li> <li>• Fear of falling when going to the toilet</li> </ul>	<ul style="list-style-type: none"> <li>• Sarcopenia, due to reduced muscle mass reducing mobility and reducing fluid reserves</li> <li>• Unable to hold a cup due to paralysis or abnormal motor functions i.e., stroke, Parkinson’s disease</li> <li>• Reliance on carers to access drinks</li> <li>• Reduced kidney function</li> <li>• Body is less effective at conserving fluid</li> <li>• Reduced sense of thirst</li> <li>• Swallowing difficulties</li> </ul>	<ul style="list-style-type: none"> <li>• Diuretics</li> <li>• Diarrhoea and vomiting</li> <li>• High output stomas and drains</li> <li>• Fluid restrictions due to kidney or heart failure</li> <li>• Low mood</li> <li>• A condition that reduces the body’s ability to absorb or utilise nutrients</li> <li>• Dementia</li> <li>• Dysphagia</li> </ul>

## Improving hydration status

To prevent avoidable low-intake dehydration, a vulnerable person of any age or stage of life needs to consistently receive the correct level and type of assistance and encouragement to drink (and eat) based on their needs. This requires a personalised, holistic approach including assessing their reliance on a carer to sit up, undertake mouth care and support their continence. Patients in the last few days of life should be offered regular sips of fluid and/or mouthcare to wet their lips and mouth (36).



To ensure safe and dignified care, the following should be enabled:

- 
- A safe and comfortable position in which to drink

---

  - Offer drinks of their personal choice, made the way they choose

---

  - Place drinks within easy reach and on their best side if applicable

---

  - Use a standard cup of their choice. Only use a drinking aid such as a beaker if assessed as required by the clinical team

---

  - The correct level and type of support for assessing with swallowing

---

  - Assistance to hold a drink and encouragement to take extra sips

---

  - Access to their spectacles and/or hearing aid as needed

---

  - For all hot drinks, remind the person it is hot and only leave a drink that is hot if safe to do so

---

  - Always leave a fresh cold drink of the person's choice within reach

---

  - Where possible promote social interaction opportunities to have a drink together

---

  - Prompt extra sips as part of all other daily contact.

---

Evidence now confirms that all hot and cold drinks count towards hydration, including caffeinated tea and coffee (25). A variety of hydrating drinks should be offered, according to patient preferences. Drinks without caffeine may help reduce people's concerns about the need to pass urine and/or promote better sleep. Therefore, these drinks should be part of the standard drink offer (25).

## Fluid gained from food

Food intake also supports hydration. If a patient is not drinking well, food with high fluid content such as fruits, vegetables, soups, stews and milk-based puddings and jelly should be offered. Nutrition needs should also be assessed, as some of these foods, while high in fluid, are not always nutrient dense.

## Use of appropriate drinking aids

There is no national guidance to support appropriate selection of drinking aids. However, the use of spouted beakers is increasingly discouraged as they can increase risk of aspiration and may be considered undignified for adults.

Individuals with swallowing difficulties are advised not to use straws; however, there is no conclusive evidence to suggest that drinking from a cup is any safer (37). To ensure safe practice, the person's individual speech and language assessments and recommendations should be followed according to local policy.

## Monitoring fluid intake

Fluid balance charts or food and drink charts are not always reliably completed. This is a historical problem in hospitals that can result in a patient safety issue. The level and type of monitoring should be based on clinical needs as well as the need for reliable sharing of information within the team and/or for the individual and their families.

## References

1. World Health Organisation. Healthy Diet. <https://www.who.int/news-room/fact-sheets/detail/healthy-diet> [Accessed 25th May 2022]
2. World Health Organisation. Malnutrition. <https://www.who.int/news-room/fact-sheets/detail/malnutrition> [Accessed 25th May 2022]
3. BAPEN. Introduction to Malnutrition. <https://www.bapen.org.uk/malnutrition-undernutrition/introduction-to-malnutrition?start=4> [Accessed 25th May 2022]
4. BAPEN. National Survey of Malnutrition and Nutritional Care in Adults. <https://www.bapen.org.uk/pdfs/reports/mag/national-survey-of-malnutrition-and-nutritional-care-2020.pdf> [Accessed 29th January 2023]
5. National Institute for Health and Care Excellence. Nutrition Support for adults: oral nutrition support, enteral tube feeding and parenteral nutrition, [CG32]. <https://www.nice.org.uk/guidance/cg32/chapter/1-Guidance#screening-for-malnutrition-and-the-risk-of-malnutrition-in-hospital-and-the-community> [Accessed 25th May 2022]
6. Saunders J, Smith T. Malnutrition: causes and consequences. Clin Med. 2010;10(6): 624-627. <https://www.rcpjournals.org/content/clinmedicine/10/6/624> [Accessed 25th May 2022]
7. NHS England. 10 Key Characteristics of 'Good Nutrition and Hydration Care'. <https://www.england.nhs.uk/commissioning/nut-hyd/10-key-characteristics/> [Accessed 25th May 2022]

8. National Institute for Health and Care Excellence. Nutrition Support in Adults. <https://www.nice.org.uk/guidance/qs24> [Accessed 25th May 2022]
9. BAPEN. Nutrition screening survey in the UK and Republic of Ireland in 2011. <http://www.bapen.org.uk/pdfs/nsw/nsw-2011-report.pdf> [Accessed 25th May 2022]
10. Age Concern. Hungry to be Heard: The scandal of malnourished older people in hospital. [https://www.dignityincare.org.uk/assets/Resources/Dignity/CSIPComment/Hungry\\_to\\_be\\_Heard.pdf](https://www.dignityincare.org.uk/assets/Resources/Dignity/CSIPComment/Hungry_to_be_Heard.pdf) [Accessed 25th May 2022]
11. Care Quality Commission. Adult Inpatient Survey 2020. <https://cqc.org.uk/publications/surveys/adult-inpatient-survey-2020> [Accessed 25th May 2022]
12. Care Quality Commission. Fundamental Standards. <https://www.cqc.org.uk/what-we-do/how-we-do-our-job/fundamental-standards> [Accessed 25th May 2022]
13. Malnutrition Task Force. Eating and Drinking Well in Later Life. <https://www.malnutritiontaskforce.org.uk/> [Accessed 25th May 2022]
14. National Patient Safety Agency. Protected Mealtimes and patient safety. [https://www.dignityincare.org.uk/assets/Resources/Dignity/OtherOrganisation/Protected\\_Mealtimes.pdf](https://www.dignityincare.org.uk/assets/Resources/Dignity/OtherOrganisation/Protected_Mealtimes.pdf) [Accessed 25th May 2022]
15. Burke A. Hungry in Hospital? BMJ. 1997;314:393. <https://www.bmj.com/content/314/7078/393.18> [Accessed 25th May 2022]
16. Age UK. Still Hungry to be Heard: Seven steps to end malnutrition in hospital campaign. <https://www.ageuk.org.uk/wp-assets/globalassets/london/documents/campaigns/still-hungry-to-be-heard.pdf> [Accessed 25th May 2022]
17. Healthcare Caterers Association. Protected Mealtimes Policy. <http://www.hospitalcaterers.org/media/1817/pmd.pdf> [Accessed 25th May 2022]
18. Dementia UK. Eating and Drinking for a person with Dementia. [https://www.dementiauk.org/wp-content/uploads/2021/03/DUKFS17\\_Eating\\_Drinking-2021\\_March2021.pdf](https://www.dementiauk.org/wp-content/uploads/2021/03/DUKFS17_Eating_Drinking-2021_March2021.pdf) [Accessed 25th May 2022]
19. Social Care Institute for Excellence. Dementia: The Eating Environment for people with dementia. <https://www.scie.org.uk/dementia/living-with-dementia/eating-well/eating-environment.asp> [Accessed 25th May 2022]

20. Elia M, Normand C, Norman K, Laviano A. A systematic review of the cost and cost-effectiveness of standard oral nutritional supplements in the hospital setting. *Clin Nutr*. 2015;35:370-380. [https://www.clinicalnutritionjournal.com/article/S0261-5614\(15\)00142-9/fulltext](https://www.clinicalnutritionjournal.com/article/S0261-5614(15)00142-9/fulltext) [Accessed 25th May 2022]
21. Bond P. A Hospital Nutrition Improvement Programme. *Nursing Times*. 2013;109(39): 22-24. <https://www.nursingtimes.net/clinical-archive/nutrition/a-hospital-nutrition-improvement-programme-27-09-2013/> [Accessed 25th May 2022]
22. Zhu H, Ruopeng An. Impact of home-delivered meal programs on diet and nutrition among older adults: A review. *Nutr Health*. 2013;22(2): 89-103. <https://pubmed.ncbi.nlm.nih.gov/24916974/> [Accessed 25th May 2022]
23. Davidson J, Folkard S, Hinkley M, Uglow E, Wright O, Bloomfield T et al. A multicentre prospective audit of bedside hydration in hospital. *British Journal of Nursing*. 2020;29(1):50-54. doi:10.12968/bjon.2020.29.1.50
24. Vourliotis N, Grimshaw K, Harris R. 5 Quality Improvement Project (QIP): A Teamwork Approach to Optimise Fluid Intake in Older Inpatients #ButFirstADrink. *Age and Ageing*. 2021;50(Supplement\_1):i1-i6. doi:10.1093/ageing/afab028.05.
25. Volkert D, Beck AM, Cedarholm T, Cruz-Jentoft A, Goisser S, Hooper L et al. ESPEN guideline on clinical nutrition and hydration in geriatrics. *Clinical Nutrition*. 2019;38(1):10-47. doi:10.1016/j.clnu.2018.05.024
26. Budd E. Advisory Committee on Antimicrobial Resistance and Healthcare Associated Infection (ARHAI). Public Health England. Report number: 5, 2013. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/405295/ARHAI\\_annual\\_report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/405295/ARHAI_annual_report.pdf) [Accessed 25th May 2022]
27. Hooper L, Abdelhamin A, Attreed NJ, Campbell WW, Channell AM, Chassange P. et al Clinical symptoms, signs and tests for identification of impending and current water-loss dehydration in older people. *Cochrane Database Syst Rev*. 2015(4):CD009647. doi: 10.1002/14651858.CD009647.pub2.
28. Department of Health and Social Care. Report of the Independent Review of NHS Hospital Food. 2020. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf) [Accessed 25th May 2022]
29. Mustofa ND. Hydration and nutrition concerns among healthcare workers on full personal protective equipment (PPE) in Covid-19 wards. *Clinical Nutrition ESPEN*. 2020; 40:616. <https://doi.org/10.1016/j.clnesp.2020.09.631> [Accessed 25th May 2022]

30. Buaprasert P, Piyapaisarn S, Vanichkulbodee A, Kamson A, Sri-On J. Prevalence and risk factors of hypertonic dehydration among older patients admitted to the emergency department: A prospective cross-sectional study. *Geriatrics & Gerontology International*. 2021;21(6):485-491. doi:10.1111/ggi.14168
31. Lacey J, Corbett J, Forni L, Hooper L, Hughes F, Minto G, et al. A multidisciplinary consensus on dehydration: definitions, diagnostic methods and clinical implications. *Annals of Medicine*. 2019;51(3-4):232–251. doi:10.1080/07853890.2019.1628352
32. Litchfield I, Magill L, Flint G. A qualitative study exploring staff attitudes to maintaining hydration in neurosurgery patients. *Nursing Open*. 2018;5(3):422-430. doi:10.1002/nop2.154
33. Featherstone K, Northcott A, Harden J, Harrison Denning K, Tope R, Bale S et al. Refusal and resistance to care by people living with dementia being cared for within acute hospital wards: an ethnographic study. *NIHR Journals Library*. 2019;7(11) <https://www.ncbi.nlm.nih.gov/books/NBK538810/> [Accessed 25th May 2022]
34. El-Sharkawy AM, Devonald MAJ, Humes DJ, Sahota O, Lobo DN. Hyperosmolar dehydration: A predictor of kidney injury and outcome in hospitalised older adults. *Clinical Nutrition*. 2020;39(8):2593- 2599. doi:10.1016/j.clnu.2019.11.030
35. Masot O, Miranda J, Santamaría AL, Paraiso Pueyo E, Pascual A, Botigué T. Fluid Intake Recommendation Considering the Physiological Adaptations of Adults Over 65 Years: A Critical Review. *Nutrients*. 2020;12(11):3383. doi:10.3390/nu12113383
36. Royal College of Physicians. Supporting people who have eating and drinking difficulties. A guide to practical care and clinical assistance, particularly towards the end of life. Report number: 2. 2021.
37. Pang B, Cox P, Codino J, Collum A, Sims J, Rubin A. Straw vs Cup Use in Patients with Symptoms of Oropharyngeal Dysphagia. *Spartan Medical Research Journal*. 2020;4(2). doi:10.51894/001c.11591

# 2

## The Role of the Food Service Dietitian



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Food service dietitians drive improvement through food and drink services that are good quality, safe, nutritionally adequate, patient-focused and good value for money.



From the early days of the dietetic profession in the UK, dietitians were an integral part of the catering department where they co-ordinated special diets to ensure every patient received appropriate nutrition to meet their needs. By the 1960s, due to a shortage of dietitians to meet new demands with the advancement of medical nutrition therapy, clinical dietetics took the lead resulting in food service taking a back seat (1). Until recently, the role of the food service dietitian has not been a standard role in all healthcare settings. However, over the last two decades there has been an increasing collaboration between catering and dietetics resulting in increased recognition for the role. In contrast, many other countries, such as the US, Canada and Australia provide a strong focus on food service management in the dietetic curriculum (2, 3, 4) and this is reflected in the robust dietetic-led management of food and drink services in these countries.

Food service dietitians drive improvement through food and drink services that are good quality, safe, nutritionally adequate, patient-focused and represent good value for money.

Providing the best possible food service for hospital patients is complex and can be a difficult and unrelenting task. It depends on a close and effective collaboration between a number of people who may have very different priorities (5). This challenge has always existed and was recorded back in the 1940's (6):

“The Steward may regard economy as the measure of his efficiency; for the Matron difficulties of staffing may tend to be predominant; while a dietitian may concentrate rather on food values than on practical considerations.”

**(King Edward's Hospital Fund for London Memorandum on Hospital Diet for consideration by hospitals)**

Menus must have the capacity to meet all nutritional needs and must also be appealing. Patients may not eat food that is unfamiliar or that they do not like, especially when they are feeling unwell and have a poor appetite.

In healthcare settings, individuals are unable to make their usual food choices and it may be impractical and undesirable for them to obtain food elsewhere. They are deprived of their normal consumer power and are left dependent on hospital food and drink provision. Where possible, patients should be involved in menu design. In addition, menu planners must be able to step into the patients' shoes and use local knowledge and feedback to inform menu choices.

## The food service dietitian’s role

### Stakeholder engagement

Food service dietitians have the skills to be involved at every level of food and drink provision; they have a unique overview of food and drink services and knowledge of how they impact nutritional care and clinical outcomes. They work directly with clinical and catering staff and several other stakeholders in the interest of patients.

Food service dietitians are well placed to identify the strengths and weaknesses in a food and drink provision chain and work to drive improvement. They may have specific responsibilities for many of the elements that support the chain, from developing policies and procedures to food service management activities including menu planning and day-to-day problem-solving.

A food service dietitian has a unique insight as the role is exposed to all areas of the chain, be it at ward, supplier, finance and governance levels. They are also an important link between the catering and clinical dietetic departments and serve to connect other stakeholders such as estates, procurement and other clinical therapy services. This can be seen in Figure 2.1.

**Figure 2.1 Stakeholder engagement**

Clinical staff	Catering staff	Wider trust staff	Senior management	External groups
Clinical Dietitians	Patient catering manager	Infection control	Trust board members	Patient groups & PALS
Speech & language therapists	Staff & visitor restaurant manager	Finance	Governors	Cultural leaders
Nurses	Chefs	IT & systems	Facilities management	Volunteers
Doctors	Ward hosts/ hostesses	Communications	AHP leads	Food & drink suppliers
Dietetic Students	Food safety	Procurement		BDA Food Service Specialist Group (FSSG)

## Responsibilities

According to The European Federation of the Associations of Dietitians (EFAD), the competencies needed in food service management cover a wide range of topics including culinary nutrition, dietetics, food safety, quality improvement, food science and the sociology of food and nutrition, as well as a respect for autonomy, ethical factors and sustainability in addition to leadership and financial accountability (7). This complex area of competence is equally relevant to UK food service dietitians as is the task of providing food and meals to vulnerable groups. These responsibilities can be seen in Figure 2.2.

**Figure 2.2 Food service dietitian responsibilities**

Food service responsibilities	Food service responsibilities	Leadership and management	Personal and professional development	External groups
<p>Advise on industry best practices and developments</p> <hr/> <p>Translate standards into targets and policies</p> <hr/> <p>Define Trust menus coding</p> <hr/> <p>Menu planning and menu capacity analysis</p> <hr/> <p>Ingredient sign off</p> <hr/>	<p>Liaise with clinical dietitians to define all dietary and menu requirements</p> <hr/> <p>Nutritional and allergen analysis of recipes</p> <hr/> <p>Ensure Trust's food and drink service complies with relevant standards</p> <hr/>	<p>Advocate for food services at all levels across Trust</p> <hr/> <p>Represent food service dietetics on Trust Nutrition steering group</p> <hr/> <p>Service planning</p> <hr/> <p>Plan and deliver training</p> <hr/> <p>Write Trust Food &amp; Nutrition Policy</p> <hr/>	<p>Proactive awareness of relevant standards, guidelines and legislation</p> <hr/> <p>Attend relevant study days and training</p> <hr/> <p>Active membership within a relevant organisation e.g. BDA FSSG and/or HCA</p> <hr/>	<p>Identify strategic goals to reduce food waste</p> <hr/> <p>Seek patient feedback to facilitate service improvement</p> <hr/> <p>Audit food and drink service</p> <hr/> <p>Ensure data compliance for Electronic Patient Meal Ordering System</p> <hr/>

## Training for clinical and food service staff

Organisations must be able to show they have an established training matrix and a learning and development programme for all staff involved in healthcare food and drink services (8).

Food service dietitians should help to ensure that all staff involved in the food chain have access to training so they can provide a patient-centred food and drink service. This enables the promotion of good nutritional care and encourages appropriate patient choices from a varied menu which contains dishes that meet a variety of dietary needs. This may involve food service dietitians developing and delivering training packages, planning training in collaboration with others and evaluating training to ensure it achieves objectives.

Training of food service staff is essential to ensure that the best possible service is provided and that the last part of the food journey from the kitchen to the patient is smooth so that all of the planning and good work does not fail (see Chapter 6 for information regarding service delivery the 'Last Nine Yards'). Topics that should be included in training sessions can be seen in Table 2.1.

**Table 2.1 Training for food service and clinical staff**

Training	Food Service Staff	Clinical Staff
Basic nutrition awareness and the importance of good nutrition and hydration in the healing and recovery process	✓	✓
Malnutrition awareness, emphasising the importance of the meal service, snacks, special diets and hydration	✓	✓
Standard Menu - provision of a nutritionally balanced diet for patients who are nutritionally well in addition to a higher energy diet for those who are nutritionally vulnerable	✓	✓
Explanation of menu coding	✓	✓
Other Menus – special (therapeutic diets) and 24/7 out of hours meal process	✓	✓
Meeting religious, cultural, personal and lifestyle diets	✓	✓
Modified food textures (including the International Dysphagia Diet Standardisation Initiative (IDDSI) terminology)	✓	✓

Training	Food Service Staff	Clinical Staff
Menu ordering for special (therapeutic) diets and the clinical role in this process	✓	✓
Allergy awareness	✓	✓
Basic food hygiene and food safety (Level 2) for staff serving food i.e. may include nursing/clinical staff out of hours	✓	✓
Training in the use of equipment trolleys/probing/timings	✓	
The timeliness of serving meals (to ensure the food is at an appropriate temperature)	✓	
Portion control, taking into consideration peoples' individual needs	✓	
Food presentation	✓	✓
Helping patients e.g., with difficult packaging and cutting up food	✓	✓
Communicating positive attitudes towards food and drinks	✓	✓
Assisted (Protected) Mealtimes championing mealtimes being primarily for food service not treatment (see Chapter 1)	✓	✓
Red Tray Policy - Identifying patients who require assistance with eating and drinking by using red or distinctive mats, trays, napkins and jugs for appropriate action to be taken. However, these aids should not be relied upon solely as some patients will still require observation and/or supervision at mealtimes. Food service staff may be required to act and signpost on what they observe	✓	✓
New menu introduction (after menu reviews)	✓	✓
Highlighting changes to existing menu	✓	
New patient meal ordering systems	✓	✓
Importance of the food record chart		✓
Monitoring food waste	✓	✓

## Menu planning and nutritional standards

The National standards for healthcare food and drink (8) support food service dietitians to set and monitor nutrition standards for hospital menus. These nutrition standards are outlined in Chapter 10 and can be measured through a menu capacity analysis (see Chapter 11) and the qualitative menu assessment checklist (Appendix 1). The annual Patient-Led Assessments of the Care Environment (PLACE) (9) Organisational Questions on Food ask whether the hospital menu has been approved by a registered dietitian. Food service dietitians need to collaborate closely with catering managers to ensure incorporation of these standards into menu planning, as outlined in Chapter 9, in order to meet the needs of their patients.

Food service dietitians must bring to the process a thorough knowledge of:

- 
- The relevant evidence base and reports

---

  - Nutritional analysis and therapeutic diets

---

  - The population to be served, its complexities and diversity – including local cultural and religious needs

---

  - The practicalities of large-scale catering

---

  - Commercial and operational awareness.

---

Planning healthcare menus brings together many conflicting demands. Interdisciplinary skills in both motivation and negotiation may be needed by everyone involved.

## Service provision

### a. Patient information

Patients and staff need comprehensive and up to date information about the food and drink service in order to make the best use of it. The Food Information Regulations (10) state there is a legal obligation to make food information accessible to patients at ward level to assist them in making informed food and drink choices.

Food service dietitians should work with colleagues on the development of user-friendly and patient-centred information using a variety of media and formats. The Report of the Independent Review of NHS Hospital Food (11) recommends that every hospital in England should implement a digital meal ordering system.

Further information can be found in PLACE (9) and the National standards for healthcare food and drink (8).

## b. Positive eating environment

The multidisciplinary team, including food service dietitians, should work with clinical teams, including ward managers, nurses and the catering team to achieve the best possible eating experience for patients.

## c. Managing therapeutic diets

Food service dietitians must work closely with caterers, clinical dietitians, nurses and speech and language therapists to ensure that therapeutic diets (12):

- 
- Meet the requirements of clinical treatment

---

  - Meet appropriate nutritional standards

---

  - Suit the preferences of the patient

---

  - Are timely

---

  - Are appetising and served appealingly

---

  - Are safe.

---

As part of a multidisciplinary team, food service dietitians should be actively involved in developing service specifications that ensure best practice in planning, ordering and delivery systems for therapeutic diets.

## d. Food service dietitian's role in monitoring and audit

Food and drink services and nutritional care need to be performance managed to ensure that standards are being met and maintained. Dietitians should work with multidisciplinary monitoring teams to support the development of appropriate performance indicators and maintain formal structures for auditing them.

## Work settings

### Patient food service

Patient food service dietitian roles vary depending on the setting. For instance, these dietitians may be employed directly by an NHS Trust or indirectly by a facilities management company contracted to manage the NHS Trust catering service. Where food production is outsourced, food suppliers and manufacturers may also employ their own dietitians. See Chapter 6 and 7

for more information on food service systems and catering contracts. Private patients may also be included in the remit of the patient food service dietitian.

## Staff and visitor food service

There is growing recognition of the importance of having a dietitian working to implement health and wellbeing standards for staff and visitor food services. As this is a large undertaking, this may be difficult to be covered by a patient food service dietitian role. This is because of the constantly evolving nature of the key legislation and guidelines regulating this area of public health. It is strongly recommended there is adequate food service dietetic resource available for the staff and visitor food and drink service that is appropriate for each NHS Trust, this is supported in The Report of the Independent Review of NHS Hospital Food (11).

In terms of the role, a food service dietitian involved in staff and visitor food service would:

- 
- Support the retail management and catering teams to understand the guidance in this area and the development of any implementation plans
  - Develop the food and catering elements of the health and wellbeing strategy and targets for staff and visitor restaurants and catering outlets
  - Support with menu and recipe development and nutritional analysis against any targets for suitable dishes
  - Support the production of healthy messaging that might be used for customers.
- 

Some organisations may also have a staff health and wellbeing programme offering dietetic interventions as part of the wider staff health and wellbeing strategy. This could be an exciting opportunity for dietitians to combine clinical and food service dietetics but would need to be strategically planned, funded and executed for it to be effective.

See Chapter 5 for more information on staff and visitor wellbeing.

## Procurement

Food service dietitians may have the opportunity to work in procurement services for government, food manufacturers or NHS supply chain services. Responsibilities include:



- 
- Influencing procurement strategies to ensure that patient, staff and visitor food is:
    - Ethically and responsibly sourced and environmentally sustainable (see Chapter 4)
    - An optimal blend of cost and quality
    - Compliant with government food regulations and standards and adapts to changing legislation (see Chapter 3)
    - Meeting the needs of patients with complex and varied nutritional and dietary needs
- 
- Working in partnership with buying teams and stakeholders to ensure that healthcare food is the best blend of sustainability, quality and price for patients, staff and visitors
- 
- Working with chefs and cooks to ensure that developed recipes meet government standards
- 
- Supporting food service dietitians working with catering departments, by being the source of expertise and point of contact within procurement
- 
- Reviewing supplier ingredient specifications to ensure nutrition and allergens contained within food and drink products bought for use in patient, staff and visitor settings meet requirements e.g., vending machines, emergency menus and product substitutions.
- 

## Working in partnership

Where food production or catering services are outsourced, there will be more than one provider in the food service chain. All stakeholders need to develop and sustain good working relationships to negotiate change or work within constraints and to promote continuing improvement in a manageable and realistic way.

Food service dietitians employed by catering contractors and food suppliers should work together with food service dietitians in health and care settings in an atmosphere of mutual trust and respect. To manage the interface, both need an awareness of the range and diversity of the populations served. They also must endeavour to meet the needs and preferences of all groups, by:

- 
- Assisting in the development of submission bids as part of catering tenders to ensure that nutrition and dietetic needs are clarified and addressed (see Chapter 7)
- 
- Providing information on food, recipe and menu capacity analysis (see Chapter 8 and 11) as part of the submission bid and contract management and ensuring the needs of patients requiring special diets are met
- 
- Collaborating on recipe and dish development to meet the needs of clinical dietetics, hospital nutrition and public health, as appropriate
-

- 
- Developing evaluated training or resources for food and drink service staff
  - Providing information on relevant legislation.
- 

## The Health and Care Professions Council (HCPC)

The Health and Care Professions Council (HCPC) Standards of Proficiency for Dietitians (13) and standards of conduct, performance and ethics (14) provides expectations of the ways in which dietitians work in relation to the provision of food and drink services.

A key HCPC requirement is that healthcare professionals must practice Continuing Professional Development (CPD) to develop the skills required for their roles. Food service dietitians need to possess certain skills to carry out their responsibilities. These include skills in change management, leadership, mediation, quality improvement, conflict resolution and budgeting. Training on these can be accessed via the NHS Elect or BDA websites and Trust transformation teams. An example of other useful training and courses can be seen in table 2.2.

**Table 2.2: Other useful training and courses for food service dietitians**

Training	Description
BDA FSSG Course	An introduction and an advanced course in food service dietetics (15)
Recipe analysis	Various CPD webinars and courses available
Food Safety Level 2-4	Ensures a sound knowledge of food safety and the ability to identify risks in the food service chain which supports with dietetic policy making.
Allergen Management Level 3	Ensures a knowledge of food allergens, aimed at individuals responsible for the purchase, delivery, production and serving of food in the catering industry.
HACCP Level 3	Provides a thorough understanding of the HACCP principles.

Developing a Feedback Culture	Provides an understanding of an environment where individuals feel free, safe and encouraged to share and receive feedback. Communication skills are outlined that support giving, receiving and asking for effective feedback to support the development of insights into action.
Quality Improvement (QI)	<p>Outlines the systematic approach to improving the way care and services are delivered to patients (Quality Improvement). Courses range from beginners to advanced practitioner. Apprenticeships in QI are also available: <a href="https://www.instituteforapprenticeships.org/apprenticeship-standards/improvement-leader-v1-0">https://www.instituteforapprenticeships.org/apprenticeship-standards/improvement-leader-v1-0</a></p> <p>NHS Elect provides several webinars around quality improvement and project management: <a href="https://www.nhselect.nhs.uk/">https://www.nhselect.nhs.uk/</a></p>
Project Management	Outlines the systems and processes for leading the work of a team project. Many different options available.
Commercial Awareness/ Finance	Analysing how businesses work and your place in adding value. Many different options available.
Education & Training Level 3	For those who deliver education and training as part of their role but not their primary role.
Leadership and Management Training	Development of people management and leadership skills NHS Leadership Academy
PLACE Assessors	Food service dietitians can also gain experience as PLACE assessors at another Trust to help them better understand the process and requirements of the PLACE assessment or ask to shadow another food service dietitian as part of general learning.
NHS Trust Mandatory Courses	Where relevant and available.

## Professional memberships

There are two main professional associations which support food service dietitians and help contribute to achieving CPD commitments:

### BDA Food Services Specialist Group (FSSG)

The BDA FSSG, formerly known as Food Counts!, was established in 2002 by a small number of dietitians working in catering in response to the need for collaboration with other dietitians working in this field to promote and share best practice. The group was born out of necessity and due to the dedication and perseverance of its members has evolved into the proactive highly functioning group that it is today. All dietitians interested, working in or new to food service are highly encouraged to join FSSG. More information can be found on the BDA webpage: [Food Services Specialist Group | British Dietetic Association \(BDA\)](#)

### Hospital Caterers Association (HCA)

Food service dietitians are encouraged to join the HCA to support their CPD as well as raise the profile of dietitians. More information can be found on the HCA webpage: [Hospital Caterers Association](#)

## Workforce planning

The Report of the Independent Review of NHS Hospital Food (11) recommends that every hospital should employ a named food service dietitian, as a minimum at Band 7 as this is a highly specialist role.

The unique set of skills required for the food service dietitian role is outlined in the sample job description and person specification (See Appendix 2 and 3). Settings without a food service dietitian may find it useful to refer to the business case guidance provided to build a case to obtain funding for this position (See Appendix 4).

A named food service dietitian is recommended for every Trust to act as the main interface between catering and clinical services. This should be a senior post and funded as such, so that the dietitian has sufficient authority and experience to lead developments and initiate resolution of challenges.

**(Chapter 2. Food as medicine, Report of the Independent Review of NHS Hospital Food (11))**

It is important to recognise that a pathway should exist for less experienced dietitians and students who want to work in this field to gain experience. We would recommend creating the following opportunities within clinical dietetic departments:

- 
- All student dietitians on placement should spend a reasonable amount of time with the food service dietitian to get an insight into the role (and demonstrate the achievement of basic competencies) and be given a small project/s with which to engage with
- 
- Having a catering link dietitian in the clinical team who liaises with and supports the food service dietitian on behalf of the clinical team and can potentially cover basic tasks while the food service dietitian is on leave
- 
- Creating a Band 5 or 6 post where possible and where demand exists to support the senior role
- 
- Encourage interested dietitians to undertake training courses (see Table 2.2) and attend study days when available.
-

## References

1. The British Dietetic Association. A History of the British Dietetic Association. <https://www.bda.uk.com/uploads/assets/0ba09393-0065-4eaf-9f8e98e5631c9314/BDA-History-part-1.pdf> [Accessed 4th April 2023]
2. ACEND Accreditation Standards for Nutrition and Dietetics. Didactic Programs (DPD). <https://www.eatrightpro.org/acend> [Accessed 4th April 2023]
3. Dietitians of Canada. What kind of training and education does a dietitian have in Canada? <https://www.unlockfood.ca/en/Articles/About-Dietitians/What-kind-of-training-and-education-does-a-dietiti.aspx> [Accessed 4th April 2023]
4. Dietitians Australia. National Competency Standards for Dietitians in Australia. [https://dietitiansaustralia.org.au/sites/default/files/2022-03/DA\\_NationalCompetencyStandards\\_2021%20%28PDF%2C%20236KB%29.pdf](https://dietitiansaustralia.org.au/sites/default/files/2022-03/DA_NationalCompetencyStandards_2021%20%28PDF%2C%20236KB%29.pdf) [Accessed 4th April 2023]
5. Donelan A. Dietitians and Caterers: a critical but uncertain relationship. MSc Thesis. Middlesex University; 1999
6. King Edward's Hospital Fund for London. Memorandum on Hospital Diet for consideration by hospitals. [https://archive.kingsfund.org.uk/concern/published\\_works/000003254#?cv=0&xywh=-1626,120,4698,1203](https://archive.kingsfund.org.uk/concern/published_works/000003254#?cv=0&xywh=-1626,120,4698,1203) [Accessed 4th April 2023]
7. The European Federation of the Associations of Dietitians (EFAD). ESDN: Food Service. <https://www.efad.org/our-networks/esdn-food-service/> [Accessed 31st May 2022]
8. NHS England. National standards for healthcare food and drink. <https://www.england.nhs.uk/publication/national-standards-for-healthcare-food-and-drink/> [Accessed 4th April 2023]
9. NHS Digital. Patient-Led Assessments of the Care Environment (PLACE). <https://digital.nhs.uk/data-and-information/areas-of-interest/estates-and-facilities/patient-led-assessments-of-the-care-environment-place> [Accessed 4th April 2023]
10. European Parliament and of the Council. Food Information Regulations. <https://www.legislation.gov.uk/eur/2011/1169/contents>. [Accessed 4th April 2023]
11. Department of Health and Social Care. Report of the Independent Review of NHS Hospital Food. <https://www.gov.uk/government/publications/independent-review-of-nhs-hospital-food> [Accessed 4th April 2023]

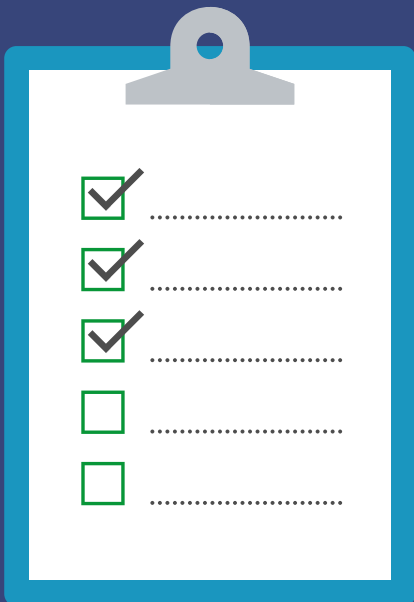
12. Care Quality Commission. Provider compliance assessment tool – Outcome 5 (Regulation 14): Meeting nutritional and hydration needs. <https://www.cqc.org.uk/guidance-providers/regulations-enforcement/regulation-14-meeting-nutritional-hydration-needs> [Accessed 4th April 2023]
13. Health & Care Professions Council. The Standards of Proficiency for Dietitians. <https://www.hcpc-uk.org/standards/standards-of-proficiency/dietitians/> [Accessed 14th Feb 2023]
14. Health & Care Professions Council. Standards of conduct, performance and ethics <https://www.hcpc-uk.org/standards/standards-of-conduct-performance-and-ethics/> [Accessed 14th Feb 2023]
15. BDA. Food Services Specialist Group (FSSG) <https://www.bda.uk.com/specialist-groups-and-branches/food-services-specialist-group.html> [Accessed 14th Feb 2023]

## Further Reading

- British Dietetic Association. How to analyse and influence stakeholders. <https://www.bda.uk.com/resource/how-to-analyse-and-influence-stakeholders.html> [Accessed 11th April 2023]
- The King's Fund. A spoonful of sugar: Hospital food and medicine. [https://features.kingsfund.org.uk/2021/04/hospital-food-medicine/?\\_ga=2.66173997.2031438469.1618038808-208912833.1589125090#group-section-Food-and-Culture-5pSo8oXqB2](https://features.kingsfund.org.uk/2021/04/hospital-food-medicine/?_ga=2.66173997.2031438469.1618038808-208912833.1589125090#group-section-Food-and-Culture-5pSo8oXqB2) [Accessed 11th April 2023]

# 3

## Key National Food Legislation and Standards





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Food and drink services are influenced by a broad range of legislation and standards. Understanding these supports effective planning of appropriate patient focused nutritional care.

Since the publication of the 2nd edition of The Nutrition and Hydration Digest, there have been several key updates to the increasingly broad range of legislation and guidance, including international, national and local influences, that need to be considered when planning food and drink services within healthcare settings. This chapter provides an overview of this legislation and guidance, with signposting to further information.

## **Adhering to key national food legislation and standards: a collaborative approach**

Everyone with a responsibility for food and drink services should be aware of the international and national regulations and recommendations for its provision. Clinicians with this responsibility should also be aware of any local policies that influence the food service decisions in their area. The application of such policies to hospital food and drink provision needs to be appropriately patient-focused, especially for the nutritionally vulnerable. The principles of nutritional standards and their monitoring can equally apply to other care settings. When commissioning services in these settings, it is important the same standards are applied.

Food Service Dietetics can feel overwhelming to a new-starter in the speciality – there are numerous pieces of legislation to consider around key areas such as food labelling and allergens, as well as nutrition standards to comply with, including procurement considerations and menu planning. In the years since the 2nd edition of the Nutrition and Hydration Digest there have been several notable updates to the guidelines and legislation that a food service dietitian will need to be aware of. The 2020 Report of the Independent Review of NHS Hospital Food (1) and the 2022 National standards for healthcare food and drink (2) are two updates of significance. In particular, the National standards are an invaluable resource for dietitians and one that they would be wise to familiarise themselves with.

The National standards outline the procedures that organisations must follow to guarantee the high quality and sustainability of the food and drink they provide to patients, staff and visitors. They describe the methods by which these procedures should be put into practice and monitored. The standards also suggest future improvement aspirations and actions. This chapter and the accompanying appendices expand on the standards. Dietitians should be aware that they now form part of the legally binding standards in the NHS Standard Contract (3) and are a part of the NHS Long Term Plan (4). What this means in practice, is that all organisations subject to the Standard Contract will be legally obliged to deliver against these standards.

Whilst the National standards may be considered the overarching standards that NHS organisations are required to meet, the Digest is a core part of them and compliance to the

recommendations outlined in this document fall under section 2 of the National standards, 'improving patients' food and drink' (2). At a local level, organisations should have efficient nutrition steering groups that meet regularly and consist of various multidisciplinary members, with dietitians being an integral part of such groups. See the text under 'Local influences' in this chapter for more information on this requirement.

## **International and national influences**

Dietitians are active contributors to policies affecting nutritional care across the UK. Some prominent examples of the invaluable dietetic contribution are introduced or discussed in this chapter, including the Report of the Independent Review of NHS Hospital Food (1) and the National standards for healthcare food and drink (2). Table 3.1 outlines the core food legislation, standards and influences (international and national) that should impact planning and decision making around food and drink in health and social care settings.

Throughout this document, there is a bias towards practices used in England – it is recognised that all home countries take a synergistic approach and each nation's guidelines can complement one another. However, each country has developed population-specific guidance for their own food and drink services, which are outlined separately in this chapter.

**Table 3.1 Summary of key food legislation, standards and influences**

<b>Standard/ Legislation Name</b>	<b>Controlling/ Responsible Body</b>	<b>Brief Summary/Signpost for more information</b>	<b>Legal standing</b>
Resolution ResAP, 2003 (International Influence) (5).	The Council of Europe (CoE)	Resolution ResAP advise that governments should implement national recommendations on food and nutritional care in hospitals based on nutritional assessment and treatment by nutritional care providers, food service practices, hospital food and health economics costs. There are over 100 recommendations within the resolution. These recommendations were summarised by the CoE Alliance into the 10 Key Characteristics.	<p>This report applies across the UK as a member state of the Partial Agreement in the Social and Public Health Field.</p> <p>The CoE Partial Agreement recommendations (called “resolutions”) are not legally binding but aim to inspire political action at a national level.</p> <p>In 2015, the 10 Key characteristics of good nutrition and hydration care were adopted by NHS England and are part of the wider Food Standards.</p>

<p>Regulation 14 of the Care Quality Commission (CQC), 2014 (National Influence, England) (6).</p>	<p>CQC</p>	<p>Hospital Trusts in England are regulated under the CQC. The CQC monitor, inspect and assess services against their fundamental standards, ensuring they meet the expected levels of quality and safety. See Appendix 5 for more details on Regulation 14 of the CQC (meeting nutritional and hydration needs).</p>	<p>The Health and Social Care Act 2008 established the CQC as the regulator of all health and adult social care services. CQC Regulated Activities are legislation.</p>
<p>Hospital Food Standards (HFS) Panel report on standards for food and drink in NHS hospitals, 2014 (National Influence) (7).</p>	<p>Department of Health (DH)</p>	<p>The HFS Panel published a report in 2014 which identified five food standards. These are now superseded by the 2022 National standards but information for reference regarding the 2014 standards can be seen in Appendix 6.</p>	<p>Since April 2015, the HFS have been included in the NHS Standard Contract and are legally binding.</p>
<p>International Dysphagia Diet Standardisation Initiative, 2019 (IDDSI) (International Influence) (8)</p>	<p>IDDSI</p>	<p>Meeting patient nutrition and hydration needs includes nutritionally vulnerable patients who require texture modified (TM) food and drink. When provided in care settings, TM food and drink should comply with the IDDSI Framework. This is discussed in further detail in Chapter 12.</p>	<p>The IDDSI Framework is not mandatory. However, it is the only currently referenced standards for the provision of modified texture food and drink in key national standards.</p>

<p>Report of the Independent Review of NHS Hospital Food, 2020 (National Influence) (1).</p>	<p>Department of Health and Social Care (DHSC)</p>	<p>The Independent Review was announced following an outbreak of listeriosis in the NHS. The report was published in October 2020 and covered eight recommended areas for system level change (see Appendix 7 for more information).</p>	<p>The Independent Review is based upon recommendations and is not legally binding. However, it contains reference to several key, very relevant pieces of food legislation including The Public Services (Social Value) Act, 2012 and legislation relating to food safety, hygiene and training.</p>
<p>The Government Buying Standard for Food and Catering Services, 2021 (GBS) (National Influence) (9)</p>	<p>Department for Environment Food and Rural Affairs (DEFRA)</p>	<p>The GBS for food and catering services forms part of the National standards for healthcare food and drink. GBS outline the standards required to procure sustainable food services. See Appendix 8 for more information on these standards.</p> <p>The nutrition standards outlined in the GBS apply to staff and visitor catering (see Chapter 4), while the nutrition standards outlined in Chapter 10 apply to patient catering.</p>	<p>The GBS for food and catering services are made up of both mandatory and voluntary standards.</p>

<p>National Standards for Healthcare Food and Drink, 2022 (National Influence) (2)</p>	<p>NHS England</p>	<p>The National Standards for Healthcare Food and Drink build on the 2014 HFS report and consider the recommendations made in the Report of the Independent Review of NHS Hospital Food.</p> <p>The standards include key priorities for both the NHS and the government and cover four sections. See Appendix 9 for more information, including how NHS England will monitor progress with the standards (10).</p>	<p>The National Standards form part of the legally binding standards in the NHS Standard Contract (SC19) and are a part of the NHS Long Term Plan.</p> <p>All organisations subject to the Standard Contract will be legally obliged to deliver against these standards.</p>
<p>Patient Led Assessments of the Care Environment (National Influence) (PLACE) (11)</p>	<p>NHS Digital</p>	<p>PLACE audits include a comprehensive evaluation of the taste, flavour and presentation of hospital food as well as a set of organisational food questions that must be answered.</p>	<p>PLACE assessments are conducted annually, and results are published. Organisations should use PLACE to provide good quality evidence of current practice and drive improvements in quality nutritional care.</p>



## Allergen information

All catering establishments must provide allergen information, including for food sold loose. Across food service environments, 2021 saw some significant change to the legislation surrounding allergen labelling. On the 1st of October, 2021, new government legislation, referred to as 'Natasha's Law' (12) was introduced. Natasha's Law requires all food which are prepared and packaged on the same premises from which they are sold, to be labelled with a full ingredients list with the 14 major allergens emphasised for easy identification (12). Food that fits this description is known as Prepacked for Direct Sale (PPDS). If an organisation sells or supplies PPDS food, they must comply with this law.

The Food Standards Agency (FSA) website is a useful resource for more information on Natasha's Law and includes examples of what is considered a PPDS food, and an allergen and ingredients food labelling tool (13).

## Food labelling responsibilities and changes following the UK's exit from the European Union

From December 2014, food labelling law in all four home countries became subject to Regulation (EU) No 1169/2011, The Provision of Food Information to Consumers (FIR) (14). Under the European Union (EU) (Withdrawal) Act 2018, this regulation was retained and incorporated into domestic law for England, Scotland and Wales (15). Following the UK's exit from the EU, goods sold in Northern Ireland will continue to follow EU rules for food labelling (16).

The Health and Care Bill gives power to the Secretary of State in England and ministers in Scotland and Wales to make amendments to this retained legislation through regulations. Any regulations made under the new power are subject to the affirmative process and must be approved by their respective chambers (Houses of Parliament, Senedd Cymru or Scottish Parliament) (15). This means changes or new policies regarding food and drink labelling are debated and approved before they are implemented.

The professional bodies who bear responsibility for food labelling laws in each of the four nations can be seen in Table 3.2.

**Table 3.2: Responsibilities of food labelling laws in the four home nations**

Nation	Policies	Responsible body/bodies
England	<ul style="list-style-type: none"> <li>• Non-safety related policy on food labelling and food compositional standards</li> <li>• Food safety related labelling including allergens</li> <li>• Labelling and nutrition policy</li> </ul>	<ul style="list-style-type: none"> <li>• DEFRA</li> <li>• FSA</li> <li>• DHSC</li> </ul> <p>Note, it is the joint responsibility of the above organisations.</p>
Wales	<ul style="list-style-type: none"> <li>• Policy on food labelling and food compositional standards</li> <li>• Nutrition policy and labelling</li> </ul>	<ul style="list-style-type: none"> <li>• FSA</li> <li>• Welsh Government</li> </ul>
Scotland	<ul style="list-style-type: none"> <li>• Food labelling policy</li> <li>• Policy for food information, food standards and nutrition labelling</li> </ul>	<ul style="list-style-type: none"> <li>• Food Standards Scotland (FSS) (17, 18)</li> </ul>
Northern Ireland	<ul style="list-style-type: none"> <li>• Policy on food labelling and food compositional standards</li> <li>• Nutrition policy and labelling</li> </ul>	<ul style="list-style-type: none"> <li>• FSA</li> <li>• FSA</li> </ul>

## Legislation and guidelines for Northern Ireland, Wales and Scotland

Northern Ireland (NI), Scotland and Wales each have their own core food legislation and guidelines, that in practice, can each complement one another and be used in synergy, along with guidance and standards specific to England. Table 3.3 outlines each of these key population-specific guidelines for Northern Ireland, Wales and Scotland. Appendix 10 provides additional information for these key guidelines from NI, Scotland and Wales, as well as information on other core policies on food and drink in each of these countries.

**Table 3.3: Legislation and guidelines for Northern Ireland, Wales and Scotland**

Country & Standard/ Legislation Name	Controlling/ Responsible Body	Brief Summary/Signpost for more information	Legal standing
Northern Ireland (NI); Promoting Good Nutrition (PGN), A Strategy for the Good Nutritional Care of Adults in all Care Settings in Northern Ireland 2011-2016 (19).	The Department of Health, Social Services and Public Safety	<p>The PGN strategy informs how healthcare professionals throughout NI aim to ensure good nutrition across all health care settings.</p> <p>It was built on and incorporates the initiatives published by the DH Chief Nursing Officer, in conjunction with the Royal College of Nursing (RCN), in the “Get your 10 a Day. Nursing Care Standards for Patient Food in Hospital” (20) For more information on the PGN strategy and assessing compliance with the standards, see Appendix 10.1</p> <p>Supplementary guidance and resources are also available to help support the use of MUST across all care settings in NI (21).</p>	This is a mandatory standard in NI.
Scotland; Food, Fluid and Nutritional Care Standards, 2014 (22)	Healthcare Improvement Scotland (HIS)	Food, Fluid and Nutritional Care Standards are based on research and development and reflect on the whole patient journey with respect to nutritional care, not just food provision. See Appendix 10.2 for more on these standards and on the purpose of HIS.	This standard is mandatory in Scotland.

<p>Food in Hospitals – National Catering and Nutrition Specification for Food and Fluid Provision for Hospitals in Scotland, 2016 (23).</p>	<p>NHS Scotland</p>	<p>Food in Hospitals sets out the food and nutrient based standards including menu planning guidance alongside guidance for therapeutic dietary provision. The specification provides NHS Boards with the rationale and necessary practical guidance to allow compliance with the HIS Food, Fluid and Nutritional Care Standards. See Appendix 10.2 for more.</p>	<p>This standard is mandatory in Scotland.</p>
<p>Wales; Wales Nutrition and Catering Standards for Food and Fluid Provision for Hospital Inpatients, 2012 (24).</p>		<p>The All Wales Catering and Nutrition Standards for Food and Fluid Provision for Hospital Inpatients is for use in hospital settings in Wales and provides technical guidance for caterers, dietitians and nursing staff responsible for meeting the nutritional needs of patients who are capable of eating and drinking. The standards are key to the delivery of the All Wales Hospital Nutrition Care pathway protocol and to meeting Standards for Health in Wales. The guidance included covers nutrient and food-based standards which provide for the needs of a diverse hospital population of all ages, nutrition status and those with different therapeutic and cultural requirements. See Appendix 10.3 for more.</p>	<p>This standard is mandatory in Wales.</p>

## Local influences

Dietitians and clinical colleagues should lead on the development, implementation and monitoring of nutrition related policies as part of clinical governance, developing relevant and workable guidelines, protocols and training to support service improvement in nutritional care. Many healthcare organisations have contracts with external providers for food services, or service agreements with internal providers. Dietitians working for healthcare organisations and catering contractors, food suppliers and manufacturers should take part in the planning and negotiation of these documents. To do this, both contractor and Trust dietitians must be familiar with the relevant national and local standards and implement monitoring processes, such as audits and patient satisfaction surveys, to evaluate food provision.

It is important that healthcare organisations have established nutrition steering groups with multidisciplinary representation. Each Trust will have their own governance arrangements to monitor and link in with activities undertaken on their behalf by the nutrition steering group. It is good practice to operate these services within the governance framework of the Trust and ensure that there is regular feedback to the Trust Board. The role of the food service dietitian in a multidisciplinary team is covered in more detail in Chapter 2.

Table 3.4 lists some examples of service level agreements at a local level. Outcomes for these agreements should focus on patient-centred care and ensuring positive patient experiences related to food and drink provision in healthcare settings.

**Table 3.4: Local service requirements**

Local Provision	Examples of Service Level Agreements	Outcomes
Service planning and support	<ul style="list-style-type: none"> <li>• Catering Specifications (see Chapter 7)</li> <li>• Staff training (see Chapter 2)</li> <li>• Provision for therapeutic diets (see Chapter 12)</li> </ul>	Provision of nutrition to meet all patient clinical and personal needs and agreed locally
Service provision	<ul style="list-style-type: none"> <li>• Assisted (protected) mealtimes and red tray initiative</li> <li>• Specific targets relating to the nutritional needs of the local population</li> <li>• Managing the dining experience and environment</li> <li>• Guidance and protocols on using the service</li> <li>• Compliant menus and guidance for managing special diets</li> <li>• Liaison with modern matrons, ward staff and food service assistants</li> </ul>	The meal service and environment meet patient needs and agreed local standards
Service monitoring and audit	<ul style="list-style-type: none"> <li>• Patient satisfaction questionnaires</li> <li>• Ward Audit e.g., based on PLACE</li> <li>• Audit of service level agreement</li> </ul>	Positive patient experience illustrates patient needs are met to agreed levels

## References

1. Department of Health and Social Care. Report of the Independent Review of NHS Hospital Food. <https://www.gov.uk/government/publications/independent-review-of-nhs-hospital-food> [Accessed 11th April 2023]
2. NHS England. National standards for healthcare food and drink. <https://www.england.nhs.uk/publication/national-standards-for-healthcare-food-and-drink/> [Accessed 11th April 2023]
3. NHS England. NHS Standard Contract. <https://www.england.nhs.uk/nhs-standard-contract/> [Accessed 11th April 2023]
4. NHS England. NHS Long Term Plan. <https://www.longtermplan.nhs.uk/> [Accessed 11th April 2023]
5. Council of Europe. Resolution RESAP(2003)3 on food and nutritional care in hospitals. <https://wcd.coe.int/ViewDoc.jsp?id=85747> [Accessed 11th April 2023]
6. Care Quality Commission (CQC) Regulations for service providers and managers: relevant guidance. <https://www.cqc.org.uk/guidance-providers/regulations-enforcement/regulations-service-providers-managers-relevant-guidance> [Accessed 11th April 2023]
7. Department of Health and Social Care. Establishing food standards for NHS hospitals. <https://www.gov.uk/government/publications/establishing-food-standards-for-nhs-hospitals> [Accessed 11th April 2023]
8. International Dysphagia Diet Standardisation Initiative (IDDSI). The IDDSI Framework. <https://iddsi.org/Framework> [Accessed 11th April 2023]
9. Department for Environment Food and Rural Affairs (DEFRA). Government Buying Standard for food and catering services. <https://www.gov.uk/government/publications/sustainable-procurement-the-gbs-for-food-and-catering-services#full-publication-update-history> [Accessed 11th April 2023]
10. British Dietetic Association. The Nutrition and Hydration Digest improving outcomes through food and beverage services, 2nd Edition. <https://www.bda.uk.com/uploads/assets/c24296fe-8b4d-4626-aeebb6cf2d92fccb/NutritionHydrationDigest.pdf> [Accessed 11th April 2023]

11. NHS Digital. Patient-Led Assessments of the Care Environment (PLACE). <https://digital.nhs.uk/data-and-information/areas-of-interest/estates-and-facilities/patient-led-assessments-of-the-care-environment-place> [Accessed 11th April 2023]
12. Allergy UK. Allergen Labelling Changes. <https://www.allergyuk.org/news/allergen-labelling-changes/> [Accessed 11th April 2023]
13. Food Standards Agency (FSA). Allergens and ingredients food labelling decision tool. <https://www.food.gov.uk/allergen-ingredients-food-labelling-decision-tool> [Accessed 11th April 2023]
14. European Parliament and of the Council. Food Information Regulations. <https://www.legislation.gov.uk/eur/2011/1169/contents> [Accessed 11th April 2023]
15. Department of Health and Social Care. Health and Care Bill: food information for consumers – powers to amend retained EU law. <https://www.gov.uk/government/publications/health-and-care-bill-factsheets/health-and-care-bill-food-information-for-consumers-powers-to-amend-retained-eu-law> [Accessed 11th April 2023]
16. Northern Ireland Office. Brexit transition: How-To-Prepare guide for changes to labelling food sold in Northern Ireland. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/941774/BREXIT\\_TRANSITION\\_HOW-TO-PREPARE\\_GUIDE\\_FOR\\_NI\\_FOOD\\_LABELLERS.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/941774/BREXIT_TRANSITION_HOW-TO-PREPARE_GUIDE_FOR_NI_FOOD_LABELLERS.pdf) [Accessed 11th April 2023]
17. Food Standards Agency. Food and Feed Law Guide. <https://www.food.gov.uk/sites/default/files/media/document/food-and-feed-law-guide-july-2020.pdf> [Accessed 11th April 2023]
18. Department for Environment, Food & Rural Affairs. Food Standards: Labelling and Composition. <https://www.gov.uk/guidance/food-standards-labelling-durability-and-composition> [Accessed 11th April 2023]
19. Department of Health, Social Services and Public Safety. Promoting Good Nutrition: A Strategy for good nutritional care for adults in all care settings in Northern Ireland 2011-2016. [https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/promoting-good-nutrition\\_0.pdf](https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/promoting-good-nutrition_0.pdf) [Accessed 11th April 2023]
20. Department of Health, Social Services and Public Safety. Get your 10 a day! THE NURSING CARE STANDARDS FOR PATIENT FOOD IN HOSPITAL. <https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/10-a-day.pdf> [Accessed 11th April 2023]



21. Health and Social Care (HSC). PROMOTING GOOD NUTRITION Guidance and resources to support the use of Malnutrition Universal Screening Tool (MUST) across all care settings. [https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/pgn-must\\_0.pdf](https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/pgn-must_0.pdf) [Accessed 11th April 2023]
22. Healthcare Improvement Scotland (HIS). Food, Fluid and Nutritional Care Standards. [https://www.healthcareimprovementscotland.org/our\\_work/standards\\_and\\_guidelines/stnds/nutritional\\_care\\_standards.aspx](https://www.healthcareimprovementscotland.org/our_work/standards_and_guidelines/stnds/nutritional_care_standards.aspx) [Accessed 11th April 2023]
23. NHS Scotland. Food in Hospitals. <https://www.nss.nhs.scot/media/1097/1479818118-food-in-hospitals-revised-march-2016.pdf> [Accessed 11th April 2023]
24. Welsh Government. All Wales Nutrition and Catering Standards for Food and Fluid Provision for Hospital Inpatients. <https://www.bapen.org.uk/pdfs/e-learning/WalesNutritionCateringStandardsHospitalInpatients.pdf> [Accessed 11th April 2023]

## Further Reading

British Association for Parenteral and Enteral Nutrition (BAPEN). A Toolkit for Commissioners and Providers in England. Second Edition. Malnutrition Matters: Meeting Quality Standards in Nutritional Care. [https://www.bapen.org.uk/pdfs/bapen\\_pubs/bapen-toolkit-for-commissioners-and-providers.pdf](https://www.bapen.org.uk/pdfs/bapen_pubs/bapen-toolkit-for-commissioners-and-providers.pdf) [Accessed 11th April 2023]

Department for Environment, Food and Rural Affairs (DEFRA). Policy paper: Government food strategy. <https://www.gov.uk/government/publications/government-food-strategy> [Accessed 11th April 2023]

European Society for Clinical Nutrition and Metabolism (ESPEN). ESPEN Guidelines & Consensus Papers. <https://www.espen.org/guidelines-home/espen-guidelines> [Accessed 11th April 2023]

Food Standards Agency (FSA). <https://www.food.gov.uk/> <http://www.food.gov.uk/> [Accessed 11th April 2023]

Hospital Caterers Association (HCA). Publications. <http://www.hospitalcaterers.org/publications/?c=1557> [Accessed 11th April 2023]

# 4

## Environmental Sustainability



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“We need to work together to combat climate change. By making dietary changes, it’s win-win for the planet and health if we all act now.”

British Dietetic Association One Blue Dot

This chapter provides an overview of sustainability, the role of the multidisciplinary team and some practical guidance for hospital food service to make impactful changes. Climate change threatens the foundations of good health, with direct and immediate consequences for our patients and the public. Our eating habits have an impact on the environment and are jeopardising the future security of our planet including farming, production, distribution and delivery through to waste (1).

## The impact of food systems on the planet

Our current food system is having a major negative impact on our planet. This impact is summarised by the below statistics and Figure 4.1 from BDA's One Blue Dot.

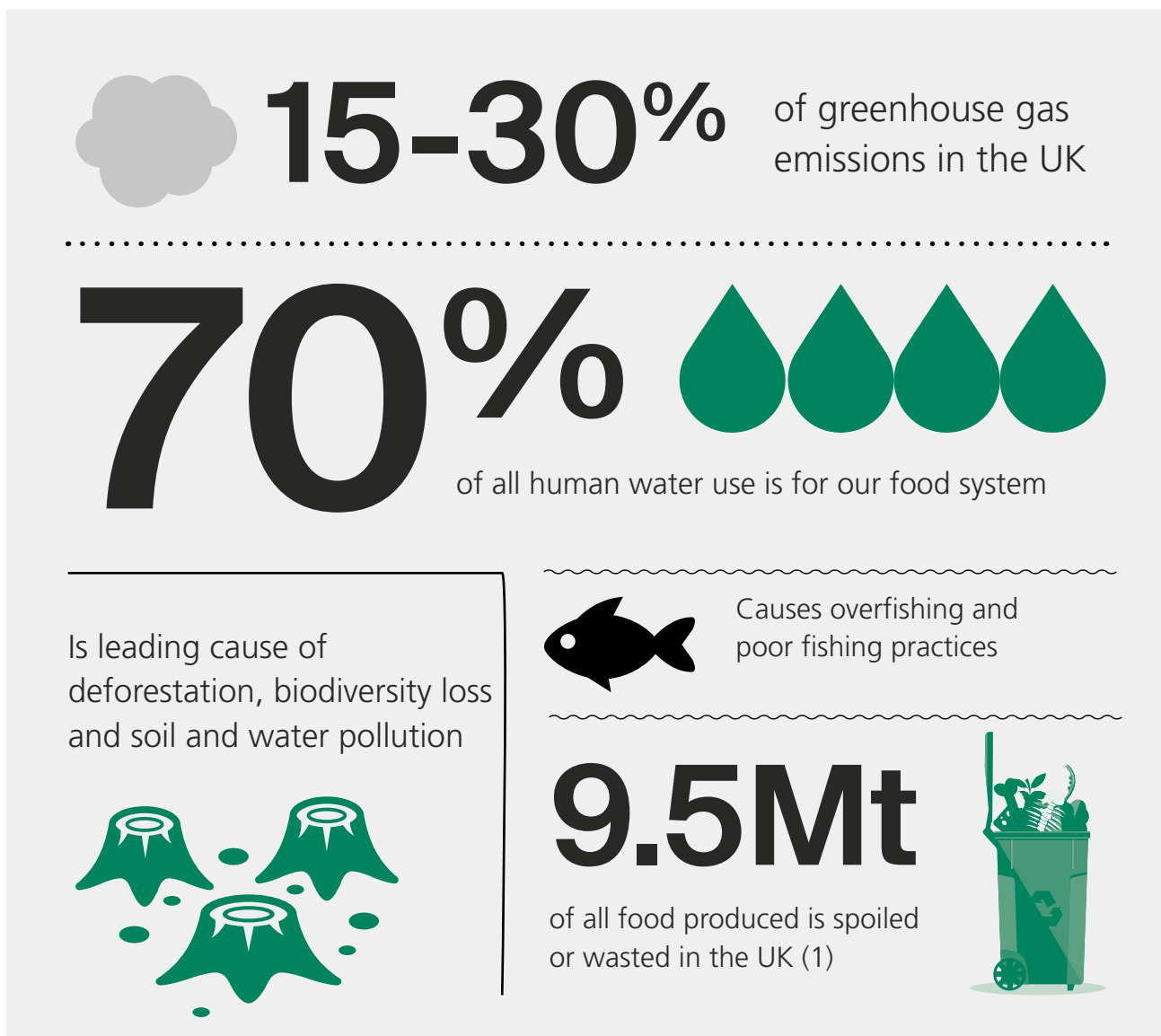
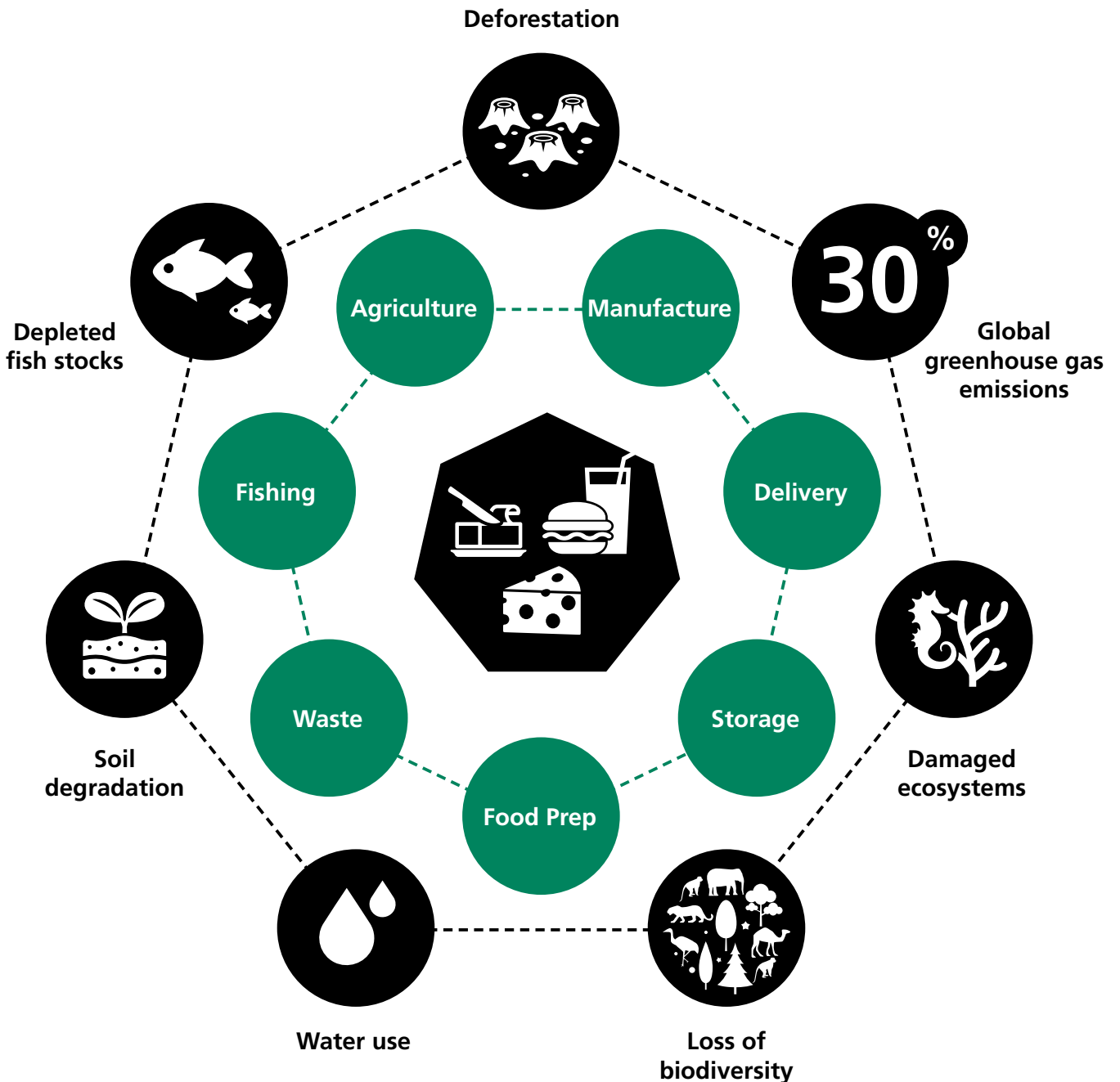


Figure 4.1: How current food systems damage our planet - BDA One Blue Dot (1)



In the UK, approximately 46% percent of the food we eat is imported from other countries (2). The transport of food from abroad increases the environmental impact of our food system, plus there is an increased risk of spoilage and food waste en route.

## A more sustainable way forward

Research on sustainability is fast paced and more sustainable practices are emerging. There are now a number of new ways to grow food, including hydroponics and no ploughing farming practices. Similarly, waste disposal methods now range from traditional landfill to innovative practices like incineration for heat provision and bio-digesters.

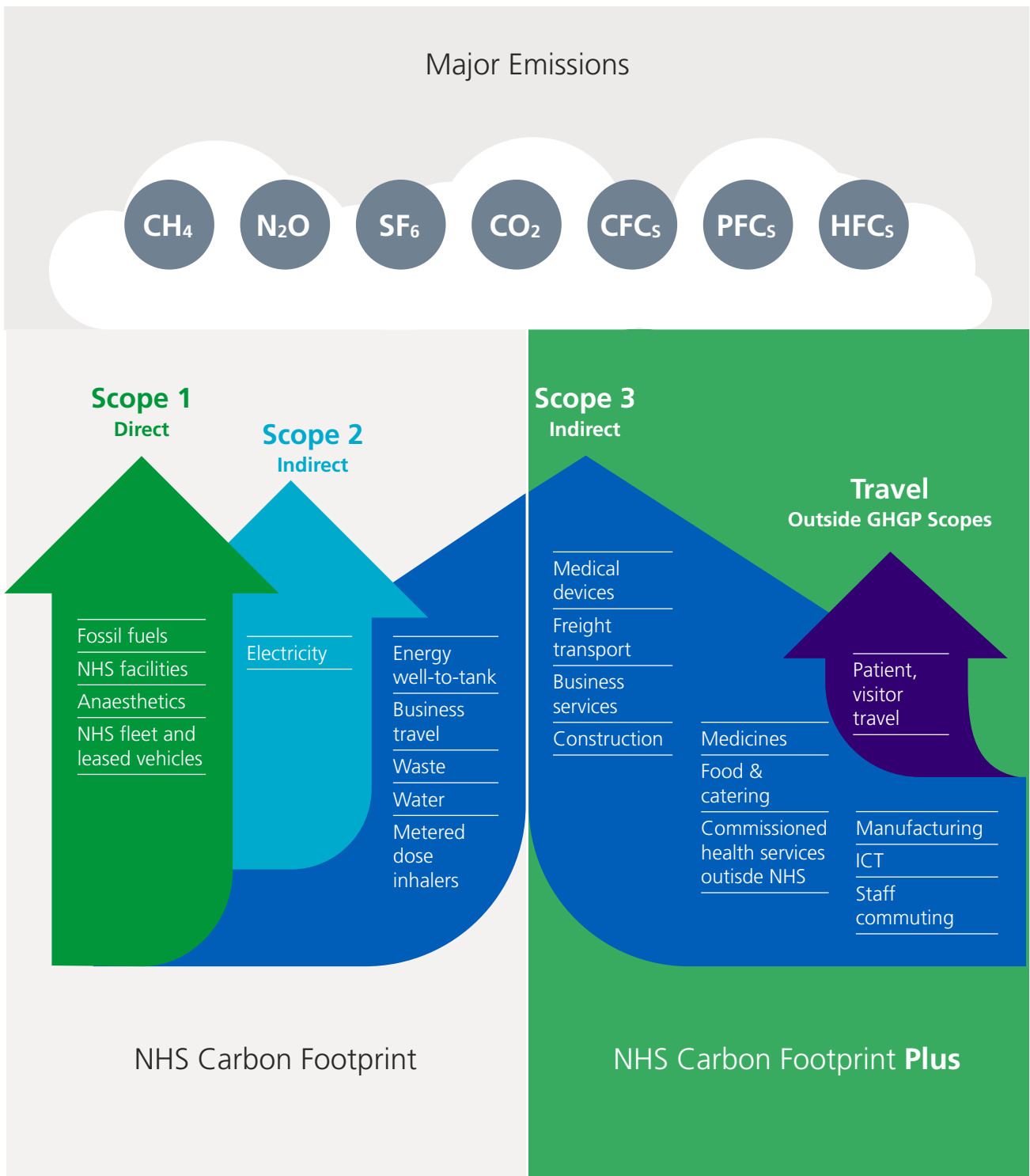
There has also been advancement in the nutrition advice for sustainable eating patterns in both the general population and for those who follow a specific diet for a clinical condition (1, 3, 4). Dietitians are well placed to apply knowledge of sustainable diets appropriately to their area of practice.

## Sustainability in healthcare food service

Over the last 10 years, the National Health Service (NHS) has taken notable steps to reduce its impact on climate change. The Independent Review of Hospital Food conducted in 2020 recommends that sustainability is considered in all aspects of healthcare food service due to the environmental impact of the whole food supply chain, including procurement and waste (5).

The NHS has committed to reaching net zero carbon by 2040 for the emissions it controls directly (i.e. Scope 1) and by 2045 for the emissions it influences. The goods and services purchased by the NHS are part of the indirect category, known as Scope 3. As outlined in Figure 4.2, food and catering are included in Scope 3 of the Greenhouse Gas Protocol (GHGP) (6).

**Figure 4.2: GHGP (Greenhouse Gas Protocol) scopes in the context of the NHS (6)**



Reproduced from *Delivering a Net Zero NHS Report* (6)



It is estimated that food and catering services in the NHS produce 1,543 ktCO<sub>2</sub>e each year, equating to approximately 6% of total emissions. In some cases, locally sourced food can cut emissions related to agriculture, transport, storage and waste across the supply chain and on the NHS estate (6).

To reduce the impact of its supply chain, the NHS has set out a roadmap to help suppliers align with its net zero ambition between now and 2030. This includes the requirement from April 2022 that all NHS procurements apply a minimum 10% net zero and social value weighting in the award of NHS contracts. Also, from April 2023 there will be a requirement for all suppliers of contracts over £5m to publish a carbon reduction plan. Full details of these and other requirements can be seen in the net zero supplier roadmap (7).

Every NHS Trust and Integrated Care System (ICS) is required to develop a board-approved Green Plan that sets out their aims, objectives, and delivery plans for carbon reduction, with a board-level 'net zero lead' responsible for overseeing its delivery. These plans should set out how trusts are reducing the carbon emissions from any food made, processed or served within the organisation (8).

## The National standards for healthcare food and drink

The National standards for healthcare food and drink include a whole section on sustainability (9). It is mandatory for all healthcare organisations in England to comply with section 4 of the standards, titled 'Improving sustainable procurement and reducing food waste'. The section covers compliance with the Government Buying Standards for Food and Catering Services, food procurement practices in line with the Net Zero and Social Value Model, measuring and reducing food waste and the elimination of single use plastics. See Chapter 3 for more information on the National standards for Healthcare Food and Drink.

## Environmentally sustainable diets

The British Dietetic Association (BDA) has published an extensive policy statement on the topic of environmentally sustainable diets. Titled 'One Blue Dot' (1), the policy statement and toolkit supports the belief that "everyone should have access to an affordable nutritious, high-quality diet that is good both for health and the environment".

The aim is to ensure that UK dietitians lead on dietary changes and nutritional considerations. The BDA's Sustainable Diets Specialist Group has also been established to help support dietitians and work with other organisations (10).

## Plant based diets

The BDA describes plant-based diets as ‘based on foods that come from plants with few or no ingredients that come from animals’ (11). There is increasing recognition that plant-based diets have a lower impact on the environment, which doesn’t necessarily include the exclusion of meat, rather smaller quantities of animal derived foods. The UK Committee on Climate Change have discussed targets such as 20% less meat (12), while the Eating Better Alliance is calling for a 50% reduction in meat and dairy consumption (13).

It is possible to meet nutrient requirements with a diet that has less or no meat. The Scientific Advisory Committee on Nutrition (SACN) have advised that reducing the red meat intakes of adults who currently consume red meat in the upper range, down to 80g/day, would have little impact on the proportion of adults with zinc and iron intakes below the lower nutrient reference value (14).

## The Eatwell Guide

The Eatwell Guide is the national food guide and recommends that 80% of the diet should be made up of plants i.e., fruits, vegetables, grains and legumes (15). See Chapter 9 for more on the Eatwell Guide recommendations.

The Carbon Trust analysis of the Eatwell Guide shows that this diet has a lower environmental impact than the current UK diet attributed to several factors, including an increase in potatoes, fish, bread, vegetables and fruit, alongside reduced amounts of meat, dairy and sweet foods (16). The Carbon Trust estimates that if individuals moved from current eating patterns to the Eatwell Guide recommendations this would result in (16):



## Lower carbon menus

Plant based proteins have been found to produce far fewer carbon emissions in their production than animal-based proteins (17). Including a good variety of plant-based dishes and reducing the availability of dishes with a higher carbon cost, such as red meat dishes, is a good way to help lower the carbon footprint of healthcare menus (1). However, it is important that plant-based dishes still meet the minimum nutrition targets outlined in Chapter 10, so patients can meet their daily nutrition requirements.

Plant-based dishes must also be appealing, to encourage patients to choose these options and eat the whole meal to gain its full nutritional value. There are several methods to help nudge patients to choose plant-based options (18). These include:

- 
- Use positive language such as 'plant-based protein' and avoiding using the terms 'vegetarian' and 'vegan' in the name of dishes so that they appeal to a wider audience
  - Position plant-based options at the start of menus to increase the likelihood that they are seen by patients as they read down the list of options.
- 

Carbon labelling is also a new tool to help signpost people to lower carbon/more environmentally friendly food choices. The carbon label may be a numeric CO<sub>2</sub> emission value or a rating system so that people can compare dishes based on their carbon footprint. The calculations consider the amount of carbon produced during the farming and transport of each ingredient and the production of the complete dish.

Once carbon emissions of ingredients are known, chefs and dietitians could also use these values when developing recipes to choose lower carbon ingredients to reduce the overall carbon footprint of the menu. Whilst software programs are available to calculate the carbon footprint of food, recipes and menus, they are in their infancy and results are often variable.

Nutrition is the key priority for patient menus, so annotating carbon labelling directly on patient menus may be inappropriate.

Comparisons between products can also only be made if the same methodology for calculating the carbon footprint has been used. Therefore, if ratings are provided by different suppliers who use different methods, these products cannot be directly compared (19). While carbon labelling may become mandatory for retailers in the future, guidelines are yet to be agreed as to what should be measured and how. Free online calculators are available; however, these may be misleading, as they utilise generic datasets and do not give specific values for the actual ingredients used.

Industry stakeholders are working on a common set of data sources and consistent methodology for measuring and verifying emissions of food and drink products, which is essential for any on-pack carbon labelling (20).

## Role of the multidisciplinary team in sustainability

All members of the multidisciplinary team with a role in food service, including Allied Health Professionals (AHPs), interact with the food system in various ways and have a unique opportunity to be agents for change. See 'further reading' for the Greener AHP hub (21), which has specific considerations for food and nutrition. Potential actions that this team can take are outlined below:

**1. Individual Actions:** Small everyday actions that together will have a significant net effect by embedding public health and prevention (and therefore environmental sustainability) in existing interventions e.g., through Making Every Contact Count (22).

**2. Waste:** Seek an active role in reducing food and plate waste by including supporting "assisted mealtimes" and digital ordering (23). Resources are available to help reduce waste generated during both meal production and service (24). For example, meals cooked and served when a patient is Nil by Mouth or is off the ward, leads to the meal being wasted. It is also vital patient food preferences are communicated at ward level to reduce the risk of plate waste.

**3. Procurement:** Those involved in procurement teams should review contracts for food, equipment and related items, aiming to achieve health and social benefits, financial savings and environmental benefits.

**4. Audits:** Hospitals are required to carry out audits and include them at the senior board level. While these have a focus on clinical, financial and operational issues, there is a requirement for an examination of maintenance of any standards including those related to sustainability.

Dietitians should be aware of the challenges for vulnerable groups and individuals (e.g., those suffering from ill health, pregnant women and older adults) and be able to modify advice as appropriate. This is never more important than dealing with ill and vulnerable people in hospital and care situations where a move to a totally plant based diet may be inappropriate.

## Practical guidance

These best practice ideas, while not all mandatory, are useful pointers towards making the food, service and environment in healthcare more sustainable.

- 
- Include more home-grown seasonal products on menus that are tailored to the preferences of local people and that can be provided safely and consistently

---

  - Where appropriate, approach local suppliers to supply the hospital. Larger, national companies may rely more on UK produce where national supply contracts cannot always be 'local'

---

  - Consider introducing a logo on the menu to indicate that UK or local sourcing has been utilised

---

  - Introduce meat-free menu options and initiatives such as Meat Free Mondays in staff and visitor restaurants

---

  - Reduce the amount of meat in popular recipes like Spaghetti Bolognese by incorporating beans, legumes and other meat alternatives to help reduce the carbon footprint by as much 50%

---

  - Utilise more sustainable options for printed menus for patients, such as large single page menus rather than multi-page booklets and menu displays for staff and visitor catering, such as digital menus or reusable menu boards

---

  - Establish a procedure to consistently measure and monitor food waste at both kitchen and ward level

---

  - Aim to recycle or convert food waste to fuel with bio-digesters or other commercial waste systems

---

  - Utilise electronic or digital meal ordering systems and take patient meal orders as close to mealtimes as possible to help reduce food waste

---

  - Appropriately recycle any food or drink packaging and limit any unnecessary packaging

---

  - Use crockery and cutlery that can be reused instead of single use plastics. Where this is not possible, use biodegradable packaging which may be more sustainable.

---

  - Decant bulk food and drink items where possible rather than use individually packaged items, unless clinically indicated

---

  - Consider using circular recycling systems for unavoidable use of plastic packaging

---

  - Consider introducing an initiative where reuseable cups or containers can be used in staff and visitor restaurants and coffee shops for a discount

---

  - Educate staff about the environmental impact of more sustainable diets and where they may/may not be appropriate for certain patients

---

## References

1. British Dietetic Association. One Blue Dot: Eating patterns for health and environmental sustainability. <https://www.bda.uk.com/resource/one-blue-dot.html> [Accessed 11th April 2023]
2. International Trade Administration. United Kingdom – Country Commercial Guide. <https://www.trade.gov/country-commercial-guides/united-kingdom-agricultural-sectors#:~:text=The%20UK%20imports%20around%2046,importer%2C%20especially%20of%20fresh%20produce> [Accessed 11th April 2023]
3. EAT. EAT-Lancet Commission Summary Report. <https://eatforum.org/eat-lancet-commission/eat-lancet-commission-summary-report/> [Accessed 11th April 2023]
4. Kassam S, Kassam Z, Simon L. Plant-based Nutrition in Clinical Practice. London. Hammersmith Books; 2022.
5. Department of Health and Social Care. Report of the Independent Review of NHS Hospital Food. <https://www.gov.uk/government/publications/independent-review-of-nhs-hospital-food> [Accessed 11th April 2023]
6. NHS England. Delivering a 'Net Zero' National Health Service. <https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf> [Accessed 11th April 2023]
7. NHS England. Suppliers. <https://www.england.nhs.uk/greenernhs/get-involved/suppliers/> [Accessed 11th April 2023]
8. NHS England. How to produce a Green Plan: A three-year strategy towards net zero. <https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2021/06/B0507-how-to-produce-a-green-plan-three-year-strategy-towards-net-zero-june-2021.pdf> [Accessed 11th April 2023]
9. NHS England. National standards for healthcare food and drink. <https://www.england.nhs.uk/publication/national-standards-for-healthcare-food-and-drink/> [Accessed 11th April 2023]
10. British Dietetic Association. Sustainable Diets Specialist Group. <https://www.bda.uk.com/specialist-groups-and-branches/sustainable-diets-specialist-group.html> [Accessed 11th April 2023]

11. British Dietetic Association. Vegetarian, vegan and plant-based diet: Food Fact Sheet. <https://www.bda.uk.com/resource/vegetarian-vegan-plant-based-diet.html> [Accessed 11th April 2023]
12. Climate Change Committee. Government's Food Strategy 'a missed opportunity' for the climate. <https://www.theccc.org.uk/2022/06/13/governments-food-strategy-a-missed-opportunity-for-the-climate/> [Accessed 11th April 2023]
13. Eating Better alliance. Food Service. <https://eating-better.org/better-by-half/food-service/> [Accessed 11th April 2023]
14. Scientific Advisory Committee on Nutrition (SACN). Iron and Health. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/339309/SACN\\_Iron\\_and\\_Health\\_Report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/339309/SACN_Iron_and_Health_Report.pdf) [Accessed 11th April 2023]
15. Public Health England. The Eatwell Guide. <https://www.gov.uk/government/publications/the-eatwell-guide> [Accessed 11th April 2023]
16. Carbon Trust. The eatwell guide: a more sustainable diet. <https://www.carbontrust.com/our-work-and-impact/guides-reports-and-tools/the-eatwell-guide-a-more-sustainable-diet> [Accessed 11th April 2023]
17. Our World in Data. Greenhouse gas emissions per kilogram of food product. <https://ourworldindata.org/grapher/ghg-per-kg-poore> [Accessed 11th April 2023]
18. Eating Better. Make plant dishes appealing. <https://eating-better.org/better-by-half/food-service/make-plant-dishes-appealing/> [Accessed 11th April 2023]
19. Our World in Data. You want to reduce the carbon footprint of your food? Focus on what you eat, not whether your food is local. <https://ourworldindata.org/food-choice-vs-eating-local> [Accessed 11th April 2023]
20. Food and Drink Federation. Achieving Net Zero: A Handbook for the Food and Drink Sector. <https://www.fdf.org.uk/fdf/resources/publications/guidance/net-zero-handbook/net-zero-handbook/> [Accessed 11th April 2023]
21. NHS England. Being a greener AHP. <https://www.england.nhs.uk/ahp/greener-ahp-hub/understanding-environmental-sustainability/being-a-green-ahp/> [Accessed 11th April 2023]
22. Public Health England, NHS England and Health Education England. Making Every Contact Count (MECC): Consensus statement. <https://www.england.nhs.uk/wp-content/uploads/2016/04/making-every-contact-count.pdf> [Accessed 11th April 2023]

23. Young A. Protected Mealtimes (or Assisted Mealtimes?). <https://dietitianconnection.com/app/uploads/2014/05/FS-workshop-assisted-mealtimes.pdf> [Accessed 11th April 2023]
24. Waste and Resources Action Programme (WRAP). Guardians of Grub. <https://guardiansofgrub.com/> [Accessed 11th April 2023]

## Further Reading

Public Sector Catering. Plant Based Week. <https://www.publicsectorcatering.co.uk/plantbasedweek> [Accessed 11th April 2023]

International Confederation of Dietetic Associations (ICDA). ICDA Sustainable Food Systems Toolkit. [https://icdasustainability.org/?dm\\_i=1M7S%2C8047H%2C9LQ00X%2CWRP5D%2C1](https://icdasustainability.org/?dm_i=1M7S%2C8047H%2C9LQ00X%2CWRP5D%2C1) [Accessed 11th April 2023]

Koutrouli, E. Identifying the challenges UK dietitians experience in implementing a food sustainability policy in the hospital setting. Unpublished Master's thesis. The University of Manchester; 2021.





# 5

## Staff and Visitor Wellbeing



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Over half of all the food provided in NHS hospitals is served to staff and visitors, providing a prime opportunity to support staff and visitors to make healthier choices.

Significant steps have been taken to help change the food environment within staff and visitor food outlets in the NHS so that they can become beacons of good practice in supporting staff and visitors to make healthier choices. This chapter is specifically in relation to the food and drink served to staff and visitors within the NHS, not patients.

Having access to healthier food options in the workplace has many benefits for staff, including reducing the risk of developing multiple lifestyle related diseases and improving physical and mental wellbeing (1). A healthier, happier, more engaged workforce leads to better performance for both individuals and the organisation (2).



**Number of NHS staff living with overweight or obesity**

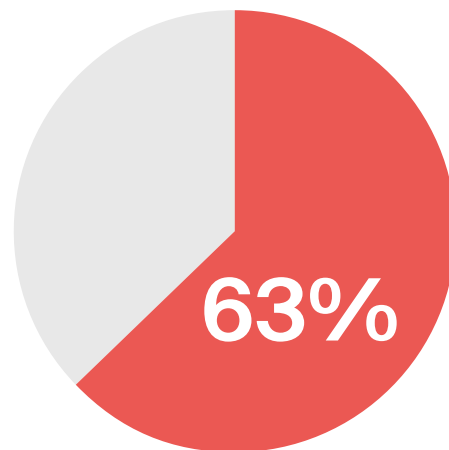
Recent National Diet and Nutrition Survey (5) data indicated that as a nation we are consuming too much saturated fat, salt and sugar, and not enough oily fish, fruit, vegetables, or fibre.

**Short and long-term health consequences of people living with overweight and obesity is costing the NHS approximately (per year)**

**£6.1bn**

The NHS is the largest employer in Europe and fifth largest in the world (6) employing 1.3 million staff members (7).

**% of the adult population living in England who were estimated to be living with overweight or obesity**



Supporting people with overweight or obesity can help to decrease the risk of chronic conditions and the associated sickness absence rate (8).

## Barriers to making healthier choices

Helping staff to reach and maintain a healthier weight requires the consideration of several factors, including:

- 
- Time pressures for meal preparation and shopping

---

  - Family demands

---

  - Cost

---

  - Access to healthier foods at home and at work

---

  - Comfort eating due to stress

---

  - Busy work schedules and shift patterns

---

  - Perception of healthier options being less satisfying and enjoyable

---

  - Unsupportive work environments (e.g., lack of breaks, sedentary jobs roles etc).

---

Additionally, visitors to hospitals may find it difficult to access food and drink due to travelling, looking after ill relatives and reduced time for food preparation.

Whilst it is important to promote healthier eating to help support people adopt healthier lifestyles, it needs to be recognised that people have different dietary requirements. Apart from physiological differences, some people may be more active than others with physically demanding jobs, therefore they need a higher energy intake than someone who has a desk-based role. It is also important to consider people's overall relationship with food. A balanced approach to the promotion of healthier choices is required to avoid weight stigma, triggers for disordered eating and general unhealthy relationships with food.

## Health and wellbeing initiatives, standards and regulations

Since 2017 there have been several important initiatives, standards and regulations introduced into the NHS to help improve the health and wellbeing of staff and visitors. These are listed below.

### National standards for healthcare food and drink

The National standards for healthcare food and drink released in 2022 (9) build on previous hospital food standards (10) and take into consideration the extensive recommendations from

the 'Report of the Independent Review of NHS Hospital Food' (11) as well as key priorities for both the NHS and the Government.

The standards comprise of four sections, with section 3 outlining the mandatory requirements for retail, staff and visitor food and drink provided by healthcare organisations.

## Retail, staff and visitor food and drink

There are four mandatory standards that apply to staff and visitor food and drink which organisations must demonstrate compliance with (9).

- 
1. Organisations must review their food and drink menus and look for opportunities to make the choices healthier and more sustainable\*

---

  2. Organisations must implement the GBS Nutrition Standards

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  3. Organisations must continue to meet the CQUIN related standards

---

  4. Organisations must provide access to suitable food and drink out of hours (based on the above nutrition standards). See checklist in the Report of the Independent Review of NHS Hospital Food (11).

---

\*See Chapter 4

## Government Buying Standards for Food and Catering Services (GBS)

The latest Government Buying Standards for Food and Catering Services (GBS) were published by the Department for Environment, Food and Rural Affairs (DEFRA) in 2021 (12).

The GBS includes a set of minimum mandatory standards with which NHS trusts must comply. It also incorporates recommended best practice guidance for health, sustainability and welfare for food and catering in the public sector.

The updated nutrition standards element of the GBS (13) aims to ensure consistent minimum standards for healthier food and drink options. This includes:

- 
- Reduction in salt, sugar and saturated fat as per the Government's calorie, salt and sugar reduction and reformulation programme
  - Increased availability of fruit, vegetables, fish and fibre rich foods
  - Controlling availability and portion size of soft drinks, confectionery and savoury snacks
  - Best practice standards on calorie and allergen labelling and menu analysis.
- 

Organisations will need to assess their compliance with the nutrition standards both mandatory and best practice setting out a programme of implementation. Technical guidance has been published alongside the nutrition standards to support this (14).

## Commissioning for Quality and Innovation (CQUIN) related standards

The CQUINs form part of standard NHS Contract (15) and its framework is intended to reward excellence, encouraging a culture of continuous quality improvement, whilst delivering better outcomes for patients and staff (16).

The CQUIN indicator 1b Healthy food for staff, visitors and patients focuses on changing organisational behaviour and culture towards the food and drinks sold on NHS premises. The standard outlines mandatory requirements for retail outlets, including:

- 
- a. Banning of price promotions on sugary drinks and foods high in fat, sugar or salt (HFSS)
  - b. Banning of advertisements on NHS premises of sugary drinks and HFSS foods
  - c. Banning of sugary drinks and HFSS foods from checkouts
  - d. Healthy options must be available at all times, including for those staff working night shifts.
- 

For specific targets for sugary drinks, confectionery and savoury pre-packaged meals, refer to the NHS staff health & wellbeing: CQUIN 2017-19 Indicator 1 Implementation Support document (17).

## 24/7 Food provision for staff

The Report of the Independent review of NHS Hospital Food is a first step towards improving food standards and focusses on the safety, nutrition, quality and production methods of food for patients, staff and visitors in NHS hospitals (11). It recognises the challenges to improving



food culture in our hospitals and adopts a holistic approach to progress this. The report includes eight key recommendations for system-level change and a checklist for catering managers and chief executives.

This chapter includes some best practice examples pertinent to staff and visitor catering.

- 
- One of the key recommendations is to ensure food is available 24/7 for staff
  - An out of hours menu or food offer for staff should contain both hot and cold food options
  - The same food offered to patients should be regularly offered in staff restaurants.
- 

## Regulations in England

### The Calorie Labelling (Out of Home Sector) (England) Regulations 2021

The calorie labelling regulations were introduced in April 2022 and aim to help consumers make healthier decisions, encourage businesses to provide lower calorie food options and food manufacturers to reformulate food and drink products (18).

The regulations only apply to staff and visitor restaurants or cafes in hospitals if they are run by an external contractor employing more than 250 people. Further information on the calorie labelling regulations can be found in Chapter 8: Food Composition, Labelling and Recipe Analysis.

### Salt Reduction Targets 2024

The 2024 salt reduction targets (19) are for all sectors, including retailers, manufacturers and the out of home sector.

NHS restaurants and cafes for staff and visitors must ensure they are compliant by procuring products that are in line with the salt reductions targets. Any fresh food and drinks made on-site must also comply with the targets outlined in the out of home sector section.

Furthermore, there are also Calorie Reduction targets for 2024 (20) to be achieved by the food industry in specific product categories.

## Health and wellbeing standards in Scotland, Wales and Northern Ireland

### Scotland: Healthcare Retail Standard

The Healthcare Retail Standard (HRS) (21) applies only to those retail outlets (i.e., where food is not prepared on-site but is ready for immediate purchase) within healthcare sites. The HRS is comparable to the National CQUIN scheme in England and consists of specific criteria that retail outlets must meet for compliance.

In line with a new three-year strategy and transformational programme, the Scottish Government have also considered changes in the out of home landscape by publishing 'Diet and healthy weight: out of home action plan' (22). Food Standards Scotland (FSS) will lead the overall monitoring and evaluation of this plan to inform future actions.

### Wales: The Corporate Health Standard

The Corporate Health Standard (23) is a free service which is funded as part of the Welsh Government's 'Healthy Working Wales' programme.

It is the national quality framework and award for employers to improve health and wellbeing in the workplace. There is a standard for healthy eating within the workplace with specific criteria for workplaces with on-site catering facilities.

The Healthy Options Award Wales (24) is open to all types of catering premises that cater for the public.

This award rewards caterers who make it easier for their customers to make healthy choices when eating out. It aims to encourage food businesses to provide healthier options to customers through:

- 
- The use of healthier catering practices
  - Increasing fruit, vegetables and starchy carbohydrates
  - Decreasing fat, especially saturated fat, sugar and salt
  - Provision of healthy options for children
  - Rewards staff training
  - Promotion and marketing of healthier options.
-

## Northern Ireland: Nutritional Standards for Catering in Health & Social Care

The Nutritional Standards for Catering in Health and Social Care (25) were published in partnership with the Public Health Agency, the Food Standards Agency, safefood and Health and Social Care.

The standards apply to all facilities that serve food or beverages to staff or visitors operating within Health and Social Care settings. This includes catering facilities, privately owned retail units and vending machines.

The standards must be adhered to from the procurement of food contracts to menu planning and food service.

### **The role of the dietitian in health and wellbeing**

The food service dietitian can provide a vital contribution towards planning, implementation and monitoring of health and wellbeing strategies, programmes, policies and procedures in relation to staff and visitor catering in hospitals.

This role can be embedded within the clinical dietetic team or with contracted catering services where applicable.

A more detailed job description of this role can be found in Appendix 2. and further information on the role of a food service dietitian can be found in Chapter 2.

### What good looks like

Several initiatives can be taken on improving the accessibility and availability of healthier meal solutions for staff and visitors.

These can include but are not limited to:

- 
- Set up a multidisciplinary steering group to improve communication, drive improvements and to monitor compliance with standards
- 
- Provide 24/7 hot meal options for staff working on shifts
- 
- Offer budget friendly healthier options in staff and visitor restaurants and consider a discount for staff on healthier options
-

- 
- Provide free drinking water throughout the facility

---

  - Promote theme days and balanced meal offers that encourage healthier eating

---

  - Introduce healthier 'grab and go' meal options

---

  - Include daily healthier meal choices on restaurant menus that reflect the demographics of the site and staff members

---

  - Share healthier eating messages and promotions via local intranets and hubs

---

  - Promote sustainability through affordable plant-based meal offers

---

  - Cater for any allergies and special dietary requests

---

  - Make nutrition and allergen information easy for staff and visitors to access, such as a QR code or website address displayed on promotional posters, digital screens or printed menus.

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## References

1. National Health Service. Obesity <https://www.nhs.uk/conditions/obesity/> [Accessed 20th March 2023]
2. British Dietetic Association. Work Ready White Paper. <https://www.bda.uk.com/food-health/workplace-health-work-ready/what-we-do/resources/work-ready-white-paper.html> [Accessed 20th March 2023]
3. Public Health England. Health matters: obesity and the food environment. <https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment--2> [Accessed 20th March 2023]
4. Royal College of Physicians. Work and wellbeing in the NHS: why staff health matters to patient care. <https://www.rcplondon.ac.uk/guidelines-policy/work-and-wellbeing-nhs-why-staff-health-matters-patient-care> [Accessed 20th March 2023]
5. Public Health England. National Diet and Nutrition Survey. <https://www.gov.uk/government/collections/national-diet-and-nutrition-survey> [Accessed 11th April 2023]
6. Forbes. McCarthy N. The World's Biggest Employers [Infographic]. <https://www.forbes.com/sites/niallmccarthy/2015/06/23/the-worlds-biggest-employers-infographic/?sh=576e0747686b> [Accessed 20th March 2023]
7. NHS Digital. NHS Workforce Statistics - August 2021 (Including selected provisional statistics for September 2021). <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics/august-2021> [Accessed 20th March 2023]
8. Saied S. Outcomes of a 12 Week Weight Management Intervention in the Workplace. Masters Level. University of Nottingham; 2020.
9. NHS England. National standards for healthcare food and drink. <https://www.england.nhs.uk/publication/national-standards-for-healthcare-food-and-drink/> [Accessed 20th March 2023]
10. Department of Health. The Hospital Food Standards Panel's report on standards for food and drink in NHS hospitals. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/523049/Hospital\\_Food\\_Panel\\_May\\_2016.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/523049/Hospital_Food_Panel_May_2016.pdf) [Accessed 20th March 2023]
11. Department of Health and Social Care. Report of the Independent Review of NHS Hospital Food. <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/>

[attachment\\_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf)  
[Accessed 20th March 2023]

12. Department for Environment, Food and Rural Affairs. Sustainable procurement: the GBS for food and catering services. <https://www.gov.uk/government/publications/sustainable-procurement-the-gbs-for-food-and-catering-services> [Accessed 20th March 2023]
13. Department for Environment, Food and Rural Affairs. The Government Buying Standards for Food and Catering Services (GBSF): updating the nutrition standards. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/802933/gbsf-nutrition-standards-consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/802933/gbsf-nutrition-standards-consultation.pdf) [Accessed 20th March 2023]
14. Department for Environment Food and Rural Affairs. Government Buying Standards for food and catering services: nutrition standards. Technical Guidance. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1011764/gbsf-nutritional-standards-technical-guidance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1011764/gbsf-nutritional-standards-technical-guidance.pdf) [Accessed 20th March 2023]
15. NHS England. NHS Standard Contract Service Conditions – Full Length. <https://www.england.nhs.uk/publication/nhs-standard-contract-service-conditions-full-length/> [Accessed 20th March 2023]
16. NHS England. Commissioning for Quality and Innovation (CQUIN) Guidance for 2016/17. <https://www.england.nhs.uk/wp-content/uploads/2016/03/cquin-guidance-16-17-v3.pdf> [Accessed 20th March 2023]
17. NHS England. NHS staff health & wellbeing: Commissioning for Quality and Innovation (CQUIN) 2017-19 Indicator 1 Implementation Support. <https://www.england.nhs.uk/publication/nhs-staff-health-wellbeing-commissioning-for-quality-and-innovation-cquin-2017-19-indicator-1-implementation-support/> [Accessed 20th March 2023]
18. Department of Health and Social Care. Calorie labelling in the out of home sector: implementation guidance. <https://www.gov.uk/government/publications/calorie-labelling-in-the-out-of-home-sector/calorie-labelling-in-the-out-of-home-sector-implementation-guidance> [Accessed 20th March 2023]
19. Public Health England. Salt reduction: targets for 2024. <https://www.gov.uk/government/publications/salt-reduction-targets-for-2024> [Accessed 20th March 2023]
20. Public Health England. Calorie reduction: guidelines for the food industry. <https://www.gov.uk/government/publications/calorie-reduction-guidelines-for-the-food-industry> [Accessed 20th March 2023]

21. The Scottish Government. Criteria for the Healthcare Retail Standard. <https://www.gov.scot/publications/criteria-healthcare-retail-standard/> [Accessed 20th March 2023]
22. The Scottish Government. Diet and healthy weight: out of home action plan. <https://www.gov.scot/publications/diet-and-healthy-weight-out-of-home-action-plan/> [Accessed 20th March 2023]
23. Welsh Government. Corporate Health Standard: A quality framework and award for health and wellbeing in the workplace. <https://phw.nhs.wales/services-and-teams/healthy-working-wales/healthy-working-wales-workplace-awards1/corporate-health-standard/> [Accessed 20th March 2023]
24. Shared Regulatory Services. Healthy Options Award. <https://www.srs.wales/en/>
25. Environmental-Health/Food-Hygiene-Standards/Healthy-Options-Award.aspx [Accessed 20th March 2023]
26. The Public Health Agency et al. Nutritional Standards in Health and Social Care. <https://www.publichealth.hscni.net/publications/nutritional-standards-catering-health-and-social-care-staff-and-visitors> [Accessed 20th March 2023]

## Further Reading

Department of Health and Social Care. Policy paper on Health and Care Bill 2022 Hospital Food <https://www.gov.uk/government/publications/health-and-care-bill-factsheets/health-and-care-bill-hospital-food#what-the-bill-will-do> [Accessed 20th March 2023]

Department of Health. A Toolkit to Support the development of a hospital food and drink strategy. <http://www.hospitalcaterers.org/media/1151/hospital-food-drink-strategy.pdf> [Accessed 20th March 2023]

British Dietetic Association. Workplace Health Work Ready. <https://www.bda.uk.com/food-health/workplace-health-work-ready.html> [Accessed 20th March 2023]

Dimbleby et al. National Food Strategy. <https://www.nationalfoodstrategy.org/> [Accessed 20th March 2023]

Department for Environment, Food and Rural Affairs. Government food strategy. <https://www.gov.uk/government/publications/government-food-strategy/government-food-strategy> [Accessed 20th March 2023]

Royal College of Nursing. Rest, Rehydrate, Refuel. <https://www.rcn.org.uk/healthy-workplace/healthy-workplaces/health-and-safety/rest-rehydrate-refuel> [Accessed 20th March 2023]

# 6

## Food Procurement, Service Systems, Safety and Waste





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Food is a precious and expensive commodity; we need to be careful how we use it and minimise waste. All food service systems have positives and negatives - the most important thing is that the chosen system delivers a quality and safe food service.

## Collaborative working in food service delivery

Dietitians, catering and nursing colleagues have campaigned for many years on the importance of working together to improve nutritional outcomes for patients. Where we see exemplar food services, the collaboration is more than this 'Power of 3'. It is a whole organisation working together in partnership, sharing skills, passion and inspiration to deliver the best possible food service.

## Food procurement

Food procurement is the process of sourcing, acquiring and paying for food. This may be carried out by several different members of the wider hospital team including the Trust catering team, a specialist Trust procurement team or via a contract caterer. Food can be bought from a range of suppliers including the NHS supply chain, manufacturers and wholesalers as well as smaller, local independent grocers, butchers, dairies and bakeries. Catering contractors will have their own approved food and drink suppliers who they work closely with to provide their catering solution. In this situation the hospital is 'contracted to use' the catering contractors' suppliers (see Chapter 7 for more information).

In England, all food and drink procurement by the NHS should comply with the Government Buying Standard (GBS) for food and catering services (1) with an exception to patient food and drink (2). The devolved nations have similar documents including Scotland: Scottish Government Procurement Strategy (2017-2019) (3) and Catering for Change: buying food sustainably in the public sector (4), Wales: Buying Food Fit for the Future (5) and Northern Ireland: Northern Ireland Food Strategy framework: Food at the Heart of our Society - A Prospectus for Change Public Consultation Document (6). For more on national food legislation and standards see Chapters 3 and 5.

## Food costs

The cost and supply of food is complex. The UK produces approximately 60–80% of the food we consume (7) which means that we rely on food supplies from the rest of the world for approximately 20-40% of our food. Many factors impact the supply and therefore cost of food. These include (7), but are not limited to:

- 
- Weather e.g., arable crop yields which, in turn, is affected by the climate and global warning
- 
- Politics - through food policy and the need to eat more sustainably and produce less carbon emissions e.g., the UK Government was one of the first in the world to set net zero (carbon emission) by 2050 targets into domestic legislation via an amendment to the Climate Change Act 2008 (8)
- 
- Agricultural disease outbreaks such as avian influenza (bird flu) 2022/23 (9)
- 
- Trade barriers with the rest of the world. Brexit has altered the relationship of Britain with Europe for the import and export of food impacting transport and supply chains
- 
- COVID-19 pandemic e.g., movement restrictions affecting trade, spacing in factories meaning that fewer products can be produced, panic buying, shortage of workers due to infections
- 
- International war e.g., the Ukraine-Russian conflict has impacted the supply and price of wheat, with approximately 30% of the world's wheat coming from Ukraine and Russia. It has also had an impact on availability of other products, including animal feed, fish, vegetable oils and fuel supplies (10).
- 

Dietitians should be aware that food is getting more expensive and that this is likely to continue.

It is important that all hospitals obtain good nutritional 'value for money' when procuring food for patients, staff and visitors with the promotion of quality food and adequate hydration to support a patient's nutritional care as part of their recovery and staff and visitor wellbeing.

## **Dietetic considerations when purchasing food**

Cost is not the only factor that needs to be considered; dietitians have a crucial role to play in the procurement process and should be actively involved with colleagues in advising on the range of products for standard menus, 24/7 solutions (including healthier eating options for staff) and emergency menus (such as in the COVID-19 pandemic or a major incident). Considerations include:

- 
- Checking the nutritional composition of food and drink purchased against standards in this document (see Chapters 10 and 12). Nutritional specifications for foods can be obtained from manufacturers/suppliers to compare their nutritional composition (macronutrients) with standards (see Chapter 8)
-

- 
- Checking the allergens contained within food and drink products, thinking about where they may be required and whether suitable for patient, staff and visitor catering
- 
- Checking the nutritional specifications and allergens of food and drink bought when there are supply issues and products are substituted due to food safety concerns, delists and/or short-term lack of availability
    - When choosing a suitable alternative, think about ingredients, cost, method of supply (i.e., ambient or frozen), cooking or preparation method and whether the substitute product is suitable for the food system or equipment
- 
- Ensuring that foods purchased do not adversely impact the environment and are 'sustainable' (see Chapter 4).
- 

## Packaging

Packaging for single portioned food and drink products that are patient or individual facing should be designed to be accessible and easy to open e.g., butter portions, sandwiches, juice cuplets. More detail can be found on the Hospital Caterers Association (HCA) website (11).

There are requirements under the Patient Lead Assessment of the Care Environment (PLACE) for healthcare organisations to review their purchasing decisions in relation to packaged foods for provision to patients. PLACE 2022 (12) stipulates that Trusts must specify at the time of food procurement that products comply with ISO 17480 Packaging Accessible design – Ease of opening standard.

With growing public concern about the environment and sustainability (13), the procurement of food and drink products is now influenced by the type of packaging of the product. Decisions may also be affected by whether the packaging is recyclable and the sheer amount of packaging a product has (2). At the time of printing, the planned legislation for October 2023, is set to ban single-use plastic plates, trays, bowls, cutlery, balloon sticks, and certain types of polystyrene cups and food containers (14).

## Food service systems

A **food service system** can be defined as the methods by which a food service operation procures, stores, prepares and serves food.

The main food service systems which are usually identified by the food distribution method and include (15):

- 
- Cook fresh (serve) - Traditional
  - Central production (on site) - Cook-Chill or Cook-Freeze
  - Delivered In (off site) - Cook-Chill or Cook-Freeze
  - Hybrid.
- 

Each system is covered in more detail in the sections below. They all have their own benefits and challenges. The overall goal is to ensure that the food supplied is safe, appropriate and is of good quality. All healthcare settings should identify which system is most suitable for their organisation considering:

- 
- Menu planning for the speciality and patient group (see Chapter 9)
  - Size, layout and space of both the hospital and the main kitchen
  - Training and skill levels of staff
  - Hygiene of the premises and food safety considerations
  - Storage, preparation and service equipment both in the kitchen and at ward level
  - Waste management practices and procedures used
  - Systems of cost control and the budget available
  - Environmentally sustainable practices.
- 

Services that cater or provide food service are also known as catering services.

## The main classifications of food service systems in healthcare settings

### Cook fresh

A cook fresh or 'traditional cook (and serve)' catering service is where food is prepared in a main hospital kitchen on the premises where the food is to be served. Ingredients are assembled, food is prepared and cooked on site and distributed as soon as possible and at the appropriate temperature (either hot or cold) to the wards (or adjacent service area such as a main hospital restaurant).

A cook fresh system can be either:

- 
- **Centralised** – Individual patient orders are assembled and set up close to the production area. Trays are then distributed to the wards and served to patients. Sometimes a tray line/belt in the main kitchen is used for the plating of orders onto plates on the individual trays
  - **Decentralised** – Food is delivered to the ward in bulk (or restaurant servery) where it is served into individual portions on to the plate for the patient (or customer).
- 

### Central production

A **central production** catering service is when food is prepared well in advance of the time it is required for service. It is produced onsite in the main hospital kitchen, then either quickly blast chilled or frozen. It is stored at a controlled temperature and is then regenerated and served to patients at a later date. Hazard Analysis Critical Control Point (HACCP) procedures must be followed in food handling and hygiene procedures to ensure the food safety of the products (16).

### Delivered in

A **delivered in** catering service is when fully prepared meals are purchased in either a bulk/multiportion (several servings) format (such as separate entrees, carbohydrates, vegetables and desserts) or as an individual plated main meal format.

Meals are produced off-site by a commercial food manufacturer or a Central Production Unit (CPU). A CPU can refer to an NHS organisation when a hospital with a large kitchen produces food for a number of smaller community units or other local hospitals. Food can be either chilled or frozen. It is delivered to the hospital in a suitable chilled or frozen vehicle and stored

at appropriate temperature in a kitchen hub (distribution point) until required for usage. Food is then 'picked and packed' into a ward trolley for regeneration (or regenerated in the kitchen) and subsequent service.

## Hybrid

A **hybrid** catering service is where any of the above systems are combined to create a mixed system that usually retains elements of the cook fresh system.

Menus use a combination of raw ingredients, frozen and chilled products and pre-made ingredients (soups and sauces etc). These are prepared, cooked and/or regenerated onsite before being delivered to wards. For example, salads, sandwiches, vegetables and soups are prepared from fresh ingredients on site, but main course meals, carbohydrates and desserts are delivered in.

The benefits and challenges are similar to those described above. This system is usually in place where you have some labour, can be less skilled and minimal cooking equipment or space but want to retain an element of fresh preparation/cook. It could result in a higher food cost as there is a potential for more waste due to the running of two systems e.g., preparation waste plus delivered in meals waste.

## Food safety

The National standards for healthcare food and drink (2) highlight that NHS Trusts must be aware of their legal obligations as food business operators and must ensure that they are compliant with food safety legislation. Whilst everybody involved in the food service system has a responsibility to ensure that the food served is safe, it is expected that all Trusts have a nominated food safety specialist (2).

## Hazard Analysis Critical Control Points (HACCP)

All caterers are legally required to carry out a HACCP (17) (similar to a risk assessment) of their food operation, and to put in a Food Safety Management System to reduce food safety risks, including allergen contamination.

All points of potential risk from the selection of suppliers and product specification, through to preparation, cooking, storage and delivery of food to the patient, must be assessed. What is possible to do in one hospital might not be safe to do in another, due to space,



available equipment and the food service system. Team members must be trained on the controls that they need to implement which have been detailed in the HACCP or Food Safety Management System.

Food must be kept at a safe temperature to prevent bacterial growth and food borne infections. Therefore, any member of the ward team (clinical or catering) should avoid further processing food (e.g., blending or reheating) once it's been served without first speaking with the caterer who has originally produced or regenerated the food.

Food safety concerns not only include food borne infections and food allergy (covered below) but also the risk of the patient being provided with food that is inappropriate for them (e.g., an unsafe texture). All three of these risks must be considered in food safety management systems.

## Listeria risk

In 2019, there was an outbreak of listeriosis in the UK, which caused the tragic death of seven patients after they ate pre-prepared sandwiches contaminated with *Listeria Monocytogenes* (18).

Listeriosis is a significant risk in healthcare settings where individuals are more vulnerable such as older adults, immunosuppressed patients, or pregnant women (18). It is linked (19) with chilled ready to eat (RTE) food in hospitals such as cooked sliced meats and pre-prepared sandwiches. It is important that organisations ensure the safety of RTE products through the supply chain, effective procurement and food hygiene controls (19). For example, having strict time controls for high-risk foods left out of temperature control and the need for patient trays to be cleared in a timely manner.

## Food allergy

Anyone involved in handling food must receive appropriate food safety training. The level of training required depends on the team member's role. In addition, allergen training must be provided to all staff involved in the preparation, handling and serving of food. The training should include the potential effects of allergens in the body, the key 14 allergens and the allergen controls that they must implement.

Depending on the level of risk, food safety training and allergen training can either be delivered at a local level, or by a course accredited by an organisation such as the Chartered

Institute of Environmental Health (CIEH) or Royal Society of Public Health (RSPH).

For sites that produce food that is prepacked for direct sale (PPDS) (20), where the food is packaged before the food is ordered and served packaged, training must be provided to the relevant team members on the requirements of what is commonly known as Natasha's Law. Organisations must have a policy in place that outlines how food allergies are managed. The food service and clinical teams need to have knowledge of any processes for the delivery of safe food to a patient with a food allergy. See Chapter 12 for further information on catering to patients with food allergies.

## Food service delivery – The 'Last Nine Yards'

The Report of the Independent Review of NHS hospital food (15) outlines the 'Last Nine Yards' initiative, which aims to improve catering at ward level. The 'Last Nine Yards' specifically refers to what happens after the food has arrived at the ward and the processes of getting it to the patient. Food that is not eaten has no nutritional value, so it is vital that the care taken in the presentation of the food is given equal value at service time, ensuring the meal is a positive experience for every patient, every time (21). Therefore consider:

- 
- The type of food packaging given to patients and whether this is easy to access (as described above in the section on packaging)

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  - Which condiments or garnishes would provide an increase the palatability of the meal

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  - Which crockery, cutlery, water jugs and glasses are easy for patients to see and lift (or where adapted crockery or cutlery is needed)

---

  - Which menus and foods are available for different patient group e.g. Finger foods, 'little & often' approach and snack choices

---

  - 24/7 availability of appropriate food and drink

---

  - Promotion of the mealtimes matters/assisted mealtimes approach – involvement and engagement from the wider clinical team at mealtimes to support patients requiring help i.e., sitting up and preparing for meal services, washing hands, removing bedpans and encouraging or assisting patients who require it.
- 

## Food waste

Food waste refers to food or drinks that are procured, prepared, delivered and intended to be eaten but end up being thrown away.

The Waste and Resources Action Programme (WRAP) (22) outlines that 'producing food

requires significant resources including land, energy and water'. Food waste from households and businesses is still around 9.5 million tonnes (Mt), 70% of which was intended to be consumed by people (30% being the 'inedible' parts). This had a value of over £19 billion a year and would be associated with more than 25 Mt of GHG emissions. For more detail on environmental sustainability see Chapter 4.

All food waste has both a negative environmental impact and a monetary cost – it concerns everyone.

There are four main types of food waste shown in table 6.1.

**Table 6.1 The four main types of food waste**

Production waste	Food that is thrown away during the preparation and cooking process. For example, vegetable off cuts (e.g., tomato cores, carrot tops, celery leaves), seeds, peel, rinds, eggshells and carcass trimmings including bones.
Spoilage waste	Food that is damaged or out of date, such as rotten vegetables, bruised apples or bananas, mouldy bread and out of date yoghurts or sandwiches.
Un-served waste	Food that is ready to serve but is in surplus. This may be due to over production in the kitchen; extra, unrequired portions remaining in bulk packs or excess food ordered to a ward.
Plate waste	Food that is left uneaten on the plate after the meal is served such as garnishes, sauces, skin off a jacket potato, salad or any food that is simply not eaten and left on the plate.

For dietitians and other clinicians, plate waste has health implications that can occur because of unmet nutritional requirements, the consequences of which are described in Chapter 1. Understanding the reasons for food waste on the ward is critical to understanding patients' food consumption.

Effective monitoring of food waste is equally vital to the catering team because of the cost implications. Waste is an issue at all levels and should be carefully considered in any food service operation. Table 6.2 summarises the potential reasons for food waste.

**Table 6.2 – Potential reasons for food waste**

Reasons for un-served waste	Reasons for plate waste or reduced food consumption
<ul style="list-style-type: none"> <li>• Over-production in excess of the need to provide choice</li> <li>• Over-ordering of meals (such as ordering a meal for someone who is nil by mouth just in case their dietary status changes)</li> <li>• Poor communication systems</li> <li>• Poor stock control</li> <li>• Poor yield management and portion control</li> <li>• Patient movements, discharges and change in patient status (e.g., now requiring a modified food texture meal)</li> </ul>	<ul style="list-style-type: none"> <li>• Meal was not the patient’s choice (often the case with a new admission)</li> <li>• No suitable ‘special or personal diet’ choice</li> <li>• Meal ordering too far in advance</li> <li>• Preference had changed</li> <li>• Patient may have been nauseated due to medications or environment or simply feeling unwell at the time</li> <li>• No help given to a patient unable to eat without assistance</li> <li>• The diet was restrictive, and the patient did not like the food provided</li> <li>• Portion size was too large</li> <li>• Patient was either asleep, away from their bed, in an awkward position not conducive to eating, or interrupted during their meal (e.g., by a clinician)</li> <li>• Poor timing of oral nutrition supplement provision</li> <li>• Meal was not served in a timely manner</li> </ul>

## Monitor, manage and reduce food waste

Hospitals must assess their level of food waste, set reduction targets and develop plans to minimise waste using the approach outlined by WRAP (23, 24). For further information and support, see section 4 of the National standards for healthcare food and drink, 'Improving sustainable procurement and reducing food waste' (2) and the following guides in England (25) and in Scotland (26).

Actions that organisations can take to manage food waste include:

- 
- Documenting all food waste, at all stages of the food chain so it is known where the greatest waste occurs

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  - Monitor waste across ward types

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  - Implement changes to the food service to address key causes of food waste, e.g., adjusting the breakfast meal time on a mental health unit, as service users issue would often sleep through the meal service. Or decreasing portion sizes and implementing a grazing style menu on a dementia ward

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  - Develop practices and policies such as 'Mealtime matters' to create an atmosphere for patients that is more conducive to enjoying meals

---

  - Consider all aspects of the meal service including timings and environment e.g., is there a dining room on the ward that can be utilised to enhance the dining experience?

---

  - Ensure that meals served reflect patients' cultural, personal or special diet needs

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  - Instigate amends in meal and/or additional snack provision, which is evidenced on an individual's food and drink record chart

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  - Audit waste of a certain type of menu item e.g., maternity wards – lots of soup wasted, children's wards more vegetables wasted and adjust menu structure accordingly

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  - Audit portion sizes

---

  - Implement a digital meal ordering system (2). It is acknowledged that this could have a positive impact on waste, as it means meals are not sent for those who are nil by mouth or who have been discharged and enables patients to choose their meal much closer to the time they will eat as the data can be immediately sent to the kitchen. Patients are less likely to change their mind leading to less waste (16).

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## References

1. Department for Environment, Food and Rural Affairs. The Government Buying Standard for food and catering services. <https://www.gov.uk/government/publications/sustainable-procurement-the-gbs-for-food-and-catering-services> [Accessed 20th March 2023]
2. NHS England. National standards for healthcare food and drink. <https://www.england.nhs.uk/publication/national-standards-for-healthcare-food-and-drink/> [Accessed 20th March 2023]
3. The Scottish Government. Scottish Government Procurement Strategy (2017-2019). <https://www.gov.scot/publications/scottish-government-procurement-strategy-2017-2019/documents/> [Accessed 11th February 2023]
4. The Scottish Government. Catering for Change: buying food sustainably in the public sector. <https://www.gov.scot/publications/catering-change-buying-food-sustainably-public-sector/documents/> [Accessed 11th February 2023]
5. Welsh Government. Buying Food Fit for the Future. <https://indd.adobe.com/view/f76f7fee-3fd6-4e39-933e-7c564aa6393a> [Accessed 20th March 2023]
6. Department of Agriculture, Environment and Rural Affairs. Northern Ireland Food Strategy framework: Food at the Heart of our Society - A Prospectus for Change. [https://consultations2.nidirect.gov.uk/daera/food-at-the-heart-of-our-society-a-prospectus/supporting\\_documents/21.22.076%20NI%20Food%20Strategy%20Framework%20Consultation.PDF](https://consultations2.nidirect.gov.uk/daera/food-at-the-heart-of-our-society-a-prospectus/supporting_documents/21.22.076%20NI%20Food%20Strategy%20Framework%20Consultation.PDF) [Accessed 20th March 2023]
7. Chatham House. Implications of COVID-19 for UK food supply resilience. <https://www.chathamhouse.org/2021/12/implications-covid-19-uk-food-supply-resilience/05-pressures-uk-food-and-nutrition-security> [Accessed 11th February 2023]
8. [legislation.gov.uk](https://www.legislation.gov.uk). Climate Change Act 2008. <https://www.legislation.gov.uk/ukpga/2008/27/contents> [Accessed 11th February 2023]
9. Department for Environment, Food and Rural Affairs et al. Bird flu (avian influenza): latest situation in England <https://www.gov.uk/government/news/bird-flu-avian-influenza-latest-situation-in-england> [Accessed 11th February 2023]
10. BBC. Meierhans J. Farmers warn Ukraine war will hit UK food prices. <https://www.bbc.co.uk/news/business-60691116> [Accessed 11th February 2023]

11. Hospital Caterers Association. Packaging, accessible design, ease of opening. <http://www.hospitalcaterers.org/service-excellence/packaging/> [Accessed 20th March 2023]
12. NHS Digital. Patient-Led Assessments of the Care Environment (PLACE): 2022 Assessment Food. <https://digital.nhs.uk/data-and-information/areas-of-interest/estates-and-facilities/patient-led-assessments-of-the-care-environment-place> [Accessed 20th March 2023]
13. NHS England et al. Delivering a 'Net Zero' National Health Service. <https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf> [Accessed 20th March 2023]
14. Department for Environment, Food and Rural Affairs. Far-reaching ban on single-use plastics in England. <https://www.gov.uk/government/news/far-reaching-ban-on-single-use-plastics-in-england> [Accessed 20th March 2023]
15. Department of Health and Social Care. Report of the Independent Review of NHS Hospital Food. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf) [Accessed 20th March 2023]
16. Food Standards Agency. Chilling Foods correctly in your business. <https://www.food.gov.uk/business-guidance/chilling-food-correctly-in-your-business> [Accessed 15th February 2023]
17. Food Standards Agency. Hazard Analysis and Critical Control Point (HACCP). <https://www.food.gov.uk/business-guidance/hazard-analysis-and-critical-control-point-haccp> [Accessed 15th February 2023]
18. Public Health England. Investigation into an outbreak of *Listeria monocytogenes* infections associated with hospital-provided pre-prepared sandwiches, UK May to July 2019. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/937907/2019-05-Listeria-CC8-Outbreak-Report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/937907/2019-05-Listeria-CC8-Outbreak-Report.pdf) [Accessed 15th February 2023]
19. NHS. Listeriosis. <https://www.nhs.uk/conditions/listeriosis/> [Accessed 15th February 2023]
20. Food Standards Agency. Introduction to allergen labelling for PPDS food. <https://www.food.gov.uk/business-guidance/introduction-to-allergen-labelling-changes-ppds> [Accessed 15th February 2023]
21. Hospital Caterers Association. Last Nine Yards – Improving hospital catering at ward level. <http://www.hospitalcaterers.org/service-excellence/last-9-yards/> [Accessed 11th February 2023]

22. The Waste and Resources Action Programme. Why we need to take action on food waste. [https://wrap.org.uk/taking-action/food-drink/actions/action-on-food-waste#:~:text=Producing%20food%20requires%20significant%20resources,greenhouse%20gas%20\(GHG\)%20emissions](https://wrap.org.uk/taking-action/food-drink/actions/action-on-food-waste#:~:text=Producing%20food%20requires%20significant%20resources,greenhouse%20gas%20(GHG)%20emissions) [Accessed 11th February 2023]
23. The Waste and Resources Action Programme. Food Waste Reduction Roadmap. <https://wrap.org.uk/taking-action/food-drink/initiatives/food-waste-reduction-roadmap> [Accessed 11th February 2023]
24. The Waste and Resources Action Programme. Guardians of Grub. <https://wrap.org.uk/taking-action/food-drink/initiatives/guardians-grub> [Accessed 21st March 2023]
25. The Waste and Resources Action Programme. Collecting food waste from NHS hospitals: a guide for waste management companies. <https://wrap.org.uk/resources/guide/food-waste-nhs> [Accessed 21st March 2023]
26. Resource Efficient Scotland et al. Managing NHSS food waste. <https://www.zerowastescotland.org.uk/food-waste/nhs> [Accessed 21st March 2023]

## Further Reading

- British Dietetic Association. Urgent Government intervention needed to drive down inflation to protect the health of the nation and prevent hunger. <https://www.bda.uk.com/resource/the-bda-calls-for-urgent-government-intervention-to-drive-down-inflation.html> [Accessed 21st March 2023]
- British Dietetic Association. Food poverty and Insecurity. <https://www.bda.uk.com/news-campaigns/campaigns/food-poverty-and-insecurity.html> [Accessed 21st March 2023]
- Chartered Institute of Environmental Health. Work-based training. <https://www.cieh.org/training-and-courses/work-based-training/> [Accessed 21st March 2023]
- Food Standards Agency. Food Safety. <https://www.food.gov.uk/food-safety> [Accessed 21st March 2023]
- Hospital Caterers Association. A Healthcare Food and Beverage Service Standards – A Good Practice Guide to Ward Level Service. <http://www.hospitalcaterers.org/publications/?c=1557> [Accessed 21st March 2023]



British Dietetic Association. One Blue Dot. <https://www.bda.uk.com/resource/one-blue-dot.html> [Accessed 21st March 2023]

Natasha Allergy Research Foundation. NARF. <https://www.narf.org.uk/> [Accessed 21st March 2023]

The Waste and Resources Action Programme. Love Food, Hate Waste. <https://www.lovefoodhatewaste.com/> [Accessed 21st March 2023]

# 7

## Catering Specifications and Tenders



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Dietitians must have executive input into catering specifications and tender processes to ensure the minimum framework for nutritional standards meets the needs of patients, staff and visitors and that the budget supports this.

Every healthcare setting requires a nutrition specification; a catering specification defines how that is delivered. Whether catering is in-house or contracted out, dietitians must have input before a specification is issued and not just advisory influence.

This chapter defines how to ensure the catering specification meets the nutritional and wider needs of patients, staff and visitors in the healthcare setting, the dietitian's role and relationships in a contracted-out catering service and the tender process.

## Key definitions

### Facilities management (FM)

FM is the management and maintenance of commercial buildings, grounds and the goods and services patients receive, this incorporates everything required to keep individuals alive and safe and is split into two main areas: hard and soft FM. Hard FM refers to the physical structures of the building such as maintenance, heating, ventilation systems and plumbing. Soft FM refers to elements managed by individuals such as catering, cleaning and portering.

### Estates Return information Collection (ERIC)

In the NHS, the Estates and Facilities Management team report to NHS England the costs of providing, maintaining and servicing the NHS estate in a safe and quality driven manner. In relation to the patient food service for example, data is collected by NHS Digital in the annual Estates Return Information Collection (ERIC) (1). This includes information such as inpatient food service cost, number of meals requested and other food service costs including food waste.

In 2021/22, the total costs of running the NHS estate were £11.1 billion of which a total cost of provision of inpatient food was £0.7 billion, an increase of 6.9% since 2020/21 (1).

### Premises Assurance Model (PAM)

The NHS Premises Assurance Model (PAM) is also used to provide evidence and confidence for NHS provider boards and other interested parties that those actions needed to keep the NHS estate and facilities safe, effective, efficient and of high quality will actually occur on a nationally consistent basis (2). Trusts self-assess against PAM annually with a range of questions. For catering services this is under safety and patient experience domains. The organisation can then work on actions to achieve assurance.

## Catering contracts

Not all hospitals have in house caterers, some will have outsourced or contracted out the service to a catering contractor. The contractor provides catering services, including but not limited to, patient food and drink, ward level service of food and drink, out of hours food provision such as vending, hospitality and staff and visitor facilities such as restaurants and coffee shops.

A catering contract is the legally binding agreement between the NHS Trust and the contractor to provide this service.

## Tender (Tendering) process

In the public sector, the tender procurement route is dependent on the value of the contract. Contracts can be quoted for directly when their value is less than the Official Journal of the European Union (OJEU) threshold, while those matching or exceeding this threshold must be procured via tender. A tender (or tendering) is a formal process where businesses can bid for contracts from public (or private sector) organisations.

A buyer (the 'NHS Trust') will issue a notice (written request) for suppliers (contractors) inviting them to submit a tender to provide their services. This is called an Invitation to Tender (ITT). Once these have been submitted, the buyer can review and evaluate them and then give notice of award.

The terms "contractor" and "supplier" are used interchangeably but both terms refer to an organisation that undertakes a contract to provide materials or labour to perform a service. The term "supplier" is often used in tender documents, and it refers to the contractor or bidders.

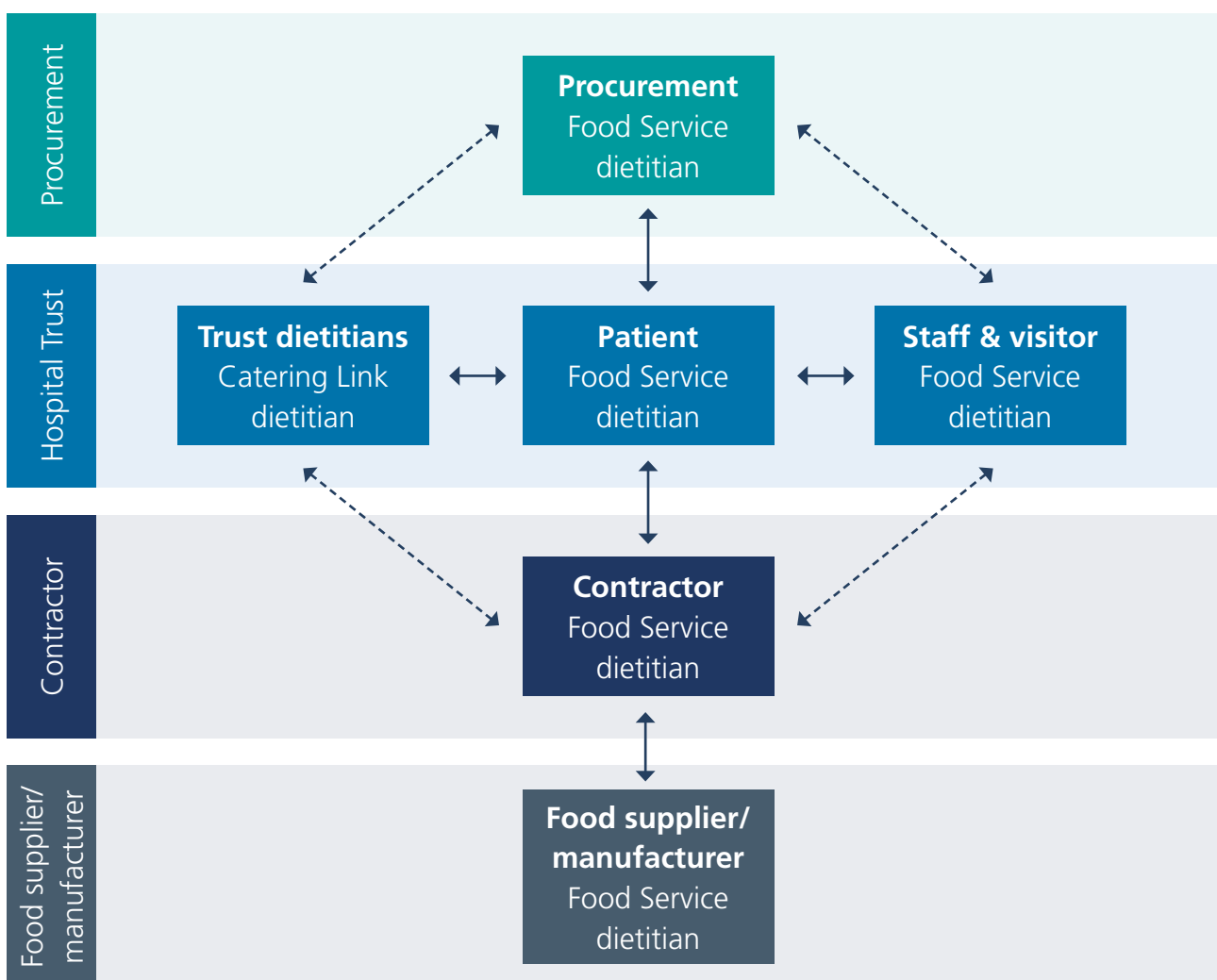
## The dietitian's role in a catering tender

Together with catering and clinical colleagues, dietitians must have executive input into catering specifications and tender processes to ensure the minimum framework for nutritional standards meets the needs of patients, staff and visitors and that the budget supports this. In order to take a pro-active role in the tender process, the Trust dietitian will require a good understanding of the actions necessary for acquiring food services within the NHS. Trust based dietitians can ensure that the nutritional and dietetic requirements are incorporated into the tender document by means of the catering specification before the tender process

commences. Contractor and food manufacturer/supplier dietitians can work to ensure they are addressing all relevant nutrition and dietetic requirements in their bid response.

Food service dietitians work in many different settings as outlined in Chapter 2. The interrelationship of the dietitians' roles in a contracted-out catering service can be seen in Figure 7.1. and a brief overview in Table 7.1.

**Figure 7.1 The interrelationship of dietitian roles in food service**



**Table 7.1 An overview of the interrelationship of dietitians in a contracted-out food service**

Dietitian	Relationships
Procurement Food Service Dietitian	Works externally in procurement services, employed by government or NHS supply chain. Liaises with any of the dietitians.
Trust Dietitians	Works for and is employed by the Trust in the dietetic department, mostly in a clinical capacity, but there is usually a catering link dietitian in the department. The National standards for healthcare food and drink (3) require organisations to consider the level of input from a named food service dietitian.
Patient Food Service Dietitian	Works at the Trust usually in the catering department and can be employed by either the Trust or by the catering contractor as the named food service dietitian responsible for patient food service and/or staff and visitor food service – depending on Trust assessment of need (3,4) and Chapter 2.
Staff & Visitor Food Service Dietitian	Works at the Trust usually in the catering department can be employed by either the Trust or by the catering contractor as the named food service dietitian (3, 4) responsible for the staff and visitor food service.
Contractor Food Service Dietitian	Works externally, employed by the contractor, (FM company contracted to provide the catering service) liaises with the Trust dietitians but predominantly links with the patient and staff and visitor food service dietitians as well as food supplier/ manufacturer and procurement dietitians.
Manufacturer/Suppliers Food Service Dietitian(s)	Works externally for the manufacturer or supplier of food and drink served in the Trust. These dietitians predominately liaise with the contractor’s food service dietitian or with the patient and staff and visitor food service dietitians.



## Catering specification document

The catering specification is a key section in an overall tender document. It forms a minimum contractual framework of requirements for food and drink in the healthcare setting and becomes part of the service level agreement. The specification should include food and drink standards, including elements of the Trust's Food and Drink Strategy (3), a menu framework appropriate for the client group, nutrition and any service-related standards. Dietitians are uniquely placed to ensure dietetic aims and objectives are incorporated into the catering specification as it communicates the Trust's requirements and the measurements of quality that will be used to measure the contractor's performance.

Evaluation questions and Key Performance Indicators (KPIs) are developed from the specification. Each evaluation question is linked back to an element in the catering specification that is being quality tested. Each KPI will set out how the elements of the specification will be monitored for delivery and quality over the life of the contract.

## Writing a catering specification

It is important that the catering specification is written as clearly as possible and articulates what is required from the contractor. This can help prevent or resolve any issues that might arise during the life of the contract.

Operational challenges and changes may take place over time whilst still in contract, such as due to new legislation or standards, innovation, improvements that mean both parties should be flexible to discuss out of date elements within a catering specification in the interests of the patient's nutrition, hydration or overall experience.

The contents of the Digest form a minimum framework of requirement for nutritional standards for healthcare food and drink and can be incorporated into the catering specification for any contract or service level agreement, see Table 7.2.

**Table 7.2 Relevant Digest chapters to support the writing of a catering specification**

Ensure relevant legislation and standards for patient, staff and visitor food and drink services is considered	Chapter 3, 5, 8
Clarify patient nutritional standards and any special dietetic needs, menu structure and coding	Chapters 9, 10, 12
Input into the selection of the food service system	Chapter 6
Input into staff and visitor catering, health and wellbeing policy	Chapter 5
Input into catering specifications and tenders	Chapter 7
Ensure environmental sustainability is included	Chapter 4

## Catering tender process

There are usually five stages in the tender process and dietitians will work with a team of colleagues to establish the roles and responsibilities in each situation. Table 7.3 provides an overview of the Trust and Contractor Dietitian specific roles in the tender and the exact type and timing of this input.

**Table 7.3 The catering contract tender process and the role of the dietitian**

Tender Process Stage	Trust Dietitian	Contractor Dietitian
<p><b>Stage 1: Prior Information Notices (PIN)</b> released 2 – 12 months in advance, informing potential contractor(s) of the intention to launch an NHS procurement.</p>	<ul style="list-style-type: none"> <li>• No input</li> </ul> <p>This stage is undertaken by the NHS Trust, through the procurement department or a consultant company who may have been employed to assist the Trust through the procurement process</p>	<ul style="list-style-type: none"> <li>• No input</li> </ul>
<p><b>Stage 2 : Selection Questionnaire (SQ) or Pre-Qualification Questionnaire (PQQ)</b> is used to establish whether any potential contractors are qualified, suitable and able to deliver the contract.</p>	<ul style="list-style-type: none"> <li>• No input</li> </ul>	<ul style="list-style-type: none"> <li>• This stage is a set of questions about level of experience, geographical spread, current contracts being delivered, financial details and liability insurance of the contractor</li> <li>• Minimal input may be required to support with preparation or responding to any dietetic related pre-qualification questions</li> </ul>

<p><b>Stage 3: ITT Invitation to Tender</b> key document for the contractor to respond to is the <b>catering specification document</b>, this specifies how the response should be formed and clarifies contract award date and other contractual documents.</p> <p><b>Site visits</b> to enable the contractor to gain a better understanding of the site structure, facilities and service requirements.</p> <p><b>Bid response</b> document is submitted in hard and soft copies, often via a procurement portal.</p> <p><b>Shortlisted contractor's site visits</b> by the Client to see their catering solution in real life.</p>	<ul style="list-style-type: none"> <li>• Ideally would have had prior involvement with clinical and Trust FM colleagues in writing of the catering specification including any dietetic policies, standards, requirements for the contractor to follow (see details above)</li> <li>• May be asked to commit to supporting a site visit at their Trust if a contractor's dietitian is in attendance or if there is anything specific that should be clarified from a dietetic perspective for the contractor</li> <li>• Read bid response</li> <li>• May attend an off-site visit to see the contractor's catering service being delivered at another hospital</li> </ul>	<ul style="list-style-type: none"> <li>• May support the contractor's sales and operational teams on a site visit to the Trust to understand any specific dietetic requirements or ward areas with different patient groups</li> <li>• Will support with the preparation or responding to dietetic elements of the tender through comprehensive knowledge of their catering operation, providing evidence of dietetic processes and policies, example menus and capacity analysis, compliance to food and drink standards</li> <li>• Key Digest chapters to support this include 3, 5, 6, 9, 10, 11 and 12</li> </ul>
<p><b>Stage 4: Presentations and interviews</b> by shortlisted bidders, this is an opportunity to bring the tender proposal to life. The client will provide a brief detailing their expectations, foods to be sampled and complete a detailed evaluation.</p>	<ul style="list-style-type: none"> <li>• Attend the contractors' presentations, evaluate food, support the decision-making process</li> </ul>	<ul style="list-style-type: none"> <li>• May attend and present about the scope of the catering provision specifically dietetic and answer any questions during the interview stage</li> <li>• Liaise with the food manufacturer/supplier teams to choose sample foods and support food tasting session</li> <li>• Arrange sample print menus and all nutrition and allergen information</li> </ul>

<p><b>Stage 5: Announcement of the winner</b> after the cooling off period, usually 10 days. During this time the unsuccessful bidders may challenge the tender process.</p> <p><b>Mobilisation</b> – the period of time after the contract has been signed but before the service is delivered (usually three months)</p> <p><b>Go Live</b> – the date set on which the new service will commence</p> <p><b>Implementation</b> – a set number of months during which the new contract is allowed to embed, after this time Key Performance Indicators (KPIs) will come into effect.</p>	<ul style="list-style-type: none"> <li>• Liaise with the contractor’s dietitian on award</li> <li>• Ongoing day to day communications would ideally be with the onsite food service dietitian</li> <li>• All dietitians should establish a collaborative relationship for the life of the contract working together to monitor quality, safety and improvements through ward level audits, patient, staff and visitor satisfaction surveys, training programmes and initiatives to enhance the patient experience or wellbeing of staff</li> </ul>	<ul style="list-style-type: none"> <li>• Attend project initiation (mobilisation) meeting</li> <li>• Start to make contact with dietetic counterparts within Trust, food manufacturer and supplier</li> <li>• Support the mobilisation team by: <ul style="list-style-type: none"> <li>- project managing dietetic/ food service changes</li> <li>- utilising a process driven/ operational mindset</li> <li>- exercising flexible and agile thinking, working and problem solving</li> <li>- Display leadership through engaging the team, sharing your vision, providing support, training and regular feedback</li> </ul> </li> </ul>
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## References

1. NHS Digital. Estates Returns Information Collection Summary page and dataset for ERIC 2021/22. <https://digital.nhs.uk/data-and-information/publications/statistical/estates-returns-information-collection/england-2021-22> [Accessed 3rd February 2023]
2. NHS England. NHS Premises Assurance Model (PAM). <https://www.england.nhs.uk/estates/nhs-premises-assurance-model/> [Accessed 14th February 2023]
3. NHS England. National standards for healthcare food and drink. <https://www.england.nhs.uk/publication/national-standards-for-healthcare-food-and-drink/> [Accessed 20th March 2023]
4. Department of Health and Social Care. Report of the Independent Review of NHS Hospital Food. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf) [Accessed 4th February 2023]

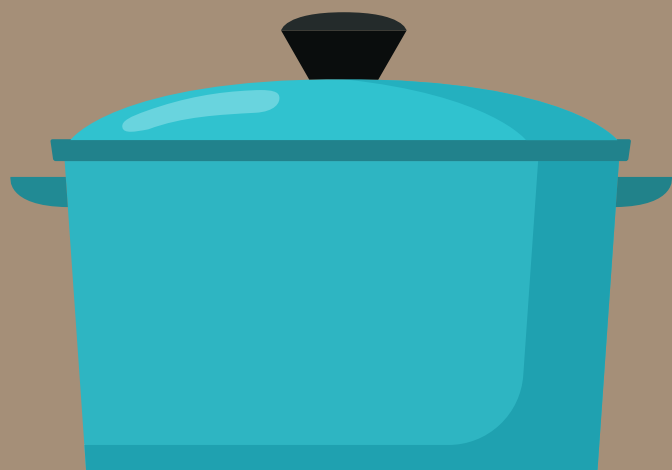
## Further Reading

Chartered Institute of Procurement & Supply. Glossary of Procurement Terms. <https://www.cips.org/knowledge/glossary-of-procurement-terms/> [Accessed 6th February 2023]



# 8

## Nutrition Analysis and Food Labelling





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“There are two schools of thought about food tables. One tends to regard the figures in them as having the accuracy of atomic weight determinations; the other dismisses them as valueless on the ground that a foodstuff may be so modified by the soil, the season or its rate of growth that no figure can be a reliable guide to its composition. The truth, of course, lies somewhere between these two points of view.”

Widdowson and McCance, 1943

Nutrition and allergen information must be readily available for all items on a healthcare menu, regardless of whether they are bought in or prepared onsite. A nutrition analysis of all food and drink items on a menu is the crucial first step in analysing the capacity of a menu (covered in Chapter 11) to ensure it can meet the nutritional needs of patients (as outlined in Chapter 10).

This chapter explores the different methods used to complete a nutritional analysis, what a food supplier is expected to provide in their product specifications and other food labelling requirements.

## The importance of nutrition and allergen information

The nutrition and allergen content of food and drink must be known so menus developed in healthcare settings can:

- 
- Meet legislative requirements:
    - Legislation about what and how food allergens are communicated including, Natasha's Law and the mandatory declaration of the 14 food allergens
    - Calorie Labelling regulations and the nutrition standards of the Government Buying Standards (see Chapter 5)
  - Meet the Estimated Average Requirements (EARs) and Reference Nutrient Intakes (RNIs) for different patient groups
  - Be analysed for their capacity to meet the needs of both nutritionally well and nutritionally vulnerable (see Chapter 11) to show compliance with the National standards for healthcare food and drink (1)
  - Be coded in line with the menu coding nutrition criteria outlined in this document (see Chapter 12)
  - Cater to several different therapeutic, religious, cultural and lifestyle requirements
  - Meet contractual requirements.
- 

## Product specifications

Manufacturers and suppliers are legally required to provide certain information in their product specifications in line with the food information regulations (2). This includes:

- 
- Name of the food
  - List of ingredients, with quantities
-

- 
- Net quantity of the food

---

  - Minimum durability or the 'use by' date

---

  - Storage conditions and/or conditions of use

---

  - Name of business and address

---

  - Country of origin/place of provenance (where necessary)

---

  - Instructions for use

---

  - Nutrition declaration – the minimum mandatory requirement is to provide energy and six nutrients in line with food labelling regulations. The values must be given in the units (including both kJ and kcal for energy) per 100g/ml.
- 

The product specification information will support the dietitian in undertaking any analysis work.

## Nutritional analysis

The declared values shall be average\* values based on:

- 
- the manufacturer's analysis of the food

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  - a calculation from the known or average values of the ingredients used; or

---

  - a calculation from generally established and accepted data (2).
- 

\* Average refers to figures which best represent the respective amounts of the nutrients which a given food contains, considering natural variability, seasonal variability, patterns of consumption and any other factor which may cause the actual amount to vary (3).

## Chemical analysis

The manufacturer's analysis of the food will be derived from chemical analysis, which is often used by the food industry for labelling purposes especially in products bearing health claims or declaring the content of vitamins and minerals and should not be established at either extreme of a defined tolerance range (3). Chemical analysis is also used by government bodies and in some research settings. It is an expensive procedure that must be undertaken by an accredited laboratory. A single analysis is only valid for that food item – grown, transported, stored, prepared and cooked under those specific conditions. The UK Food Databanks (4), which is the basis for nutritional analysis systems, is based on such chemical analysis.

## Tolerances and rounding

It is not possible for foods to always contain the exact levels of energy and nutrients that are labelled, due to natural variations and variations from production and storage (3). Therefore, guidelines for tolerances for nutrition labelling purposes available in the 'Guidance Document for Competent Authorities for the Control of Compliance with EU Legislation' on the setting of tolerances for nutrient values declared on a label (3). Therefore tolerances for nutrient values declared on a food label are covered in official guidance in line with EU legislation (3). This guidance is outlined in Appendix 11.

## Calculated analysis

Calculation for the nutritional values of recipes uses weights of ingredients and generally established and accepted food composition data. This is done using generic and manufacturers' data and is the mostly widely used and accepted method in industry, schools and healthcare settings.

The nutritional data commonly used for calculation in the UK software includes McCance and Widdowson's 'The Composition of Foods Integrated Dataset (CoFID)' (5). New searchable versions of McCance and Widdowson's Composition of Foods Integrated Dataset are freely available, including The Quadram Institute's Food Databanks (4) and Nutridex (6).

## Standard recipes

Standard recipes must be followed to ensure consistency of quality, nutrition and allergen data as well as costs and safety of the food.

## Recipe analysis

Recipe analysis can be carried out using an appropriate commercially developed nutritional analysis software package (see Table 8.6) or by using spreadsheets. While the latter is more cost effective, it can be more time consuming and prone to errors. Recipe analysis can be undertaken by experienced registered dietitians, registered nutritionists, or appropriately trained individuals under the supervision of a registered dietitian or nutritionist. The analyst should be able to interpret both the input data and the results and be aware of food regulations and the limitations of their software.

To produce a standard recipe and complete a full analysis the following information shown in Table 8.1 is required.

Each recipe component will need its own analysis (see Figure 8.1).

**Table 8.1: Information for completing a recipe analysis**

Information	Details
Recipe Code	A code number that identifies the recipe.
Recipe Name	Each recipe must be given a unique identification and a descriptive title e.g., poached haddock with Cheddar cheese sauce.
Ingredients	The full list of recipe ingredients, including fluid and seasoning.
	Clearly define each specific ingredient and/or brand in the recipe and ensure the corresponding ingredient from the dataset is selected e.g., milk either dried or fresh; whole; semi-skimmed, skimmed. In some analysis packages it is possible to input actual brand names for ingredients instead of looking up a corresponding ingredient from the CoFID (5) dataset.
Weights	All weights should be specific and given in metric units not household measures.
	Liquid content may need to be converted from volume to weight, based on individual specific gravities (7).
	Dry mixes and ingredients may need to be entered as dry weight with additional water in recipe or 'as served' weight, e.g., lentils, rice, pasta and soup powder. Some analysis packages will automatically convert dry to cooked weights of ingredients like pasta when analysing the final composition.
Method	Instructions for preparing and cooking – so the recipe can be replicated, including equipment and serving utensil details.
	Preparation methods need to be known - the edible portion weight e.g., the drained weight for canned foods, fruit and vegetables after peeling.
	Cooking methods need to be known e.g., frying, baking.
Food Safety	Hazard analysis critical control points (HACCP) should be documented e.g., cooking temperatures and times.

Recipe Yields	The relationship between batch size and portion yield should be established by testing the recipe or seeking advice from a knowledgeable chef. In a traditional kitchen, yields will vary slightly due to the natural variation in foods. It is important to consider the weight losses or gains during cooking e.g., water evaporation when calculating the recipe yield and portion weight.
Portion Size	Ensure the single portion size (volume or weight) for the recipe is appealing and nutritionally appropriate and give feedback to the recipe owner if this is not the case. The food portion size book may be useful for this (8).
Nutritional Analysis	The nutrient composition should be given per 100g and per portion. In traditional catering practice calculating per recipe or batch is likely to be the method used. Most nutritional analysis packages convert to 100g values but ensure that cooking losses and gains have been accounted for (see below).

Further useful details on recipe development can be obtained from 'Food in Hospitals: National catering and nutrition specification for food and fluid provision in hospitals in Scotland' (9).

## Methodological limitations

Cooking losses and gains can be significant and difficult to calculate. An assessment of cooking losses/gains is given in McCance and Widdowson's 'The Composition of Foods, Seventh Summary Edition' (7). Most analysis software programmes can account for these losses or gains. It is important to take a pragmatic approach.

For the purposes of menu analysis, the loss may not be nutritionally significant. Examples of these are:

- 
- Water loss during chill and frozen storage
  - Water loss during reheating/regeneration.
- 

Where nutrient losses are significant this should be considered. Examples of these are:

- 
- Fluid lost during baking of sponges or open cooking of meat or fish dishes. This results in a concentration of the nutrients (as only water is lost) and may affect the weight and portion size of the finished dish
-

- 
- Fat and water lost during grilling of meats and meat products.
- 

## Missing data

In the case of missing food composition data, suppliers can be contacted for this information. If this is not possible, then use of the closest match in the CoFID data set (5) is advised. CoFID data is likely to be preferable when specific nutrient data e.g., vitamins, is not available from the supplier. This data may be calculated or derived by chemical analysis and should still be checked in terms of reliability and compatibility. If the source of data is not McCance and Widdowson's 'The Composition of Foods, Seventh Summary Edition' (7) or CoFID (5) it must be identified within the software dataset. Should an alternative database, such as the United States Department of Agriculture (UDSA) food data (10), be used to assess 'missing values', these must be clearly referenced.

## Vitamin losses

Vitamin loss may be significant for heat-labile vitamins such as vitamin C, folate and thiamine. These can be assessed manually or through nutritional analysis software. In practice, menus should be designed to provide reliable sources of these less heat stable vitamins (see Chapter 9).

## Cooking gains

When cooking in fat or water, these may be absorbed by the ingredient and any gains should be accounted for.

- 
- Fat uptake during frying is very difficult to estimate e.g., fried potatoes. Fried values from CoFID (5) should be used where necessary. The cooked weight will need to be estimated if only the raw weight is known.
  - Fat uptake for ingredients fried before incorporation into recipes needs to be included in the calculation for the final dish.
  - Dry foods such as cereal, pasta, rice (as a starchy side option) and pulses will absorb water. Cooked values can be used if cooked weight is known. Uncooked pasta or rice (in a recipe) e.g., risotto or lasagne can be added as dry weight as they will absorb the fluid from other ingredients when cooking.
-



## Recipe types

The approach to recipe calculation will differ depending on the type of dish. The following section provides a description of the methods used.

### Simple recipes

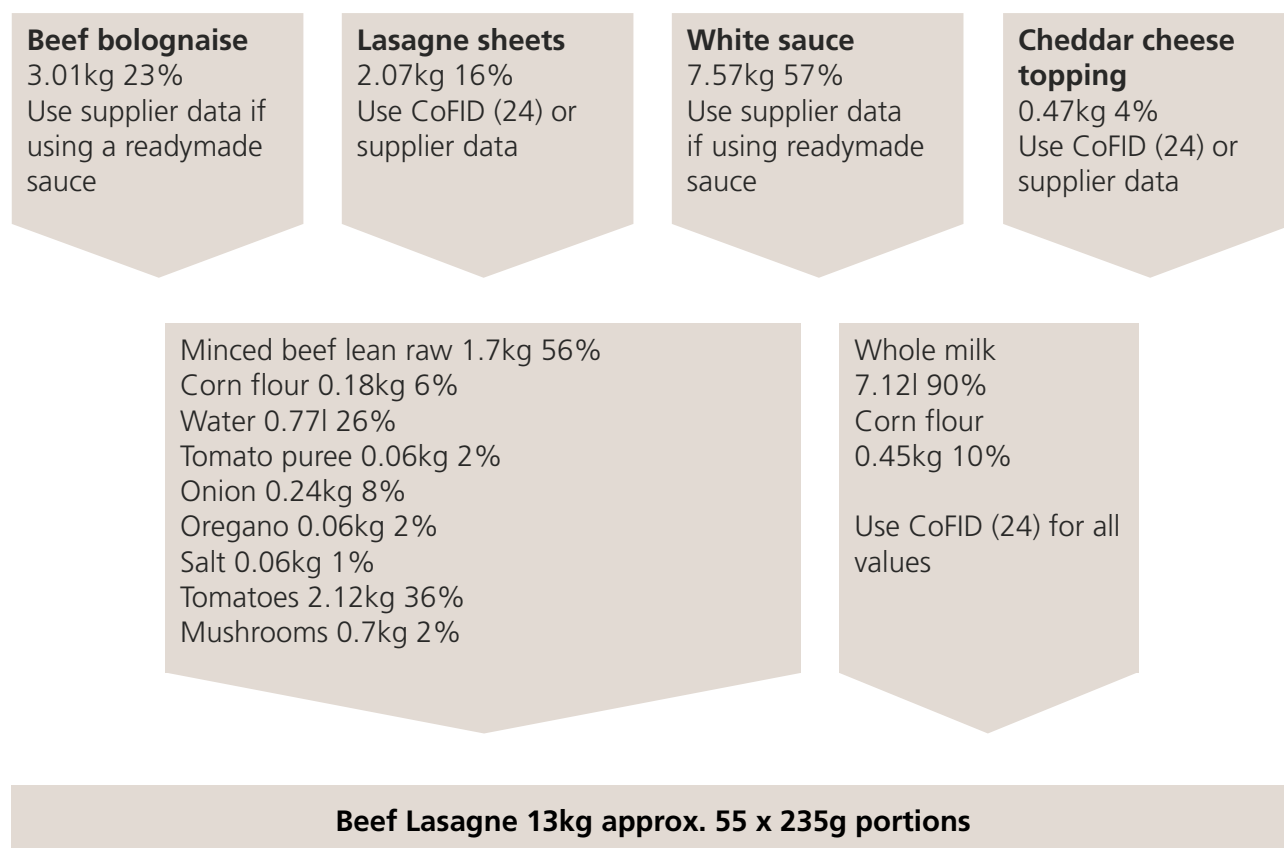
These recipes are a simple addition of the analysis of each of the single ingredients listed (to include water), using data for either raw or cooked ingredients (state which) depending on the known weights in the recipe.

Cooking losses or gains are assessed, either by test weighing the finished product before and after cooking or by using data as supplied by CoFID (5). It is important to realise that variations in finished weight are inherent in traditional catering practices.

### Composite recipes

These are multi-layered dishes composed of more than one recipe combined to form a composite. Calculate each part of the recipe as a simple recipe as described above and then create a recipe, which is the final make-up of the dish. An example of this is given for a beef lasagne recipe, see figure 8.

**Figure 8.1: Example of composite dishes - beef lasagne**



## Recipe analysis software

There are many different commercial nutritional analysis software packages available. When looking to purchase a software package or licence it is advisable to first determine the needs of the analyser and/or the organisation. Liaising with the catering department may be useful as some packages have functions that are suitable for both caterers as well as dietitians. It is advisable to make a detailed list of what you wish your recipe analysis software to do before you start looking at the available packages. Example considerations may include:

1. Does the supplier regularly update the CoFID (5) dataset?
2. Is it possible to add foods and recipes to the dataset and if so, how many and how much will this cost?
3. Does the package provide a live link to the nutrition and allergen data of foods sold by large suppliers/manufacturers?
4. Does the package allow for cooking losses or gains during analysis?

- 
5. Is the package able to print labels for foods (e.g., sandwiches / salads) including the ingredients, allergens and nutrition declaration?

---

  6. What other analysis would you like it to perform e.g., menu analysis, menu costing?

---

  7. Do you wish to combine the nutritional analysis function with catering functions such as the calculation of gross profit?

---

  8. What is the cost of a license per user, either annually or per month?

---

  9. Does the software company provide training or a guide to using the system?

---

  10. Does the software company provide on-going technical support, software updates and development and/or maintenance of the software system?

---

Examples of software that can be used to analyse recipes and menus are given in Table 8.2. The list is not exhaustive. It is presented in alphabetical order, and we do not endorse any particular system.

**Table 8.2: Nutritional analysis software**

Software System / Supplier	Details
A La Calc	<a href="https://www.alacalc.com/">https://www.alacalc.com/</a>
Delegate	<a href="https://delegate-group.com/products/patients-service">https://delegate-group.com/products/patients-service</a>
Dietplan 7	Forestfield Software Limited. <a href="http://www.foresoft.co.uk/">http://www.foresoft.co.uk/</a>
Kafoodle	<a href="https://www.kafoodle.com/">https://www.kafoodle.com/</a>
My Food 24	<a href="https://www.myfood24.org/professional-nutritional-analysis-software">https://www.myfood24.org/professional-nutritional-analysis-software</a>
Nutmeg	<a href="https://www.nutmeg-uk.com/">https://www.nutmeg-uk.com/</a>
Nutridex	<a href="https://www.nutridex.org.uk/">https://www.nutridex.org.uk/</a> (free)
Nutrimen	<a href="https://www.nutrimen.co.uk/">https://www.nutrimen.co.uk/</a>
Nutritics	<a href="https://www.nutritics.com/">https://www.nutritics.com/</a>
Nutrium	<a href="https://nutrium.com/">https://nutrium.com/</a>
Saffron	Civica. <a href="https://civica.com/en-gb/product-pages/saffron/">https://civica.com/en-gb/product-pages/saffron/</a>
Starchef	Fourth Limited. <a href="https://www.starchef.net/">https://www.starchef.net/</a>

## Food labelling legislation

Regulation (EU) No 1169/2011 on the provision of Food Information to Consumers (EU FIC) became law in 2011 (2). EU FIC brought European Union (EU) rules on general, and nutrition labelling together to simplify and consolidate existing legislation into one single regulation. Although the UK has left the EU, the EU FIC regulation has been retained in UK Food Law (11).

## Nutrition information

Commonly referred to as “back of pack” nutrition labelling, a nutrition declaration is mandatory under EU FIC for all packaged food products, regardless of whether a nutrition or health claim is made. The mandatory declaration comprises of the seven nutrients as shown in Table 8.3; therefore all food suppliers must be able to provide this information (2).

**Table 8.3: Order of Seven Mandatory Nutrients under EU FIC (except annex V exceptions)**

Nutrient	Units	Useful Calculations
Energy	kJ	$\text{kJ} (\text{F} \times 37) + (\text{CHO} \times 17) + (\text{P} \times 17) + (\text{fibre} \times 8)$
	kcal	$\text{kcal} (\text{F} \times 9) + (\text{CHO} \times 4) + (\text{P} \times 4) + (\text{fibre} \times 2)$ $\text{kcal} \times 4.2 = \text{kJ}$
Fat (F)	g	
of which saturates	g	
Carbohydrate (CHO)	g	
of which sugars	g	
Protein (P)	g	
Salt	g	Sodium (g) $\times 2.5$

## Supplementary nutrients

Under article 30 of EU FIC (2) the mandatory nutrition may be supplemented (voluntary) with one or more of the following:

- 
- mono-unsaturates

---

  - polyunsaturates

---

  - polyols

---

  - starch

---

  - fibre

---

  - any specified vitamins or minerals present in significant amounts.

---

If a nutrition or health claim regarding any of the supplementary nutrients is made, the nutrient must be included in the nutrition declaration.

This mandatory information includes the important nutrients needed for menu planning and analysis. Where some relevant micronutrient data is unavailable but needed for therapeutic diets (e.g., potassium for patients with renal disease), the dietitian may be able to access the information direct from the manufacturer if available or use ingredient lists (full ingredient lists are mandatory under EU FIC). An ingredient list could be used to identify good or poor sources of micronutrients as this is generally the basis of advice given to patients. Ingredient lists are ordered in descending order of volume included. Any ingredients listed in the title of the food or drink product must and for key have quantitative declaration giving the percentage present in the product (e.g., a pork sausage must list the percentage of pork meat present in the sausage in the ingredients list). McCance and Widdowson's 'Composition of Foods Integrated Dataset (CoFID)' (5) can also be used for guidance.

There is no requirement for nutrition information to be provided for food sold unpackaged, however in healthcare catering settings this information is often provided voluntarily to support dietitians in the clinical or public health setting and used for menu planning and dietary coding. In this case the information must meet the requirements set out in the EU FIC (2), namely:

---

Energy value (both kJ and kcal) only

---

Energy value (both kJ and kcal) + 4 (fat (g), saturates (g), sugars (g) and salt (g))

---

Its provision must meet legibility and font size requirements.

---

This information can be provided:

---

per 100g/ml only

---

per 100g/ml and per portion or

---

on a per portion basis only (applies only in the case of energy + 4).

---

Front of Pack Nutrition Labelling (12) also includes:

- 
- Where information is provided per portion only for the four nutrients (energy + 4), the absolute value for energy must be provided per 100g/ml in addition to per portion (there is no requirement to express per 100g/ml for non-prepacked foods)
- 
- Percentage reference intakes (RI) can be given on a per 100g/ml and/or per portion basis
- 
- Where % RI information is provided on a per 100g/ml basis, the statement 'Reference intake of an average adult (8400kJ/2000kcal)' is required
- 
- Additional forms of expression are allowed if they meet requirements set out in the EU FIC.
- 

Voluntary front of pack nutrition labelling cannot be given in isolation; it must be provided in addition to the full mandatory ("back of pack") nutrition declaration. This is energy value (both kJ and kcal) + fat (g), saturates (g), carbohydrate (g), sugars (g), protein (g) and salt (g) (12).

## Allergen information

### The declaration of the 14 allergens

It is a mandatory requirement for 14 allergens, identified by the EU as most likely to cause harm, to be made known to consumers buying any prepacked or non-prepacked food and/or drink item. The 14 allergens listed in the legislation are: cereals containing gluten (namely wheat (such as spelt, Khorosan wheat/Kamut) oats, rye and barley); crustaceans; eggs; fish; peanuts; soya; milk; nuts (almonds, hazelnuts, walnuts, cashews, pecan, brazil nuts, pistachio, macadamia); celery; mustard; sesame seeds; sulphur dioxide; lupin; molluscs (2).

### Natasha's Law

On the 1 October 2021 Natasha's Law (13) came into force in England, Wales and Northern Ireland. As a result, any business that produces food pre-packed for direct sale (PPDS) is required to label the food item with a full list of ingredients and the allergens. PPDS foods are items that are packaged in the same place they are being offered or sold to consumers and are in this packaging before they are ordered. For non-prepacked food there is some flexibility to how the information can be provided.

For food service in healthcare settings, if any products are packaged onsite, they must be opened before being served to a patient or must have a label with all the ingredients present, and allergens highlighted. Typically, these products may include decanted toppings for jacket potatoes (e.g., grated cheese), potted sides (e.g., potato salad) and pre-packaged sandwiches and salads made onsite.

In line with legislation, allergen information must be readily available on each ward. This may be an up-to-date allergen file and/or digital allergen information for all menu items.

Further allergen guidance for food businesses can be found on the Food Standards Agency website (14) and in Chapter 6 of this document.

## References

1. NHS England. National standards for healthcare food and drink. <https://www.england.nhs.uk/publication/national-standards-for-healthcare-food-and-drink/> [Accessed 20th March 2023]
2. [Legislation.gov.uk](https://www.legislation.gov.uk). Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers. <https://www.legislation.gov.uk/eur/2011/1169/contents#> [Accessed 20th March 2023]
3. European Commission Health and Consumer Directorate-General (EC). Guidance document for competent authorities for the control of compliance with EU legislation on Regulation (EU) No 1169/2011 with regard to the setting of tolerances for nutrient values declared on a label. <https://www.fsai.ie/getmedia/71c87819-77a7-4bf2-b741-2f11cf019c2d/eu-guidance-tolerances.pdf> [Accessed 20th March 2023]
4. The Quadram Institute. Food databanks. <https://fdnc.quadram.ac.uk/> [Accessed 20th March 2023]
5. Public Health England. Composition of foods integrated dataset (CoFID). <https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid> [Accessed 20th March 2023]
6. Nutridex. Nutridex. <https://www.nutridex.org.uk/> [Accessed 20th March 2023]
7. Finglas PM, Roe MA, Ounchen HM, Berry R, Church SM, Dodhia SK, Farron-Wilson M. & Swan G. McCance and Widdowson's The Composition of Foods, Seventh Summary Edition. Cambridge: The Royal Society of Chemistry; 2015.
8. Mills A & Patel S. Food Portion Sizes. Third Edition. London: Food Standards Agency; 2002.
9. The Scottish Government. Food in Hospitals: National catering and nutrition specification for food and fluid provision in hospitals in Scotland. <https://www.nss.nhs.scot/publications/food-in-hospitals-shfn-04-01/> [Accessed 20th March 2023]
10. U.S. Department of Agriculture. FoodData Central. <https://fdc.nal.usda.gov/> [Accessed 20th March 2023]
11. Food Standards Agency. General food law. <https://www.food.gov.uk/business-guidance/general-food-law> [Accessed 20th March 2023]



12. Department of Health and Social Care. Technical guidance on nutrition labelling. <https://www.gov.uk/government/publications/technical-guidance-on-nutrition-labelling> [Accessed 20th March 2023]
13. Food Standards Agency. Allergen labelling changes for prepacked for direct sale (PPDS) food. <https://www.food.gov.uk/allergen-labelling-changes-for-prepacked-for-direct-sale-ppds-food> [Accessed 20th March 2023]
14. Food Standards Agency. Allergen guidance for food businesses. <https://www.food.gov.uk/business-guidance/allergen-guidance-for-food-businesses> [Accessed 20th March 2023]

# 9

## Menu Planning and Design



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Catering and food services must be capable of providing food and drink suitable for all patients in their care. Patient needs and type of menu are two of the first considerations in menu design.

This chapter focuses on the process of planning a menu. It also looks at menu design and food-based guidance to create menus that meet the dietary needs of patients and the nutrition standards outlined in Chapter 10.

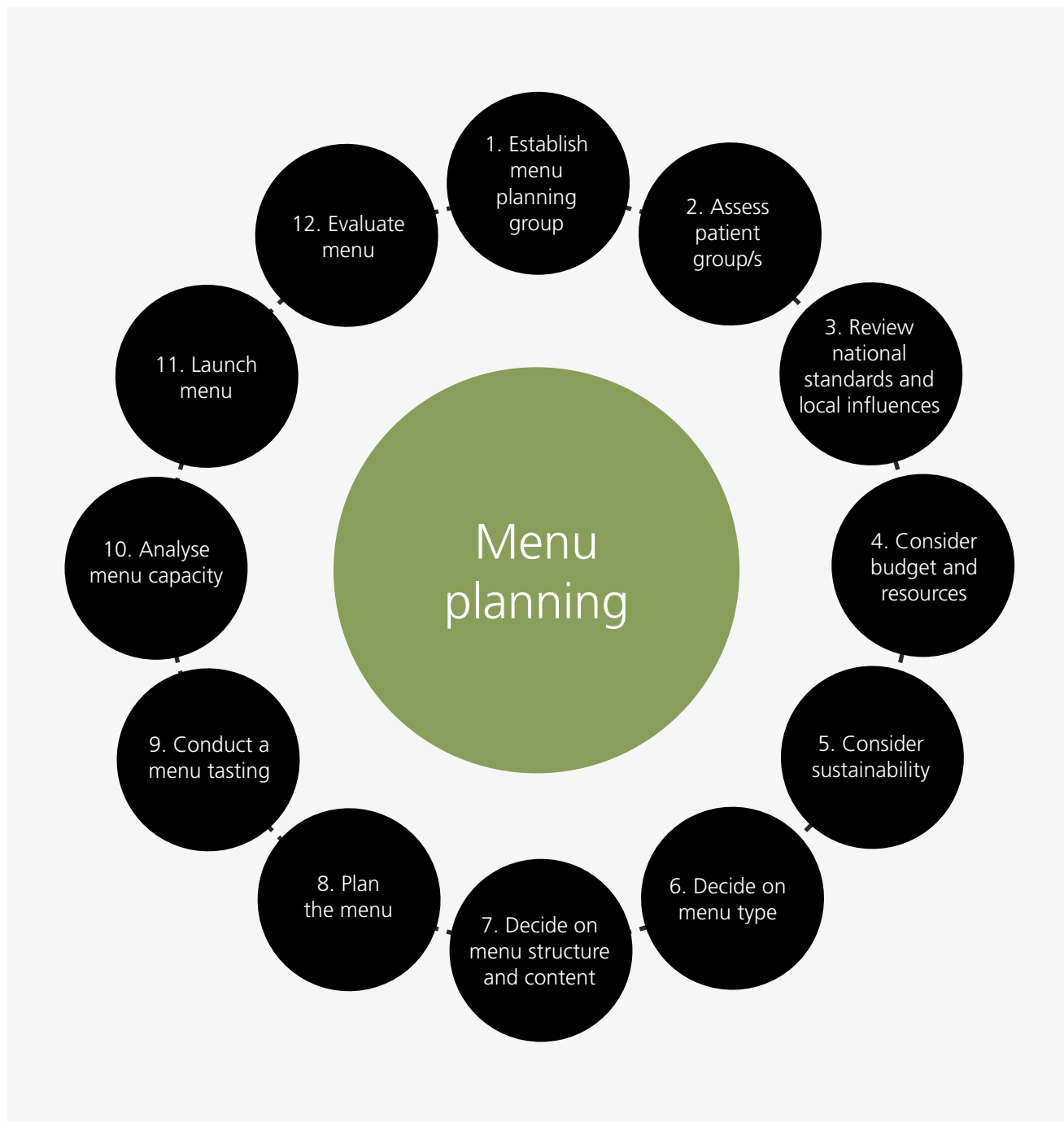
## The process of menu planning

Menu planning requires a multidisciplinary approach – it should involve representatives from all key groups responsible for food provision, including catering, dietetics and nursing. This approach will ensure that all stakeholders are involved from the beginning and that all requirements are met.

Figure 9.1 provides an overview of the menu planning process and Table 9.1 goes into more detail for each step.

Throughout the whole process, there needs to be a focus on meal nutrition, taste and appeal to patients. While cost and logistics are important elements of menu planning, there is no nutritional or economic value in uneaten meals.

**Figure 9.1: The Process of Menu Planning**



**Table 9.1: The process of menu planning**

<b>1. Establish menu planning group</b>	<ul style="list-style-type: none"> <li>• The process starts with the establishment of a multidisciplinary group. Key representatives may include catering manager, food service dietitian, chef, nurses, food safety specialist, food service staff, patient representative/champion/groups (1), specialist dietitians, patient experience team, speech and language therapists (SLT), sustainability lead, communication team, monitoring officers.</li> </ul>
<b>2. Assess patient group/s</b>	<ul style="list-style-type: none"> <li>• Patient demographics: Age, gender, cultural background</li> <li>• Length of stay: Acute (generally short stay), community (generally longer stay), rehabilitation, mental health settings. Consider the structure of the patients' day and meal timings for the different patient groups like maternity and mental health.</li> <li>• Groups of people: Children, older adults, maternity, mental health, learning disabilities, teenagers.</li> <li>• Requirements of clinical specialities: Renal, oncology, cystic fibrosis, dysphagia, cognitive decline, dementia, stroke.</li> <li>• Dietary needs: Nutritional requirements, proportion of nutritionally well vs. nutritionally vulnerable, therapeutic diets, religious, cultural and personal needs e.g., halal, vegan, notifiable allergies, modified texture diets.</li> </ul>
<b>3. Review national standards and local influences</b>	<ul style="list-style-type: none"> <li>• Review National Standards – See Chapter 3 for further information on key national food legislation and standards</li> <li>• Review the Trust Food and Drink Strategy</li> <li>• Review any local food or dietetic policies</li> <li>• Review any food safety policies</li> </ul>
<b>4. Consider budget and resources</b>	<ul style="list-style-type: none"> <li>• Type of contract and overall catering and nutritional specification</li> <li>• Total budget per patient meal/day/week</li> <li>• Procurement of food and service specifications</li> <li>• Staff resources and staff skill level</li> <li>• Site logistics/facilities and infrastructure (locations, storage, chiller and freezer capacity)</li> <li>• Food system – see Chapter 6 for further information</li> <li>• Food service equipment</li> <li>• Method of distribution and style of service</li> <li>• Availability of kitchen space and food storage facilities</li> <li>• Meal ordering system – e.g., electronic, paper ordering</li> <li>• Budget for printed menus, ward resources and any menu related staff training materials</li> </ul>

<p><b>5. Consider sustainability</b></p>	<ul style="list-style-type: none"> <li>• See Chapter 4 for further information on environmental sustainability and practical menu ideas</li> </ul>
<p><b>6. Decide on menu type</b></p>	<ul style="list-style-type: none"> <li>• Decide on the type of menu that will meet the needs of your patient groups assessed above: cyclical, à la carte or hybrid (see Table 9.2)</li> <li>• Consider the take up of current meals/order volumes, what is popular/ not popular?</li> <li>• Consider feedback from ward-based food service staff in relation to any operational considerations</li> <li>• Consider lifestyle food trends in the UK and globally</li> <li>• Review food wastage and patient satisfaction surveys</li> <li>• Use relevant data from audits or electronic meal ordering systems to inform menu choices</li> <li>• Ensure patient and staff feedback is considered during menu compilation</li> </ul>
<p><b>7. Decide on menu structure and content</b></p>	<ul style="list-style-type: none"> <li>• Consider the structure of breakfast, lunch and dinner menus (see Table 9.3)</li> <li>• Review the most suitable meal service times for different wards</li> <li>• Ensure a variety of snacks that meet all patient needs are offered a minimum of twice a day</li> <li>• Ensure patients are offered regular hot and cold drinks (at least seven drinks a day and access to chilled water 24 hours a day)</li> <li>• Identify the four key diets on the standard menu (healthier eating, higher energy, easy to chew and vegetarian). Additional optional coding may be considered, for example, vegan, higher protein or halal. In some settings not all menu coding may be necessary or appropriate, such as children’s menu or in mental health settings. See Chapter 12 for details on menu coding and different patient groups.</li> </ul>
<p><b>8. Plan the menu</b></p>	<ul style="list-style-type: none"> <li>• Review new, delisted and amended supplier products and/or chef recipes.</li> <li>• Review meals that have negative feedback (audit results, patient feedback) or low uptake numbers.</li> <li>• Plan the menu – see menu content section below and the “How to plan a menu” section of the Manual of Dietetic Practice (2).</li> <li>• Use the menu assessment checklist (Appendix 1) as a guide whilst menu planning.</li> <li>• Ensure the agreed menu codes are available at each meal service.</li> <li>• Review the menu against nutritional standards.</li> </ul>



<b>9. Conduct a menu tasting</b>	<ul style="list-style-type: none"> <li>• Assess the product range, quality, taste, texture, aroma and appearance of the food.</li> <li>• Consider suitable portion sizes, nutritional value and menu coding.</li> <li>• SLT are encouraged to be involved to review the modified texture main meals and snacks.</li> <li>• Edit the menu draft to reflect the tasting results.</li> </ul>
<b>10. Analyse menu capacity</b>	<ul style="list-style-type: none"> <li>• Conduct a menu capacity analysis of the draft menu to ensure that it meets all relevant nutrition standards (see Chapter 11).</li> <li>• If the nutrition standards are not met – make the necessary changes to the menu to ensure compliance.</li> <li>• Send the final version of the menu to the menu planning group for final approval.</li> <li>• Start liaising with the back of house catering team to ensure operations are ready for the menu changes (e.g., purchasing of new ingredients/products, running down old stock, updating meal ordering systems).</li> </ul>
<b>11. Launch menu</b>	<ul style="list-style-type: none"> <li>• Develop new printed menus – see printed menu guidance at the end of this chapter.</li> <li>• Provide menu training to food service staff, covering key updates on the menu and any operational changes.</li> <li>• Inform clinical staff of changes.</li> <li>• Ensure any old menus are disposed of and that new menus and allergen information are available on the wards.</li> </ul>
<b>12. Evaluate menu</b>	<ul style="list-style-type: none"> <li>• Carry out mealtime observations to ensure quality standards are being met.</li> <li>• Carry out patient feedback surveys to monitor satisfaction.</li> <li>• Monitor uptake and food wastage to adjust ordering, production or considerations for the next menu review.</li> </ul>

## Menu type

There are three main types of menus used in healthcare settings – cyclical, a la carte and hybrid. See Table 9.2 below for a description of each.

**Table 9.2 Different menu types**

<p><b>Cyclical</b></p> <p>A menu with different meal options for the cycle period, typically 1 – 4 weeks. This type of menu provides a set number of choices for each meal service and the menu is repeated at the end of the cycle.</p> <ul style="list-style-type: none"> <li>• Can be used in acute healthcare settings, but most common in facilities with a longer length of stay</li> <li>• Usually used with multi portion meal solutions, but not exclusive to this</li> <li>• Provides a choice of meal accompaniments and portion sizes, allowing more flexibility for patients. This is particularly useful for children’s wards</li> <li>• Perception of greater choice over a period as the variety of meals change each day</li> <li>• Less menu fatigue reported</li> </ul>	<p><b>À la Carte</b></p> <p>A menu with an extended choice of defined meal options that remains the same every day.</p> <ul style="list-style-type: none"> <li>• Mostly used in acute healthcare settings, particularly for short stay facilities and to accommodate special dietary requirements</li> <li>• Usually, a plated chilled or frozen meal solution, but not exclusive to this</li> <li>• Provides a greater choice of meals at each service, which helps patients to find a meal they enjoy</li> <li>• Provides flexibility and speed for meal provision outside of the standard service times (e.g., 24/7 menu, A&amp;E and Maternity meal provision)</li> <li>• Helpful menu type for diets that cannot be integrated into the standard menu, such as allergy free, modified texture and religious and cultural diets.</li> <li>• Can result in menu fatigue for longer stay patients</li> </ul>
<p><b>Hybrid</b></p>	
<p>A menu that combines an a la carte menu and a cyclical menu. Within a meal service, it contains some options that are available every day and a cycle of some options that change each day (i.e., daily specials).</p> <ul style="list-style-type: none"> <li>• Reduces the risk of menu fatigue for longer stay patients, while providing a greater variety of choices for each meal service</li> <li>• Requires consideration of storage space, budget and operational processes to cater for a larger number of options with differing availability</li> </ul>	

Some healthcare settings use more than one type of menu, e.g., maternity and A&E may offer an a la carte menu, while the rest of the hospital utilises a cyclical menu. The risk of menu fatigue should be considered when planning any menus and strategies for combatting this issue should be discussed in the early stages of menu planning.

Whichever approach is chosen, it is crucial that the menu design meets the dietary needs of those who will use it.

## Standard menu structure

Menu structure refers to the overall types of food and drink, the number and variety of choices offered and at which times of the day. The structure will differ slightly depending on the menu type. It should be based on an eating pattern that is recognisable and compatible with the patient group it is designed for.

Breakfast offerings are similar across most healthcare settings, whether using a cyclical or an a la carte menu for main meals. At lunch and dinner, there should be a minimum of two courses offered to patients: a main meal and a dessert. Starters are optional. This ensures the two courses with the greatest nutritional value are available for nutritionally vulnerable patients who require more nutrient dense food.

The decision to serve either a two or three course meal should be based on the patient group being catered for. This must be discussed at the menu planning stage on a hospital-by-hospital basis to ensure the dietary needs for the population group are met.

A sample format for both a standard cyclical and à la carte menus is suggested below (Table 9.3). This does not include guidance for special menus. Further information about each course and dish type can be found in the next section that covers menu content.

**Table 9.3 Standard menu structure**

Early morning	Drink	
Breakfast	Standard breakfast items (see menu content section below) Any special breakfast items for certain patient groups Drink	
Mid-morning	Drink + snack	
	Cyclical Menu	À la carte menu
Lunch & dinner	<p>Starter – optional</p> <p>Main meal Minimum 3 main entrées – one of which is vegetarian, + carbohydrate side (i.e., potato or grain based) + vegetable side (fresh or cooked) for each day of the cycle</p> <p>A range of salads (meat/fish/vegetarian)</p> <p>A range of sandwiches (meat/fish/vegetarian)</p> <p>Dessert Hot dessert + custard or milk pudding Cold dessert</p> <p>Drink</p>	<p>Starter – optional</p> <p>Main meal Minimum 14 choices of hot main meals (to provide a different option at lunch and dinner for a one-week period), including: a meat, fish or vegetarian based entrée + carbohydrate side (i.e., potato or grain based) + vegetable side (fresh or cooked) or composite dish that includes the main entrée, vegetables and/or potatoes/grains</p> <p>A range of salads (meat/fish/vegetarian)</p> <p>A range of sandwiches (meat/fish/vegetarian)</p> <p>Dessert Hot dessert + custard or milk pudding Cold dessert</p> <p>Drink</p>
Mid-afternoon	Drink + / - snack	
Evening	Drink + snack	

## Exceptions to the standard menu structure

À la carte menus, such as those used for special and therapeutic diets, should strive to meet the above standards, but it is recognised that this may not always be possible with very restrictive diets e.g., low fibre, multiple allergies and texture modified. In these cases, specialist dietitians should be involved.

The type of meal provided, food storage and ordering procedures need to be carefully considered in these situations. Care should be taken to ensure that these menus are designed to provide an appropriate range of options relevant to the patient group, type of hospital and the length of stay and should be sufficient to avoid menu fatigue.

For patients who may be nutritionally vulnerable and for whom complete meal options may not be realistic, such as those recommended to follow a 'little and often' eating pattern, a grazing style menu should be encouraged.

## Menu content

This section provides an overview of the recommended types of food and drink to include in a standard hospital menu to ensure that the nutrition standards, outlined in Chapter 10, can be met.

## The Eatwell Guide

As a minimum and to ensure that requirements for protein, minerals and micronutrients are met, menus should be able to provide the following each day, as outlined by the Eatwell Guide in figure 9.2 (3):

- 
- Fruit and vegetables (5 servings)

---

  - Potatoes, bread, rice, pasta and starchy carbohydrates (5 servings)

---

  - Dairy and alternatives (3 servings)

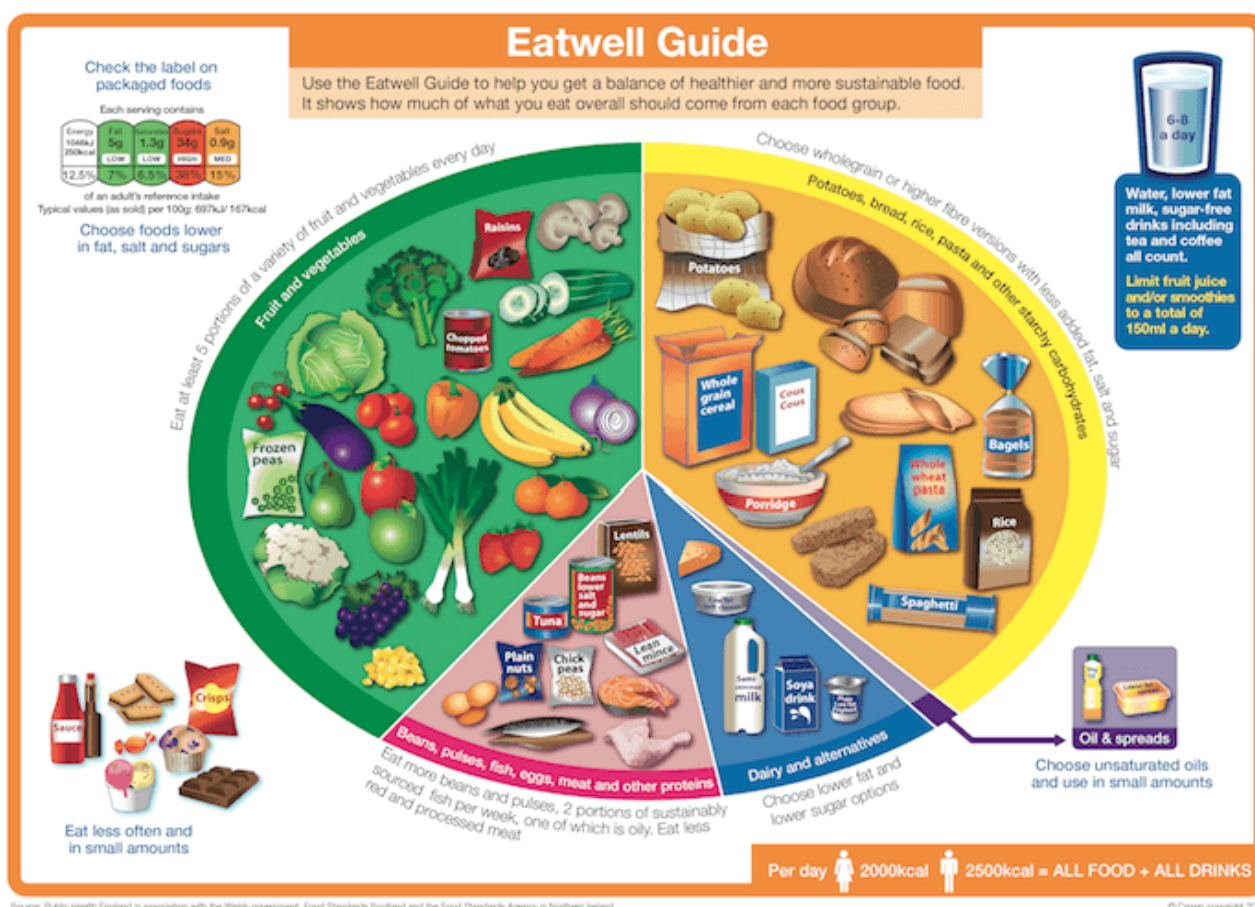
---

  - Beans, pulses, fish, eggs, meat and other proteins (2 servings)

---

  - Foods with a high fat or sugar content may be offered, but the emphasis will be different depending on individual needs. Choices which provide important nutrients should always be given priority. In the case of nutritionally vulnerable patients, nutrient dense options may also include added fat and sugar to make useful contributions to the overall requirements.
-

Figure 9.2: The Eatwell Guide



Eatwell Guide must be acknowledged as Crown copyright and the following statement included to identify the source: Public Health England in association with the Welsh government, Food Standards Scotland and the Food Standards Agency in Northern Ireland. <https://www.gov.uk/government/publications/the-eatwell-guide>

## Breakfast

Breakfast may be provided at ward level using ward provisions or as a full meal service through the catering team. Regardless, there needs to be a clear process for the delivery of breakfast to patients and a consistent offer of choices, supported by a solid supply chain. Breakfast generally consists of continental-style choices and as a minimum the daily standard breakfast should offer:

- **Fruit juice:** A range of juices, e.g., apple and orange juice. 85ml cuplets are often used in healthcare settings, however 150ml of unsweetened 100% fruit juice is equivalent to one portion of fruit. Regardless of whether more is consumed, fruit juice can only ever count as one portion of the '5-a-day' target (3)

- 
- **Cereals with milk:**
    - A range of cold cereals – including both higher fibre options, e.g., branflakes, wheat biscuits, and lower fibre options, e.g. cornflakes, rice krispies
    - At least one hot cereal choice, e.g. porridge or a smooth oat-based cereal
    - A choice of full fat, semi-skimmed and a calcium fortified dairy alternative drink should be available to serve with the cereals
- 
- **Bread/toast:** White and wholemeal sliced bread or rolls. Where it is operationally feasible and where quality can be assured, toasted bread should be offered to patients. Patients may choose to have more than one slice of bread
- 
- **Spreads:** Both butter and a dairy alternative fat spread
- 
- **Preserves:** Assorted jam and marmalade. Other options, such as Marmite and honey are optional.
- 

Depending on the patient group and facilities, additional higher protein breakfast items such as yoghurt, cooked breakfast items, fortified porridge or fortified milk, should also be offered to ensure requirements are met for nutritionally vulnerable patients.

Table 9.4 outlines the minimum breakfast assumptions, which provide adequate energy and protein for nutritionally well patients, as outlined in Chapter 10.

**Table 9.4 Minimum breakfast assumptions**

Breakfast item	Minimum amount per patient
Fruit juice	1 serving (~85ml)
Cereal	1 serving (~30-40g)
Milk	100ml to be served with cereal
Bread/toast	1 slice (~40g)
Spreads	1 packet per slice of bread/toast (~6-10g)
Preserves	1 packet per slice of bread/toast (~20g)

## Lunch and dinner

### Starters

#### **Soup**

As a starter, soup can be a good way to increase the vegetable intake of patients, but the portion size should be limited to roughly 150ml. This will help ensure that nutritionally vulnerable patients do not fill up on soup and as a result, not eat their main meal, which is higher in protein and other key nutrients. Soup can be a popular choice for unwell patients; however, a starter portion of soup should only be served before a main meal and not as a replacement.

Soup should only be provided as a starter if it meets the minimum nutritional criteria of a 'nourishing soup' as outlined in Chapter 10. Soups that are of poor nutritional quality (e.g., some whisk and serve style soups) should not be used in the healthcare setting. If a patient would like to have soup as their main meal, then larger portions of 'fortified soup' should be included in the mains section of the menu (see Main Meals section below).

Service times should factor in multiple courses to ensure food is served to patients at a safe (i.e., >63°C) and enjoyable temperature. This will look different for each hospital ward depending on the number of beds, levels of staffing, available equipment and the budget for extra ward support at mealtimes.

#### **Other options**

Alternative options could be offered as a starter if an item meets the clinical need of a patient group, and the menu continues to meet daily nutrition standards (outlined in Chapter 10).

## Main meals

#### **Hot main course**

Standard hospital menus should provide an adequate choice of hot main meals that cater to both nutritionally well and nutritionally vulnerable patients. They should also include vegetarian options and options that are easy to chew (see Chapter 12) at each meal service.

Portion sizes for main courses or main meals are not set at any target. Dishes can have varying



nutrient densities. For example, two different fruit crumbles may weigh the same or visually look the same size on a plate, but one may have a significantly higher fruit to crumble ratio than the other. Less focus should be placed on the weight of main meal portions and more priority placed on the nutrition content. See Chapter 10 for more information on nutrition standards.

## Carbohydrate sides

At least one carbohydrate-based side dish should be offered as part of a hot main course. This could be potatoes, rice, pasta, bread or other grain options like cous cous, pearl barley or quinoa.

The type of side dishes offered should reflect the needs and preferences of the patient group. For example, if there is a high proportion of older adults, at least one easy to chew side, such as mashed potato, should be offered at each meal service. The side dishes should also compliment the main entrees they are served with, e.g., rice with a vegetable curry or roast potatoes with roast chicken.

## Vegetable sides

When choosing vegetable options for a main course, the following should be considered:

- 
- Minimum portion size of a vegetable serving is 80g per meal
- 
- Consider serving two different vegetables per meal to increase variety and choice
- 
- Using vegetables of different colours and textures in a meal service creates more appealing meals
- 
- Ensure at least one of the vegetables at each meal service is coded as an easy to chew option (as defined in Chapter 12)
- 
- Popular choices and seasonal vegetables should be routinely planned, when possible
- 
- Higher protein vegetables, such as peas and baked beans can be offered with lower protein entrees to improve the overall meal protein content.
- 

## Sauces, condiments, garnishes and gravy

Sauces, condiments, garnishes and gravy could also be considered to complement and improve the overall palatability of a meal, such as offering a slice of lemon and tartare sauce

with fish and chips or offering natural yoghurt with a curry dish.

Food costs and sustainability issues, such as increasing food waste should be considered carefully. It is also important to be aware that some people do not like sauces, therefore plainer meals without sauce should also be offered. To cater to different preferences, it is best to implement ordering and meal service systems that allow for choice.

### **Main meal soup**

Soups as main meal option can be appealing for patients with a poor appetite or who are feeling generally unwell. A main meal soup should be a larger portion than a starter soup. The soup itself also needs to meet the minimum nutrition criteria of a 'fortified soup' and be served with suitable accompaniments (e.g., bread roll and spread) to ensure it meets the minimum nutrition criteria for a main meal. Both the minimum energy and protein criteria for a fortified soup and a main meal are outlined in Chapter 10.

### **Sandwiches**

Sandwiches may be offered to patients as an alternative to a hot main meal.

The minimum nutrition criteria for sandwiches served as a main meal option is outlined in Chapter 10. Sandwiches also need to be able to provide the same minimum nutrition targets for a complete main meal (i.e., with a dessert and where applicable, a starter). To meet these targets, sandwich options may require the addition of a side dish, such as coleslaw, other salads, crisps or chips to increase the overall nutritional value.

A selection of sandwiches should be available to meet the different dietary needs of patients, including easy to chew, healthier eating, higher energy and vegetarian options. It is best practice to offer sandwiches that cater to other special diets, such as Gluten Free, Halal and Vegan, however, the selection of sandwiches and order volumes will be dependent on the requirements of patients for each individual healthcare facility. It is also important to consider uptake volumes to avoid food waste.

When choosing the types of sandwiches to offer, ensure there is a choice of white and wholemeal bread available and opt for fillings and types of bread that are more popular and nutritious.

Sandwiches such as plain ham, chicken or cheese may be required as a flexible component to the food offer for different patient groups, such as children, those requiring special diets, such as low fibre and those with food allergies.

Accessible design of packaging for sandwiches should be considered in line with the requirements set out in Chapter 6.

### **A note on soup and sandwich meals**

While soup and sandwich options are fine to offer on a standard menu, a soup and sandwich meal must not be the only main meal choice available at a given meal service due to the inability of this option to meet the higher nutrition requirements of nutritionally vulnerable patients (4). An alternative option must always be available.

### **Salads**

A salad meal is a welcome addition to a menu, especially in summer months.

The minimum nutrition criteria for a salad served as a main meal is outlined in Chapter 10. As with sandwiches, main meal salads also need to be able to provide the minimum nutrition targets for a complete main meal. To ensure nutrition targets can be met, a salad should contain a good source of protein and either be served with or contain a source of carbohydrates, such as pasta, potato, a bread roll, rice or other grains.

### **Desserts**

Some desserts can contribute a significant number of calories and enjoyment to a menu, which is especially important for nutritionally vulnerable patients. Menus should include at least one higher energy, and ideally higher protein, dessert option at each meal service to cater for nutritionally vulnerable patients. See Chapter 12 for the nutrition criteria of a higher energy dessert. These desserts may include fruit crumble, sponge with chocolate or jam, puddings or cheese and crackers. They can also be served with custard or ice cream to increase their overall energy and protein content.

Menus should also offer healthier eating dessert choices, including fresh or tinned fruit, custard and yoghurt.

### **Snacks**

A minimum of two different types of snacks should be offered to patients twice a day to support additional nutritional requirements. Snacks should be provided at either mid-morning

or mid-afternoon and in the evening.

The range of snacks should include both healthier eating and higher energy options to cater for both nutritionally well and nutritionally vulnerable patients. The minimum nutrition targets for snacks for both groups are outlined in the day parts approach (Table 10.4) in Chapter 10. Refer to Chapter 12 for the menu coding of individual snacks.

Healthier eating choices may include fruit, yoghurt, crackers or wholegrain crispbreads. While higher energy options could include muffins, cakes, flapjacks or cheese and crackers. Higher protein snacks should also be considered to meet the needs of nutritionally vulnerable patients.

It is important to offer a selection of snacks that also cater to different dietary needs, such as vegetarian, vegan, easy to chew, gluten free, modified texture and culturally appropriate options, and to different patient groups, such as children and older adults (4).

## Drinks

The Healthcare Caterers Association (HCA) Good Practice Guide (5) recommends offering seven drinks over the day as a minimum. In addition to tea and coffee, other drinks like squash, milk-based hot drinks and fresh water must also be readily available. Options should also include decaffeinated tea and coffee and consideration should be given to the provision of fruit juice, fruit teas or malted milk drinks.

The choices of drinks available should reflect the needs of the patients being served. For example, a children's ward may not offer caffeinated drinks or certain renal wards may choose to avoid serving chocolate-based drinks.

- 
- 400ml of milk as a minimum should be allocated per patient for drinks.
- 

This excludes milk for breakfast, where a minimum of 100ml should be allocated. Where patients are nutritionally vulnerable, whole milk should be provided as standard. Children under the age of 2 years old should not be given skimmed or semi skimmed milk. A dairy free drink, fortified with calcium, should always be available as an alternative to cow's milk, e.g. soya or oat based drinks supplied for vegan or patients with a cow's milk protein allergy or intolerance.

## Other considerations

### 24-hour meal provision

Patients should have access to suitable 24/7 food and drink options, which are appropriate for their demographic (6) and dietary needs (4). This includes patients with any special dietary needs, including cultural, allergen free and modified texture.

Meals served outside of the dedicated meal service times should provide a choice for all patient groups and be capable of providing the same minimum nutrition as a main meal, as outlined in Chapter 10.

The process for ordering meals outside of regular meal service times should be clear and well communicated throughout the facility to ensure patients who have missed a meal can meet their nutrition needs. It is also critical that any staff providing 'out of hours' hot meals have completed the appropriate food safety training and that meals service records are kept.

### Alcohol as a recipe ingredient

While alcohol as an ingredient can enrich the flavour of a dish and most of the alcohol content is evaporated during cooking processes, there are some considerations to make when alcohol is used in recipes for healthcare settings.

To ensure that the needs of all people are met, it is good practice to always include the alcohol ingredient in the dish name, e.g. steak and ale pie, so that there is no uncertainty about whether or not alcohol has been included as a dish ingredient. It provides transparency for people who avoid alcohol for clinical, cultural or religious reasons and enables hospitals that have an alcohol-free policy to confidently plan menus that do not contain any alcohol.

### Vitamin analysis

Dietitians and other members of the menu planning team may wish to gain assurance that all nutritional targets are met, including vitamin and minerals. Reference intakes of individual nutrients for the well population can be found on the British Nutrition Website (7) and within The Eatwell Guide from Public Health England (8).

## Menu checklist

The menu planner should assess the food-based standards outlined in this chapter by using the Qualitative Menu Assessment Checklist provided in Appendix 1.

This tool can be adapted to reflect the needs of the patient groups served where some elements may not be applicable or appropriate.

## Printed menu guidance

Patients should be provided with printed menu information to allow them to consider their food and drink choices and assist with the meal ordering process. There are several print menu designs now being used within healthcare settings – e.g. menu booklet, poster, tray mat, menu slips or cards. It is important to consider the sustainability aspects of a printed menu. Where less paper is used there is an ultimate saving in the greenhouse gas emissions associated with paper.

Consideration should be made as to which design best communicates information to patients to help them decide what to order. The table below lists the most important information or signposting that is typically displayed on healthcare menus. It is also important to consider legibility and accessibility of the menu design and the budget for printing menus.

**Table 9.4 Information and guidance on printed menus**

Importance of nutrition & hydration whilst in hospital
Signposting to allergen (legally required) and nutritional information
Menu coding descriptions
Meal service times and missed meal procedure (24/7 food service options)
Other menus available e.g. special diet menus, pictorial menus
Patient satisfaction survey link or instructions for providing feedback
Assisted or protected mealtimes information
Sustainability information a
Breakfast, lunch, dinner, snack and drink options
Meal ordering instructions

## References

1. NHS England and C4PC (2020) A co-production model. <https://coalitionforpersonalisedcare.org.uk/resources/a-co-production-model/> [Accessed 2nd April 2023]
2. Bowen L et al. Food service in hospitals and institutions. In: Gandy J. (ed.) Manual of Dietetic Practice. 6th ed. UK. Wiley Blackwell on behalf of The British Dietetic Association; 2019. p. 260-270.
3. Public Health England. The Eatwell Guide: The Eatwell Guide Booklet. 2016. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/742750/Eatwell\\_Guide\\_booklet\\_2018v4.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/742750/Eatwell_Guide_booklet_2018v4.pdf) [Accessed 2nd April 2023]
4. Department of Health and Social Care. Report of the Independent review of NHS hospital food. 2020. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf) [Accessed 2nd April 2023]
5. Hospital Caterers Association. A Good Practice Guide to ward level services. Healthcare Food and Beverage Service Standards. Manchester: Lansdowne Publishing Partnership Limited; 2013. <http://www.hospitalcaterers.org/publications/> [Accessed 2nd April 2023]
6. NHS England. National standards for healthcare food and drink. 2022. <https://www.england.nhs.uk/publication/national-standards-for-healthcare-food-and-drink/> [Accessed 2nd April 2023]
7. British Nutrition Foundation. Vitamins and minerals in a healthy Diet. <https://www.nutrition.org.uk/healthy-sustainable-diets/vitamins-and-minerals/?level=Consumer> [Accessed 2nd April 2023]
8. Public Health England. Government Dietary Recommendations: Government recommendations for energy and nutrients for males and females ages 1-18 and 19+ years. London: Public Health England; 2016. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/618167/government\\_dietary\\_recommendations.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/618167/government_dietary_recommendations.pdf) [Accessed 2nd April 2023]

# 10

## Nutrition Standards





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All healthcare menus must meet the nutrition standards for both nutritionally well and nutritionally vulnerable patients.

Standard menus should provide choice for patients from both the nutritionally well and nutritionally vulnerable groups. This chapter will outline the nutrition standards that need to be met. Chapter 9 provides food-based guidance on meeting these standards. Chapter 11 provides guidance on how to assess menu capacity to ensure compliance with these standards.

Each standard menu should reflect current national and/or devolved government public health messages tailored to the patient population; however, menu planners should be mindful that a diet promoting longer term health may not be appropriate in times of acute illness. Dietitians are best placed to judge where the implementation of a 'healthier choice' menu is a useful adjunct to patient treatment.

The balance of healthier and higher energy/higher protein choices should reflect the needs of the patient population it will serve. For example, taking into consideration clinical needs and the length of stay of patients within particular units. Identification of such needs is a clinical responsibility (see Chapter 3 for information on nutritional screening).

## Nutrition targets

The nationally recognised dietary reference values (DRVs) for energy (1) apply to a healthy population and those who are nutritionally well in an acute setting. The Parenteral and Enteral Nutrition Group (PENG) (2) states energy requirements in sick or injured individuals are influenced by many factors and, as a result may be lower, similar to, or in rare cases, higher than requirements in the healthy population. Following this rationale and the Eatwell Guide will ensure that micronutrient targets are achieved.

**Table 10.1: Daily nutrition standards for adults**

<b>Nutrient (/day)</b>	<b>Nutritionally Well</b>	<b>Nutritionally Vulnerable</b>
Energy (kcal)	1840 – 2772	1840 – 2772
Protein (g)	56*	79-92

\*For females in the same age bracket the Reference Nutrient Intake (RNI) is 45g

## Nutritionally well

The energy target range for nutritionally well individuals is based on the Estimated Average Requirements (EARs) for energy from the Dietary Reference Values (DRVs) for Energy for the United Kingdom (1). This target accounts for the lowest and highest energy requirements for adult men and women aged 19+ years. The lowest target being women aged 75+ years at 1840kcal and the highest target being men aged 19-24 years at 2772kcal.

The protein targets for nutritionally well individuals are based on the latest government dietary recommendations, which are 45g protein/day for females aged 19-64 years and 56g protein/day for males aged 19-64 years (3).

## Nutritionally vulnerable

A review of the previous recommendations for energy, protein and the weight range used to calculate requirements has taken place. Considering an acutely unwell hospitalised individual with a requirement of 20-30kcal/kg body weight/day, using 66-77kg weight and typical Physical Activity Level (PAL) of 1.2 (limited mobility) gives a range of 1584-2772kcal. Whilst the lower figure is outside of the nutritionally well range (1840kcal), the requirements for the nutritionally well range must be met. Therefore, the minimum calories requirement for a hospital menu has been set higher at 1840kcal-2772kcal/day.

Protein recommendations for those over the age of 65 years are between 1.0-1.5g protein/kg/day (2, 4). It can be presumed that those who require over 1.2g protein/kg/day will likely require specialist dietetic intervention to meet protein requirements. However, a hospital menu should be capable of providing protein intakes up to 1.2g protein/kg/day to ensure it has the ability to meet the needs of most patients in the hospital setting, including those over the age of 65 years. Therefore, using the increased target of 1.2g protein/kg body weight/day for adults and the more accurate weight range of 66-77kg thus provides an increased target protein requirement of 79-92g protein/day (2, 4, 5).

It is recognised that the increased protein recommendations in this section may require some product reformulation and/or a review of current menus. It is therefore required that these changes be implemented within 18 months of the publication date of this document.

## Menu capacity

Menus should be capable of providing the nutrient standards for both nutritionally well and nutritionally vulnerable adults. As stated in Chapter 9, dietary needs for the patient group must be assessed for nutritional requirements. Dietitians must demonstrate they have taken the patient cohort's nutritional requirements into consideration when establishing nutrient targets for inpatient food provision.

The latest Hospital Admitted Patient Care Activity 2020-21 (6) showed that of the 14,187,137 patients admitted to hospitals during the financial year 2020-21 in England, only 16% were in the female aged over 75 category (with a requirement of 1840kcal), with 45% being male and requiring in excess of 2294kcal to meet their nutritionally well targets. As such, the targets in this guideline are intended as a minimum and care must be taken to avoid nutritionally well hospitalised patients becoming undernourished through inadequate food provision. However, there may be some patients, such as those requiring reduced calorie diets, that may require fewer calories than that stated in Table 10.1.

It is likely that some patients will require a protein intake greater than 1.2g/kg/day (2, 4), such as those in critical care or with liver conditions. These patients will need at least three meals (breakfast, lunch and dinner) and two higher energy snacks but may also need intervention from a dietitian.

It is important to note that ensuring patients have the opportunity to meet their energy and protein requirements both at a mealtime and across the day relies not just on the capacity of the menu offered, but also on the support given to both order and consume appropriate options (see Chapters 3 and 6 for more information).

## Complete main meal nutrition

The span of 'healthier eating' to 'higher energy' should provide 1840-2772kcal and 56-92g protein a day. When assessing the capacity of a complete meal to provide these nutrients, the contribution of all components, as outlined in Table 9.3, must be considered. A complete meal that reaches a total of approximately 500kcal, 15g protein meets the lowest target of healthier eating requirement and a complete meal that provides approximately 800kcal, 27g protein meets the higher energy needs (see Table 10.2). It is important that you assess your user group to determine which targets to aim for.

**Table 10.2: Nutrition targets for menu planning**

<b>Complete meal nutrition targets (optional starter + main + dessert) for lunch and dinner meals</b>	<b>Nutritionally Well</b>	<b>Nutritionally Vulnerable</b>
Energy (kcal)	500	800
Protein (g)	15	27

## Main courses

The current recommendation is that main courses alone should aim to provide at least 300kcal. However, it is important to note that the starter and dessert must then provide a combined 200-500kcal to meet the complete meal energy targets (see Table 10.2).

All patient groups within the nutritionally well category, where the daily calorie requirements span 1840-2772kcal, must be able to meet their nutritional requirements in full. The calorie content of the main course and complete main meal should be reviewed to ensure all patients are given adequate opportunity to meet their calorie requirements, without the need for the addition of dietetic led interventions, as this additional individual assessment and support may not always be available or appropriate.

Table 10.3 provides a summary of the minimum nutrition targets for specific menu components listed in Chapter 9. These minimums are significantly below the complete meal nutrition targets outlined in Table 10.2. Therefore, where lower calorie main courses are utilised in menu planning, consideration must be given to the type of starters, accompaniments and desserts available to ensure the minimum complete meal nutrition targets are reached. In the absence of a starter, minimum choices for main course and dessert must reach total complete meal nutrition targets.

**Table 10.3 Minimum nutrition targets for specific menu components**

Menu Component	Energy (kcal)	Protein (g)
Starter soup (nourishing soup)	100	3
Main meal soup (fortified soup)	200	7
Main course	300	10
Sandwich	300	10
Salad	300	10

## Energy

Menus should demonstrate that an average complete meal (starter + main + dessert) comes to approximately 500kcal for nutritionally well and 800kcal for nutritionally vulnerable, whilst recognising practicalities and exceptions for the menu capacity to be outside this.

Where patients are able to choose combinations of options on a menu, they may select lower energy combinations of foods (e.g., Roast chicken in Gravy for main with fruit for dessert). It is expected however, with guidance, that patients are encouraged to enhance these meals with higher calorie side orders or desserts, so that their meal is able to meet the minimum 500 kcals.

Therefore, considering minimum and maximum values as part of a menu capacity analysis, as outlined in Chapter 11, provides compliance with the nutrition standards outlined in this chapter.

## Protein

The minimum protein content for any main meal, i.e., a starter, dessert and a main course, that is based on meat, fish, eggs, cheese, pulses, or other plant-based proteins, must reach a total of 15g protein. On a menu where some desserts such as fruit or jelly may contribute negligible protein, the 15g minimum protein level will therefore need to be provided by the rest of the components for that mealtime.

Dietitians must exercise judgement about the menu capacity for nutritionally vulnerable patients to ensure that suitable higher energy and protein choices are available to provide targets of at least 27g of protein for a complete meal.

Some items that may feature on menus such as ready-prepared dishes (e.g., sausage rolls, fishcakes, pastries) and pulse-based vegetarian/vegan meals generally have a lower protein

content per serving. It is recommended that suitable high protein accompaniments such as mushy peas, peas, sweetcorn, or baked beans are available on the menu. This ensures the capacity of the menu still offers adequate protein.

To achieve the recommended protein targets for breakfast the dietitian will need to consider the availability of higher protein options at breakfast time, for example omelettes, eggs, baked beans, milky drinks, cheese, yoghurt etc., to achieve the 18g recommendation for nutritionally vulnerable patients (see table 10.4).

## 'Day Parts' model

The 'Day Parts' model divides the day into meal parts. It allows flexibility to divide the eating events of the day as appropriate for the patients for whom the menu is being assessed, e.g. having small frequent meals throughout the day or the inclusion of a cooked breakfast.

To enable the planning of balanced patient menus for the general hospital population, this guidance uses a structure that reflects the contribution of protein and calories across all eating events of the day to provide an adequate overall intake for the whole day: day parts.

Day parts uses the range 56-92g protein/day as a reference point and the span of 1840-2772 kcals to cover the majority of nutritional requirements for the general adult population. The day parts approach is similar to the method used in nutrition standards in other sectors, such as schools (7). Patient needs should be assessed and addressed on an individual basis and are the responsibility of all involved in the care of the patient.

The combination of choices at both of the day's complete meals should have the capacity to contribute adequate energy and protein for the population they are designed to meet (i.e., both midday and evening meal). Protein is an important proxy for other important vitamins and minerals. As long as a suitable combination for meeting both protein and energy can be identified, the menu is likely to be satisfactory.

**Please note the figures in table 10.4 are calculated from DRVs. For practical day to day use, please see table 10.2 which includes rounded figures for applying to patient menus.**

The day parts model should be applied to ensure the nutritional needs of the local population can be met through the whole menu. For example, if a lighter breakfast is routinely served, snacks and main meals should be adjusted accordingly. A maximum/minimum menu capacity calculation for both an à la carte and a cyclical menu is shown in Chapter 11.



Table 10.4: Example of menu day parts

Day Parts	% of daily nutrition (approx.)	Nutritionally Well		Nutritionally Vulnerable	
		Energy (kcal)	Protein (g)	Energy (kcal)	Protein (g)
<b>Breakfast</b> <b>Nutritionally Well</b> Fruit juice Cereal and milk 1 x bread Preserve portion Butter or fat spread portion		400	10	545	18
<b>Nutritionally Vulnerable</b> As above, plus the addition of high protein, high calorie options such as full fat yoghurts, cooked breakfast items or by fortifying porridge, milk or drinks with milk powder.					
<b>Snacks</b> Minimum of two daily recommended <b>Nutritionally Well</b> Healthier eating snacks		150	2	300	7
<b>Nutritionally Vulnerable</b> Higher energy and higher protein snacks					
<b>Milk for drinks</b> 400ml minimum <b>Nutritionally Well</b> Semi skimmed milk		184	14	264	13
<b>Nutritionally Vulnerable</b> Whole milk					
<b>Total (Fixed)</b>	<b>40%</b>	<b>734</b>	<b>26</b>	<b>1109</b>	<b>38</b>

continues on next page

<b>Lunch Meal</b> Starter (optional) Main course (entree + carbohydrate + vegetable/s sides) + sauce/gravy OR sandwich OR main salad) Dessert					
<b>Nutritionally Well</b>					
<b>Nutritionally Vulnerable</b>					
<b>Total for lunch meal</b>	<b>30%</b>	<b>552</b>	<b>15</b>	<b>831</b>	<b>27</b>
<b>Dinner Meal</b> Starter (optional) Main course (entree + carbohydrate + vegetable/s sides) + sauce/gravy OR sandwich OR main salad) Dessert					
<b>Nutritionally Well</b>					
<b>Nutritionally Vulnerable</b>					
<b>Total for dinner meal</b>	<b>30%</b>	<b>552</b>	<b>15</b>	<b>831</b>	<b>27</b>
<b>Total (Variable) (main meals)</b>	<b>60%</b>	<b>1104</b>	<b>30</b>	<b>1662</b>	<b>54</b>
<b>Total (40% Fixed + 60% Variable (whole day)</b>	<b>100%</b>	<b>1838</b>	<b>56*</b>	<b>2771</b>	<b>92</b>
<b>Targets (from Table 10.1)</b>		<b>1840</b>	<b>56</b>	<b>2772</b>	<b>79-92</b>

This table indicates how a multi-choice menu can meet the targets from Table 10.1. Within this range, the BAPEN recommendations for nutritionally vulnerable can also be met. \*Please note the higher RNI for protein has been used in this table.

## References

1. Scientific Advisory Committee on Nutrition. Dietary Reference Values for Energy. London: TSO; 2011. <https://www.gov.uk/government/publications/sacn-dietary-reference-values-for-energy> [Accessed 2nd April 2023]
2. Parenteral and Enteral Specialist Group of the British Dietetic Association. A Pocket Guide to Clinical Nutrition. 5th ed. BDA; 2018. <http://www.peng.org.uk>

3. Public Health England. Government Dietary Recommendations: Government recommendations for energy and nutrients for males and females ages 1-18 and 19+ years. London: Public Health England; 2016. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/618167/government\\_dietary\\_recommendations.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/618167/government_dietary_recommendations.pdf) [Accessed 2nd April 2023]
4. Dorrington N, Fallaize R, Hobbs DA, Weech M, Lovegrove JA. A Review of Nutritional Requirements of Adults Aged  $\geq 65$  Years in the UK. *The Journal of Nutrition*. 2020;150(9): 2245-2256. doi: 10.1093/jn/nxaa153.
5. Moody A. Health Survey for England 2019: Overweight and obesity in adults and children. NHS Digital; 2020. <https://files.digital.nhs.uk/9D/4195D5/HSE19-Overweight-obesity-rep.pdf> [Accessed 2nd April 2023]
6. NHS Digital. Hospital Admitted Patient Care Activity 2020-21. 2021. <https://digital.nhs.uk/data-and-information/publications/statistical/hospital-admitted-patient-care-activity/2020-21>, [Accessed 2nd April 2023]
7. Crawley H. Eating well at school: Nutritional and practical guidelines. London: The Caroline Walker Trust; 2005. <https://www.cwt.org.uk/wp-content/uploads/2014/07/EatingWellatSchool.pdf> [Accessed 2nd April 2023]

## Further reading

Welsh Government. All Wales Nutrition and Catering Standards for food and fluid provision for hospital inpatients. 2011. <https://www.bapen.org.uk/pdfs/e-learning/WalesNutritionCateringStandardsHospitalInpatients.pdf>

NHS Scotland. Food in Hospitals: National Catering and Nutrition Specification for Food and Fluid Provision in Hospitals in Scotland. Edinburgh: APS Group Scotland; 2016. <https://www.nss.nhs.scot/media/1097/1479818118-food-in-hospitals-revised-march-2016.pdf>

HSE. Food, Nutrition and Hydration Policy. For Adult Patients in Acute Hospitals. HSE; 2016. [food-nutrition-and-hydration-policy-for-adult-patients-in-acute-hospital.pdf](https://www.hse.ie/eng/health/food-nutrition-and-hydration-policy-for-adult-patients-in-acute-hospital.pdf) ([hse.ie](https://www.hse.ie))

# 11

## Menu Capacity Analysis



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The process of menu analysis requires an understanding of menu type, structure, planning and content. It is not all about number crunching; both qualitative and quantitative aspects of menus are equally important.

The methodology outlined in this chapter can be used to evaluate the range and capacity of menus used in a healthcare setting. **A menu capacity analysis provides evidence of compliance with applicable hospital food standards.** Each home country's standards vary slightly, so it is important to check the ones that apply to your organisation. It is also recommended that a new analysis is carried out for each substantial menu change.

In addition to the standard menu, it is recommended that special and therapeutic menus (i.e., texture modified menus, paediatric menus, finger food and allergy menus) are also analysed using the same methodology to ensure energy and protein needs are met across the spectrum of menus.

It should be noted that the aim of the menu capacity analysis is to outline the hypothetical capacity of the menu and is based on patients eating 100% of their meals. Patients who are nutritionally vulnerable may consume less of their meals due to nutrition impact symptoms like swallowing difficulties, poor appetite, and fatigue. Therefore, menu planners should be cautious of menu analysis figures when aiming to show compliance with any standards. Other factors that will impact a patient's intake still need to be considered, such as taste, appearance and portion size.

## Methodology for analysing menu capacity

The structure of a menu capacity analysis is based on the day parts model outlined in Chapter 10, Table 10.4. Each day has both a 'fixed' and a 'variable' component.

Fixed amounts are used to estimate the daily intake of energy and protein from breakfast, snacks and drinks. As there are multiple products available to patients at breakfast and snack/drink rounds - using the average of these products provides a more measured approach to analysing the capacity of a menu.

Variable amounts are used to reflect the range of energy and protein available from the different meal choices on the menu for the lunch and dinner meal services.

This chapter illustrates two worked examples of a menu capacity analysis based on a cyclical and à la carte standard menus. Both examples illustrate how the minimum/maximum method of menu analysis is used to show how the menus meet the needs of both nutritionally well and nutritionally vulnerable patients.

**Tables 11.2, 11.3, 11.4, 11.5 and 11.6** depict a worked example of a menu capacity analysis of a sample day from a 2-week cycle menu. **Tables 11.7, 11.8, 11.9 and 11.10** depict a worked example of a menu capacity analysis of a sample à la carte menu.

**Table 11.1: Outline of minimum/maximum methodology**

<b>Step 1: Nutritional breakdown</b>		
	<b>Cyclical menu</b>	<b>A la carte menu</b>
Obtain the energy (kcal) and protein (g) information for all food and drink items on the menu.	Table 11.2	Table 11.7
<i>Notes: Data can be sourced from the food supplier, manufacturer, food labels, calculated in-house using recipe analysis software based on food composition tables, or through a combination of these.</i>		
<b>Step 2: Calculate fixed values</b>		
	<b>Cyclical menu</b>	<b>A la carte menu</b>
<b>Minimum</b>	Table 11.3	Table 11.8
Calculate the minimum 'fixed' energy and protein values for breakfast, snacks and drinks	Breakfast - calculate the average energy and protein of the breakfast items on offer, as outlined in the standard <b>nutritionally well</b> breakfast in Table 10.4  Snacks - use the total energy and protein for the two snacks with the <b>lowest</b> amount of energy  Drinks - use the energy and protein of 400ml of your <b>lowest</b> energy milk	
<b>Maximum</b>	Table 11.4	Table 11.9
Calculate the maximum 'fixed' energy and protein values for breakfast, snacks and drinks	Breakfast - calculate the average energy and protein of the breakfast items on offer, as outlined in the standard <b>nutritionally vulnerable</b> breakfast in Table 10.4  Snacks - use the total energy and protein for the two snacks with the <b>highest</b> amount of energy  Drinks – use the energy and protein of 400ml of your <b>highest</b> energy milk	
<i>Notes: For the worked examples in this chapter, the appropriate energy and protein values were taken from Table 10.3. In practice use actual breakfast and snack items figures. Two different types of snacks should be used.</i>		



<b>Step 3: Calculate variable values</b>		
	<b>Cyclical menu</b>	<b>A la carte menu</b>
<b>Minimum</b>	Table 11.3	Table 11.8
Calculate the minimum 'variable' energy and protein values for lunch and dinner	Select a random day in the week and pick the appropriate <b>minimum</b> choice (i.e., that which provides the <b>lowest</b> energy value) at lunch and dinner for the starter (if applicable), main meal and dessert.	Select the 3 <b>minimum</b> choices on the menu (i.e., those which provide the <b>lowest</b> energy value) for the starter (if applicable), main meal and dessert.  Add the total energy together for the 3 lowest options in each course and divide by 3 to get an average for that meal course.  Repeat this for protein
<b>Maximum</b>	Table 11.4	Table 11.9
Calculate the maximum 'variable' energy and protein values for lunch and dinner	For the same day, pick the appropriate <b>maximum</b> choice (i.e., that which provides the <b>highest</b> energy value) at lunch and dinner for the starter (if applicable), main meal and dessert	Select the 3 <b>maximum</b> choices on the menu (i.e., those which provide the <b>highest</b> energy value) for the starter (if applicable), main meal and dessert.  Add the total energy together for the 3 highest options in each course and divide by 3 to get an average for that meal course.  Repeat this for protein.
<p><i>Notes: Pick realistic options when choosing carbohydrate and vegetable sides to make up a main course - even if that choice is not always the lowest/highest in energy for that meal service, e.g. when completing a minimum capacity analysis, pick rice to go with chilli con carne, even though mashed potato may be on the menu and provide less calories, similarly you may pick chips to pair with battered fish when completing a maximum capacity analysis, even though rice may have more calories.</i></p>		

<b>Step 4: Calculate average total daily energy and protein</b>		
	<b>Cyclical menu</b>	<b>A la carte menu</b>
<b>Minimum</b>	Table 11.3	Table 11.8
Calculate the total <b>minimum</b> energy and protein provided over the day	Add together the values for energy and protein for both the <b>minimum</b> fixed and variable components of the day to calculate the totals for each.	If the same <b>variable</b> options are available and lunch and dinner, multiply the calculated average <b>minimum</b> values for energy and protein by <b>2</b> to represent both main meals (or simply add together lunch and dinner if different options are available). Then add these amounts to the <b>minimum fixed</b> values to calculate the totals for both energy and protein.
<i>Notes: Show the percentage of the nutritional targets met for both the <b>minimum</b> fixed and variable figures as demonstrated in Table 10.1</i>		
<b>Maximum</b>	Table 11.4	Table 11.9
Calculate the total <b>maximum</b> energy and protein provided over the day	Add all the values for energy and protein together for both the <b>maximum</b> fixed and variable components of the day to calculate the totals for each.	If the same variable options are available and lunch and dinner, multiply the calculated average <b>maximum</b> values for energy and protein by <b>2</b> to represent both main meals (or simply add together lunch and dinner if different options are available). Then add these amounts to the <b>maximum</b> fixed values to calculate the totals for both energy and protein.
<i>Notes: Show the percentage of the nutritional targets met for both the maximum fixed and variable figures as demonstrated in Table 10.1</i>		

<b>Step 5: Calculate average energy and protein for a cycle</b>		
	<b>Cyclical menu</b>	<b>A la carte menu</b>
<b>Minimum</b>	Table 11.5	
Calculate the average <b>minimum</b> energy and protein provided across the three days or three meals	Repeat steps 3 and 4 for three random days in total within the week, including one weekend day.	N/A
Calculate the average <b>maximum</b> energy and protein provided across the three days or three meals	Add the total energy together for all 3 days from the <b>minimum</b> menu capacity analysis and divide by 3 to get the average energy provided by the <b>minimum</b> choices.  Repeat this for protein.	N/A
<b>Maximum</b>	Table 11.5	
Calculate the average <b>maximum</b> energy and protein provided across the three days or three meals	Repeat steps 3 and 4 for three random days in total within the week, including one weekend day.  Add the total energy together for all 3 days from the <b>maximum</b> menu capacity analysis and divide by 3 to get the average energy provided by the <b>maximum</b> choices.  Repeat this for protein.	N/A
<i>Notes: Including a Saturday or Sunday ensures consistency of meeting nutritional capacity over the entire week.</i>		

<b>Step 6: Compare to nutritional Targets</b>		
Minimum	Table 11.6	Table 11.10
Compare the average energy and protein to the nutritional targets for <b>nutritionally well patients.</b>	The average energy and protein from your <b>minimum</b> menu capacity analysis should be equal to or above the targets for nutritionally well patients.	
Maximum	Table 11.6	Table 11.10
Compare the average energy and protein to the nutritional targets for <b>nutritionally vulnerable patients.</b>	The average energy and protein from your maximum menu capacity analysis should be equal to or above the targets for nutritionally vulnerable patients.	

## A note on hybrid menus

If a menu contains a combination of both a la carte options (i.e. options that are available everyday) and a cyclical menu (i.e. daily specials), then the two different components of the menu should be analysed separately.

For example, if the menu has the same sandwiches and cold desserts available every day with a rotating menu of daily hot options, the sandwiches and cold desserts should be analysed using the a la carte menu method and the hot options analysed using the cyclical menu method.

## Worked examples

The following worked examples of lunch and dinner menus show how the menu capacity analysis methodology can be applied to both cyclical and à la carte menus.

Some nutritional analysis packages allow selection of meal choices from specific days to carry out a menu capacity analysis. In the absence of an appropriate electronic analysis tool, calculations can be carried out manually using an Excel spreadsheet and the energy and protein information from recipe analysis.

Table 11.2: Nutritional breakdown cycle menu A

Menu structure	Menu items from Tuesday, week 1	Portion size	Energy (kcal) / portion	Protein (g)
<b>Breakfast</b>				
	Breakfast for Nutritionally Well (Table 10.3)	Varies	400	10
	Breakfast for Nutritionally Vulnerable (Table 10.3)	Varies	545	18
<b>Lunch</b>				
<b>Starter</b>	Tomato Soup*	150g	105	2.1
	Bread Roll Wholemeal	50g	122	5.2
	Bread Roll White	50g	127	4.7
	Butter Portion	7g	52	0
<b>Mains</b>	Chilli Con Carne*	170g	171	14
	Sausage Casserole*	240g	359	16
	Vegetable Cheese Bake*	250g	354	13
<b>Gravy</b>	Gravy	100ml	30	0.3
<b>Carbohydrate sides</b>	Rice*	120g	175	3.1
	Mashed Potato *	100g	122	1.7
<b>Vegetable sides</b>	Broccoli*	90g	30	3.5
	Sweetcorn*	90g	91	3.1
<b>Cold dessert</b>	Strawberry Cheesecake*	94g	210	3.4
<b>Hot dessert</b>	Stewed Apple and Custard*	300g	263	1.9
<b>Custard</b>	Low Sugar Custard*	150g	164	1.8
<b>Supper</b>				
<b>Mains</b>	Smoked Haddock and Spinach Crumble*	186g	356	17
	Chicken Breast in Tomato and Basil Sauce*	188g	166	25
	Lentil and Vegetable Pie*	250g	353	13
<b>Carbohydrate sides</b>	Mashed Potato *	100g	122	1.7
	Potato Wedges*	100g	120	2.2
<b>Vegetable sides</b>	Peas*	90g	70	5.1
	Swede*	100g	29	0.7
<b>Gravy</b>	Gravy	100ml	30	0.3

<b>Cold dessert</b>	Rice Pudding Pot	150g	128	5
<b>Hot dessert</b>	Chocolate Chip Sponge	110g	281	4.2
<b>Custard</b>	Low Sugar Custard*	150g	164	1.8
<b>Other menu day parts</b>				
<b>2 Snacks</b>	Snacks for nutritionally well	Varies	150	2
	Snacks for nutritionally vulnerable	Varies	300	7
<b>7 Drinks</b>	400 ml semi-skimmed milk for drinks including evening milky drink	400ml	184	14
	400 ml full-fat milk for drinks including evening milky drink	400ml	264	13

Data sources:

All nutrition data taken from [Nutridex.org.uk](http://Nutridex.org.uk) (1), sourced from McCance & Widdowson Composition of Foods Integrated Dataset (2), except for options marked with an \*, these were taken from the apetito Nutridata App (3)

**Table 11.3: Worked example from cycle menu A (minimum capacity analysis)**

	<b>Minimum capacity analysis for menu A</b>	<b>Energy (kcal)</b>	<b>Protein (g)</b>	<b>% of Daily nutrition</b>
<b>Fixed</b>	Nutritionally well breakfast	400	10	
	Snacks	150	2	
	Drinks	184	14	
	<b>Fixed total</b>	<b>734</b>	<b>26</b>	<b>40%</b>
<b>Variable</b>	<b>Lunch</b>			
	Starter: Tomato Soup	105	2.1	
	Main (Chilli Con Carne) + Carbohydrate (Rice) + Vegetable (Broccoli)	376	20.6	
	Dessert: Low Sugar Custard	164	1.8	
	<b>Dinner</b>			
	Main (Chicken Breast in Tomato and Basil Sauce) + Carbohydrate (Potato Wedges) + Vegetable (Swede)	315	27.9	
	Gravy and Condiments	30	0.3	
Dessert: Rice Pudding Pot	128	5		
	<b>Variable total</b>	<b>1118</b>	<b>57.7</b>	<b>60%</b>
	<b>Total minimum choice for the day</b>	<b>1852</b>	<b>84</b>	

**Table 11.4: Worked example from cycle menu A (maximum capacity analysis)**

	Maximum capacity analysis for menu A	Energy (kcal)	Protein (g)	% of Daily nutrition
<b>Fixed</b>	Nutritionally vulnerable breakfast	545	18	
	Snacks	300	7	
	Drinks	264	13	
	<b>Fixed Total</b>	<b>1109</b>	<b>38</b>	<b>34%</b>
<b>Variable</b>	<b>Lunch</b>			
	Starter: Tomato Soup + White Roll + Butter	284	6.8	
	Main (Sausage Casserole) + Carbohydrate (Mashed Potato) + Vegetable (Sweetcorn)	572	20.8	
	Gravy and Condiments	30	0.3	
	Dessert: Stewed Apple and Custard	263	1.9	
	<b>Dinner</b>			
	Main (Smoked Haddock and Spinach Crumble) + Carbohydrate (Mashed Potato) + Vegetable (Peas)	548	23.8	
	Dessert: Chocolate Chip Sponge + Custard	445	6	
	<b>Variable total</b>	<b>2142</b>	<b>59.6</b>	<b>66%</b>
	<b>Total maximum choice for the day</b>	<b>3251</b>	<b>98</b>	

Repeat the minimum capacity analysis and maximum capacity analysis for 3 random days for each week. Then, take the average total energy and protein from the 3 days and compare this to the nutrition targets for both nutritionally well and nutritionally vulnerable patients (targets outlined in Table 10.1).

**Table 11.5: Worked example from cycle menu A (average totals for three days)**

	Energy (kcal)	Protein (g)
<b>Minimum capacity analysis</b>		
Day 1 (from Table 11.2)	1852	84
Day 2	1938	78
Day 3	1810	84
<b>Average</b>	<b>1867</b>	<b>82</b>
<b>Maximum capacity analysis</b>		
Day 1 (from Table 11.3)	3251	98
Day 2	3273	97
Day 3	3171	92
<b>Average</b>	<b>3231</b>	<b>96</b>

**Table 11.6: Worked example from cycle menu A (comparison of nutrition targets to menu capacity analysis)**

	Energy (kcal)	Protein (g)
<b>Nutritionally well</b>		
Nutrition targets	1840	56
Total average minimum choice from Menu A	1867	82
Percentage of target met	101%	146%
<b>Nutritionally vulnerable</b>		
Nutrition targets	2772	79-92
Total average maximum choice from Menu A	3231	96
Percentage of target met	117%	104%



Table 11.7: Nutritional breakdown à la carte menu B

Menu structure	Menu items	Portion size(g)	Energy (kcal)	Protein (g)
Breakfast				
	Breakfast for nutritionally well (Table 10.2)	Varies	400	10
	Breakfast for nutritionally vulnerable (Table 10.2)	Varies	545	18
Lunch and dinner				
<b>Starters</b>	Fruit juice	85ml	38	0.5
	Chunky vegetable soup*	200g	106	2.7
	Tomato, red pepper & lentil soup*	150g	117	4.2
	Wholemeal bread roll	50g	122	5.2
	White bread roll	50g	127	4.7
	Butter Portion	7g	52	0
<b>Sandwiches</b>	Tuna mayonnaise sandwich	157g	365	18
	Cheese sandwich	120g	328	16
	Egg mayonnaise sandwich	150g	400	14
<b>Salads</b>	Four bean salad with a bread roll and spread	212g	377	15
	Boiled egg and coleslaw salad with a bread roll and spread	289g	318	12
	Chicken and cous cous salad with a bread roll and spread	267g	508	27
<b>Hot mains</b>	Vegan curry with basmati rice and onion bhaji*	160g	353	16
	Provençale vegetable bake with green beans, peas and broccoli*	435g	339	12
	Cheese and tomato omelette with fried potatoes and mixed vegetables*	375g	514	23
	Macaroni cheese*	290g	513	22
	Tuscan salmon with boiled potatoes, carrots and green beans*	405g	369	24
	Fish bake with carrots and peas*	405g	402	21

continues on next page

<b>Hot mains</b>	Chicken tikka masala with yellow rice and onion bhajis*	398g	506	26
	Roast chicken in gravy with roast potatoes, carrots, sprouts and a pork chipolata sausage*	398g	328	30
	Pork meatballs and spaghetti*	405g	533	21
	Sausages and mashed potato with peas*	398g	448	17
	Beef casserole with mashed potato and carrots*	390g	389	23
	Shepherd's pie with carrots and peas*	380	346	16
<b>Gravy</b>	Gravy	100ml	30	0.3
<b>Hot desserts</b>	Apple crumble*	120g	246	3
	Sticky toffee pudding*	160g	349	4
	Gluten free lemon Sponge*	120g	370	4
	Rice pudding*	160g	181	5
	Chocolate chip sponge*	135g	267	4
<b>Custard</b>	Low sugar custard*	150g	164	1.8
<b>Cold desserts</b>	Vanilla ice cream	80ml	130	2.7
	Thick and creamy yoghurt	110g	140	5.6
	Fruit salad	150g	56	0
	Raspberry jelly	115g	70	1.4
	Chocolate mousse	90ml	189	4.3
	Cheese and crackers	56g	234	11.6
Other menu day parts				
<b>2 Snacks</b>	Snacks for nutritionally well	Varies	150	2
	Snacks for nutritionally vulnerable	Varies	300	7
<b>7 Drinks</b>	400 ml semi-skimmed milk for drinks including evening milky drink	400ml	184	14
	400 ml full-fat milk for drinks including evening milky drink	400ml	264	13

Data sources:

All nutrition data taken from [Nutridex.org.uk](http://Nutridex.org.uk) (1), sourced from McCance & Widdowson Composition of Foods Integrated Dataset (2), except for options marked with an \*, these were taken from the apetito Nutridata App (3)

Table 11.8: Worked example from a la carte menu B (minimum capacity analysis)

Minimum capacity analysis for menu B		Total energy (Kcal)	Total protein (g)	% of Daily nutrition			
Fixed		Nutritionally well breakfast	400	10			
		Snacks	150	2			
		Drinks	184	14			
		<b>Fixed total</b>	734	26	38%		
Variable	<b>Lunch and dinner</b>						
	<b>Starters</b> (3 lowest options)		Fruit juice	38	0.5		
			Chunky vegetable soup + wholemeal bread roll	228	7.9		
			Tomato, red pepper and lentil soup + wholemeal bread roll	239	9.4		
			Average	168	5.9		
	<b>Mains</b> (3 lowest options)		Boiled egg and coleslaw salad with a bread roll and spread	318	12		
			Roast chicken in gravy with roast potatoes, carrots, sprouts and a pork chipolata sausage	328	30		
			Cheese Sandwich	328	16		
			Average	325	19.3		
	<b>Gravy</b>		Gravy and condiments	30	0.3		
	<b>Desserts</b> (3 lowest options)		Fruit salad	56	0		
			Raspberry jelly	70	1.4		
			Vanilla ice cream	130	2.7		
			Average	85	2.3		
			Average variable total for single meal service	608	27.5		31%
			<b>Variable total</b> (x2 meal services)	1216	55		62%
			<b>Total average minimum choice</b> (Fixed total + variable total)	<b>1950</b>	<b>81</b>		100%

**Table 11.9: Worked example from a la carte menu B (maximum capacity analysis)**

Maximum capacity analysis for menu B		Total energy (Kcal)	Total protein (g)	% of Daily nutrition		
Fixed		Nutritionally vulnerable breakfast	545	18		
		Snacks	300	7		
		Drinks	264	13		
		<b>Fixed total</b>	1109	38	31%	
Variable	<b>Lunch and dinner</b>					
	<b>Starters</b> (3 highest options)	Tomato, red pepper and lentil soup + white bread roll + butter	296	8.9		
		Chunky vegetable soup + white bread roll + butter	285	7.4		
		Fruit juice	38	0.5		
		Average	206	2.9		
	<b>Mains</b> (3 highest options)	Pork meatballs and spaghetti	533	21		
		Cheese and tomato omelette with fried potatoes and mixed vegetables	514	23		
		Macaroni cheese	513	22		
		Average	520	22		
	<b>Gravy</b>	Gravy and condiments	30	0.3		
	<b>Desserts</b> (3 highest options)	Gluten free lemon sponge + custard	534	5.8		
		Sticky toffee pudding + custard	513	5.8		
		Chocolate chip sponge + custard	431	5.8		
		Average	493	5.8		
		Average variable total for single meal service	1249	31		35%
		<b>Variable total</b> (x2 meal services)	2498	62		69%
		<b>Total average maximum choice</b> (Fixed total + variable total)	<b>3607</b>	<b>100</b>		100%

**Table 11.10: Worked example from a la carte menu B (comparison of nutrition targets to menu capacity analysis)**

	Energy (kcal)	Protein (g)
<b>Nutritionally well</b>		
Nutrition targets	1840	56
Total average minimum choice from Menu B	1950	81
Percentage of target met	106%	145%
<b>Nutritionally vulnerable</b>		
Nutrition targets	2772	79-92
Total average maximum choice from Menu B	3607	100
Percentage of target met	130%	107%

## Utilising nutritional analysis software

A way to show that a whole menu has capacity to meet the needs of patients, rather than parts of a menu (as shown in the above methodology), is to utilise nutrition analysis software where uptake figures are entered for each menu item (either known or average).

This method shows the capacity of the menu when related to actual (or estimated) patient uptakes. Uptake figures can be entered in percentages, assuming 100% is the whole patient population (e.g. of the main meal options, 65% of patients chose Shepherd's Pie, 25% had Chicken Pasta and 10% opted for Vegetarian Sausages).

An advantage of this method of analysing capacity is that it includes the actual choices that patients make. The main disadvantage of this methodology is that, if it is based on actual choices, patients may not choose the combination of meals or meal components that reflect how their nutrition targets can be met.

However, users can set uptake figures to show higher energy or healthier choices to show compliance where necessary – like in the methodology outlined in this chapter where specific choices were made to show compliance for those nutritionally well and nutritionally vulnerable.

## References

1. Nutridex. Nutridex. <https://www.nutridex.org.uk> [Accessed 22nd March 2023]
2. Public Health England. Composition of foods integrated dataset (CoFID). <https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid> [Accessed 22nd March 2023]
3. Apetito Ltd. Nutridata [Mobile App] 2023 <https://apps.apple.com/gb/app/apetito-nutridata/id1088291791> [Accessed 22nd March 2023]

## Further reading

Biró G, Hulshof KF, Ovesen L, Amorim Cruz JA. Selection of methodology to assess food intake. *European Journal of Clinical Nutrition*. 2002;56(S2):25-32. doi: 10.1038/sj.ejcn.1601426

Education Scotland. Nutritional Analysis Manual: Nutritional analysis of school lunches in Scotland, a guide to demonstrating compliance with the nutritional requirements for food and drink in schools (Scotland) regulations. <https://education.gov.scot/media/jrynk5w0/nutritional-analysis-manual-040921a.pdf> [Accessed 22nd March 2023]

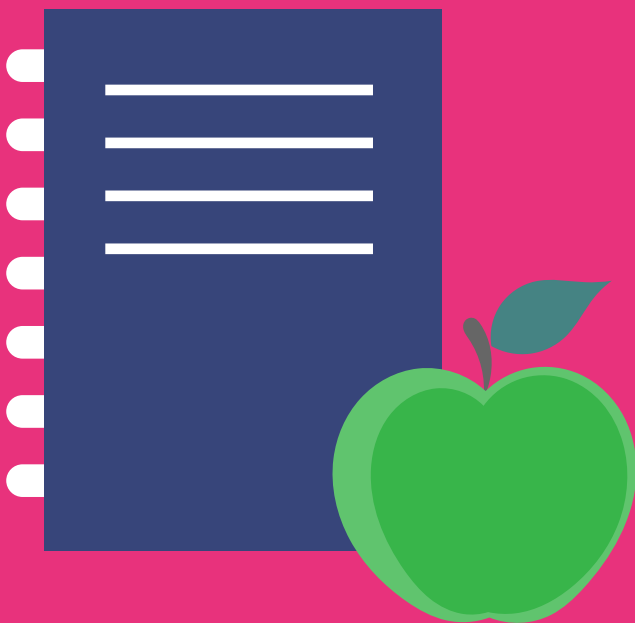
Welsh Government. All Wales Nutrition and Catering Standards for food and fluid provision for hospital inpatients. <https://www.bapen.org.uk/pdfs/e-learning/WalesNutritionCateringStandardsHospitalInpatients.pdf> [Accessed 22nd March 2023]

NHS Scotland. Food in Hospitals: National Catering and Nutrition Specification for Food and Fluid Provision in Hospitals in Scotland. <https://www.nss.nhs.scot/media/1097/1479818118-food-in-hospitals-revised-march-2016.pdf> [Accessed 22nd March 2023]



# 12

Menu Coding,  
Therapeutic Diets  
and Patient Groups





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All special diets should be based upon the normal requirements of the individual... If one food substance must be restricted, the diet must in all other respects be adequate.

Rose Simmonds, Handbook of Diets (1937)

## Food and drink dietary descriptors

Menu planners must devise a standard menu that meets the nutritional needs of most of the population. Any special dietary requirements or nutrition needs of specific patient groups can be met by separate à la carte or cyclical menus.

Standard hospital menus should:

- Provide patients with access to suitable and nutritious food and drink that is adequate to sustain life and good health
- Have the capacity to meet the nutritional needs of both the nutritionally well and nutritionally vulnerable (1).

**Table 12.1: Food and drink dietary descriptors**

Type of Diet	Description
Standard diets	Meet the nutritional needs of most of the population spanning nutritionally vulnerable to nutritionally well
Religious, cultural, personal and lifestyle considerations	Diets that cater to cultural, religious or lifestyle beliefs (including veganism) and reasonably meet the personal preferences of patients
Therapeutic diets	Dietary modifications as a prescribed part of the treatment of a medical condition e.g., renal disease, swallowing difficulties, food allergies
Specific patient groups	The nutritional requirements for specific patient groups that vary from the standards specified e.g. children, mental health service users, older adults

## Menu coding guidance

Menu coding provides information for patients, carers, and staff to enable them to make an informed choice whilst in hospital. The purpose is to highlight dishes that are suitable for patients' specific requirements.

Patients requiring more specialist therapeutic diets should be catered for via a specialist à la carte menu so as not to limit choice for most other patients.

The **four key diets** that should be identified on standard inpatient menus are:

- 
- Healthier Eating
  - Higher Energy
  - Easy to Chew
  - Vegetarian.
- 

Other **optional menu codes** that hospitals can choose to use on their standard menus depending on the dietary needs of their patients include:

- 
- Higher Protein
  - Vegan (see section 2)
  - Gluten Free (see section 3)
  - Renal Suitable (see section 3) .
- 

## 1. Standard Diets

The following diets should be met by the standard menu and highlighted using menu coding. This section covers the following standard menu codes:

- 
- 1.1 Healthier Eating
  - 1.2 Higher Energy
  - 1.3 Higher Protein (Optional)
  - 1.4 Easy to Chew
  - 1.5 Vegetarian
-

## 1.1 Healthier Eating

Diet	Healthier Eating																																								
Recommended Menu Code	H or ♥																																								
Suggested Menu Type	Standard – a la carte or cyclical menu																																								
Suitable Patient Groups	General population Type 1 or type 2 diabetes Dyslipidaemia and cardiovascular risk Weight management Hypertension																																								
Rationale for Diet	To maintain good general nutrition and meet Dietary Reference Values (DRVs) To support public health messages on eating to protect and promote health and wellbeing To support the clinical management of patients with the above medical conditions																																								
Nutritional Criteria for Diet Coding	<p>Lunch and dinner meals The following criteria is recommended as best practice.</p> <p><b>Table 12.2: Healthier Eating per Meal Coding Criteria (maximum figures shown):</b></p> <table border="1"> <thead> <tr> <th></th> <th>Fat (g)</th> <th>Saturated Fat (g)</th> <th>Sugars (g)</th> <th>Salt (g)</th> </tr> </thead> <tbody> <tr> <td>Starters</td> <td>5.3</td> <td>1.7</td> <td>8</td> <td>0.3</td> </tr> <tr> <td>Main course</td> <td>16</td> <td>5</td> <td>15</td> <td>1.5</td> </tr> <tr> <td>Desserts</td> <td>5.3</td> <td>1.7</td> <td>18</td> <td>n/a</td> </tr> </tbody> </table> <p><b>Table 12.3: Healthier Eating per Main Course Coding Criteria (maximum figures shown):</b></p> <table border="1"> <thead> <tr> <th></th> <th>Fat</th> <th>Saturated Fat</th> <th>Sugars</th> <th>Salt</th> </tr> </thead> <tbody> <tr> <td>Entree</td> <td>16</td> <td>5</td> <td>15</td> <td>1.5</td> </tr> <tr> <td>Starch</td> <td>no added</td> <td>n/a</td> <td>n/a</td> <td>no added</td> </tr> <tr> <td>Veg</td> <td>no added</td> <td>n/a</td> <td>n/a</td> <td>no added</td> </tr> </tbody> </table>		Fat (g)	Saturated Fat (g)	Sugars (g)	Salt (g)	Starters	5.3	1.7	8	0.3	Main course	16	5	15	1.5	Desserts	5.3	1.7	18	n/a		Fat	Saturated Fat	Sugars	Salt	Entree	16	5	15	1.5	Starch	no added	n/a	n/a	no added	Veg	no added	n/a	n/a	no added
	Fat (g)	Saturated Fat (g)	Sugars (g)	Salt (g)																																					
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Entree	16	5	15	1.5																																					
Starch	no added	n/a	n/a	no added																																					
Veg	no added	n/a	n/a	no added																																					

	<p><b>Snacks</b>                  Snacks are considered a healthier eating option if they meet the same fat, saturated fat, and salt criteria as a starter option (as outlined in Table 12.2) and either contain no added sugar (i.e., only contain naturally occurring sugars like those found in fruit and dairy products) or contain &lt;5g sugar/100g.</p> <p>Note: A food service dietitian may decide to exercise clinical judgement in deciding not to give certain dishes a healthier eating code. For example, battered fish may meet the above criteria, but in some settings, it may be felt that this provides a confusing message to patients who are being given contradictory dietary advice.</p>
Source	Food Services Specialist Group (FSSG)

The total figures for fat, saturated fat, and salt in Table 12.2 are based on the recommended daily proportions per main meal from the Healthier and Sustainable Catering: Nutrition Principles (2) and the guidelines for front of pack nutrition labels from the Department of Health (3). The nutrient breakdowns of these in Tables 12.2 and 12.3 are based on dietetic judgements. The sugar value is based on an appropriate proportion of the reference intake.

## 1.2 Higher Energy

Diet	Higher Energy
Recommended Menu Code	E or ↑
Recommended Menu Type	Standard – a la carte or cyclical menu
Patient Groups Suitability	Patients with a small or poor appetite Patients with increased energy (and protein) requirements - including critical care, major trauma, burns, cancer, and any patients at risk of malnutrition

Rationale for Diet	<p>To provide a high intake of protein, vitamins, minerals, and other essential nutrients for patients with increased requirements. This could include around one third of hospital admissions (4).</p> <p>To provide a diet which can meet increased nutritional requirements in modest portion sizes that are well presented and appealing for patients with reduced appetites.</p>																
Nutritional Criteria for Menu Coding	<p><b>Lunch and dinner meals</b></p> <p>The following criteria is recommended as best practice. Aim for 800kcal per mealtime (lunch and dinner meals) to ensure the day part energy figures are met for nutritionally vulnerable patients.</p> <p>Higher energy options should also be nutrient dense and be able to at least meet the minimum protein target for nutritionally well patients (15g/meal).</p> <p>Note: These protein targets are not intended to be used in the same way as the protein targets for the optional 'Higher Protein' menu code. The coding criteria outlined in table 12.4 are designed to ensure that any item marked as higher energy is also nutrient dense and will help nutritionally vulnerable patients towards meeting their daily protein requirements.</p> <p><b>Table 12.4: Higher Energy Suggested Coding Criteria for a 3-Course Meal:</b></p> <table border="1"> <thead> <tr> <th>Meal type</th> <th>Energy (kcal/portion)</th> <th>Protein (g/portion)</th> </tr> </thead> <tbody> <tr> <td>Starter</td> <td>≥100</td> <td>≥2</td> </tr> <tr> <td>Main course</td> <td>           Total main course: ≥450            Recommended main course breakdown            Entree: ≥300            Total side dishes*: ≥150         </td> <td>           Total main course: ≥11            Recommended main course breakdown            Entree: ≥9            Total side dishes*: ≥2         </td> </tr> <tr> <td>Dessert (incl. accompaniments)</td> <td>≥250</td> <td>≥2</td> </tr> <tr> <td>Total</td> <td>≥800</td> <td>≥15</td> </tr> </tbody> </table>		Meal type	Energy (kcal/portion)	Protein (g/portion)	Starter	≥100	≥2	Main course	Total main course: ≥450 Recommended main course breakdown Entree: ≥300 Total side dishes*: ≥150	Total main course: ≥11 Recommended main course breakdown Entree: ≥9 Total side dishes*: ≥2	Dessert (incl. accompaniments)	≥250	≥2	Total	≥800	≥15
Meal type	Energy (kcal/portion)	Protein (g/portion)															
Starter	≥100	≥2															
Main course	Total main course: ≥450 Recommended main course breakdown Entree: ≥300 Total side dishes*: ≥150	Total main course: ≥11 Recommended main course breakdown Entree: ≥9 Total side dishes*: ≥2															
Dessert (incl. accompaniments)	≥250	≥2															
Total	≥800	≥15															

Diet	Higher Energy		
Nutritional Criteria for Menu Coding	<b>Or Table 12.5: Higher Energy Suggested Coding Criteria for a 2-Course Meal:</b>		
	Meal type	Energy (kcal/portion)	Protein (g/portion)
	Main course	≥500 Recommended main course breakdown Entree: ≥350 Total side dishes*: ≥150	≥12 Recommended main course breakdown Entree: ≥10 Total side dishes*: ≥2
	Dessert (incl. accompaniments)	≥300	≥3
References	<p><b>*Side dishes</b>                      It is recommended that <b>both</b> a starchy carbohydrate side dish and a vegetable side dish be offered as part of the main course to provide at least 150kcal. Any carbohydrate and vegetable sides are suitable to be served with a higher energy entree to create a higher energy main course, however side dishes should only be coded as higher energy on menus individually if they provide <b>≥150kcal</b> per serve on their own.</p> <p><b>Snacks</b>                      Snacks are considered a higher energy option if they provide <b>≥150kcal</b> and <b>≥2g of protein</b> per serve (5).</p>		
Source	Food Services Specialist Group (FSSG)		



## 1.3 Higher Protein

Diet	Higher Protein (Optional)	
Recommended Menu Code	P or +	
Recommended Menu Type	Standard – a la carte or cyclical menu	
Patient Groups Suitability	<p>Patients with a small or poor appetite.</p> <p>Patients with increased protein requirements, including critical care, major trauma, burns, cancer, malnutrition and older adults.</p> <p>These patients can make up to a third of hospital admissions (4).</p>	
Rationale for diet	<p>To improve general nutrition and meet or exceed DRVs.</p> <p>To provide a diet which can meet increased protein requirements in modest portion sizes and presentations which are appealing and easy to eat.</p>	
Nutritional Criteria for Menu Coding	<p><b>Lunch and dinner meals</b></p> <p>The following criteria is recommended as best practice.</p> <p>Aim for 27g protein per mealtime (lunch and dinner meals) to ensure the day part energy figures are met for nutritionally vulnerable patients</p>	
	<b>Table 12.6: High Protein Suggested Coding Criteria:</b>	
	Meal type	Protein (g/portion)
	Starter	≥3
	Main course	≥19 Recommended main course breakdown Entree: ≥15 Total side dishes*: ≥4
	Dessert (including accompaniments)	≥5
	<p><b>*Sides</b></p> <p>It is recommended that both a starchy carbohydrate side dish and a vegetable side dish be offered as part of the main course to provide at least 4g protein. Any carbohydrate and vegetable sides are suitable to be served with a higher protein main meal to create a higher protein main course, however side dishes should only be coded as higher protein on menus if they provide <b>≥4g protein</b> or more per serve on their own.</p>	

continues on next page

	Snacks Snacks are considered a higher protein option if they provide <b>≥4g protein</b> per serve.
Source	Food Services Specialist Group (FSSG)

## 1.4 Easy to Chew

Diet	Easy to chew
Recommended Menu Code	★ or L7 Easy to Chew or EC
Recommended Menu Type	Standard – a la carte or cyclical menu
Patient Groups Suitability	<p>This menu code can be used to signpost patients to foods that are easy to chew within a regular texture as outlined by the International Dysphagia Diet Standardisation Initiative (IDDSI) (6), i.e., normal, everyday foods of a soft/tender texture.</p> <p><b>People who are unsafe to eat without supervision are not considered suitable for this texture level.</b></p> <p>Primarily, this menu code can be used on the standard menu but also included in cultural and therapeutic diet menus.</p>

continues on next page

Diet	Easy to chew
Patient Groups Suitability	<p>This level is for people with enough chewing ability to break down soft/tender foods into pieces without help, but who have difficulty chewing or coping with firm foods, due to problems such as:</p> <ul style="list-style-type: none"> <li>• No or limited teeth</li> <li>• Poor teeth condition</li> <li>• Badly fitting dentures</li> <li>• Sore mouths</li> <li>• Fatigue (but alert enough to safely swallow foods).</li> </ul> <p>It is only for patients who have no increased risk of choking and who are safe to eat unsupervised. It is possible to have a problem swallowing thin liquids, but still be able to manage a Level 7 Easy to Chew diet.</p> <p>Some patients with no clinical requirement, may simply prefer to choose Easy to Chew items which is why it is recommended to signpost suitable dishes on appropriate menus (as referred to above). Other patients may be prescribed Level 7 Easy to Chew by a Speech and Language Therapist, but it should only be used for people who are safe to eat without supervision and who have not been clinically identified as at risk of choking.</p>
Rationale for diet	<p>It is imperative we have only one system for describing food and drink texture modification. IDDSI have developed a standard terminology with a colour and numerical index to describe texture modification for food and drink (6). Easy to Chew foods are softer food choices that fall within Level 7 regular and are intended for those who do not require particle size restriction to help reduce choking risk.</p> <p>Since the NHS Improvement Patient Safety Alert in 2018 (7), there has been a directive not to use the imprecise term 'soft diet' due to confusion about what this means and the subsequent risk to patient safety.</p> <p>A clinical decision will have been made by Speech and Language Therapist regarding any patients who need a texture modified diet based on their assessment. Healthcare assistants and catering staff must not make decisions about which patients have dysphagia or what level they require. They should also not assess food textures themselves as this should be done by a multidisciplinary team when menu planning.</p>

<p>Guidance for Menu Coding</p>	<p>Everyday foods of soft/tender texture that break apart or squash easily (and do not regain shape) or that can be cut using the side of a fork or spoon.</p> <p>Food piece size is not restricted in a Level 7 Easy to Chew diet; therefore, foods may be a range of sizes. The following list of the description/ characteristics of Level 7 Easy to Chew Foods is specified by IDDSI as a guide: “Do not include: hard, tough, chewy, fibrous, stringy, crunchy, or crumbly foods. This includes any foods with pips, seeds, fibrous parts of fruit or vegetables, husks or bones.” However, please note that whether any item is suitable for a Level 7 Easy to Chew diet is determined by the IDDSI tests on the final product, detailed in the full framework, not by the listed ingredients.</p> <p>Details of the IDDSI Framework, Descriptor and Testing Method documents can be found on the IDDSI website as well as resources to describe all the levels including Level 7 Regular Easy to Chew (8).</p>
<p>Source</p>	<p><a href="http://iddsi.org/">http://iddsi.org/</a> [Last accessed: 10.06.22]</p>

## 1.5 Vegetarian

Diet	Vegetarian
Recommended Menu Code	V
Recommended Menu Type	Standard - a la carte or cyclical menu
Patient Groups Suitability	Lacto-ovo vegetarians - those who eat dairy and eggs
Rationale for Diet	This is the most common type of vegetarian diet.

Guidance for Menu Coding	<p>Excludes all meat, poultry, fish, shellfish, crustaceans and ingredients or products derived from these e.g. gelatine and rennet.</p> <p>Eggs, milk and dairy products are suitable.</p> <p>Care should be taken to identify hidden ingredients that may contain animal by-products such as rennet or gelatine when coding vegetarian menus. This can be done by careful checking of food labels. Items to be aware of include:</p> <ul style="list-style-type: none"> <li>• Desserts (especially cheesecakes, other set desserts and ice cream)</li> <li>• Yoghurts</li> <li>• Cheeses</li> <li>• Soups</li> <li>• Condiments and other table sauces.</li> </ul> <p>Ensure meals contain adequate and varied protein. Good protein sources for vegetarians include (9):</p> <ul style="list-style-type: none"> <li>• Beans, legumes and lentils</li> <li>• Peas</li> <li>• Nuts</li> <li>• Tofu and tempeh</li> <li>• Meat substitutes such as soya protein and mycoprotein</li> <li>• Eggs</li> <li>• Dairy products</li> <li>• Wholemeal cereal products, such as wholemeal pasta, rice, quinoa, bread and breakfast cereals.</li> </ul>
Source	Food Services Specialist Group (FSSG)

## 2. Religious, Cultural, Personal and Lifestyle Considerations

The following special diets are typically met by separate à la carte menus. This section will cover the following religious, cultural, personal and lifestyle considerations:

---

2.1 Halal

---

2.2 Kosher

---

2.3 Asian Vegetarian

---

2.4 Vegan

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### Religious and Cultural

Food is an important element of many religious faiths and cultural practices. The Care Quality Commission (CQC) Regulation 14 requires that patients have access to food and drink that reasonably meets their personal preferences and their religious or cultural background (10).

The role of food and drink is complex and varies among individuals and communities. Seeking the guidance of a local religious or cultural advisor is strongly recommended. Be mindful that food practices and preferences are highly individual choices that can vary between people of the same faith - there is no 'one size fits all' solution.

When serving cultural meals to people of a certain faith, staff must be trained to food service standards akin to those applied to 'allergy meals' to avoid unacceptable cross-contamination. Many people with dietary concerns can be suspicious of the food served in hospital (or of any food they have not prepared themselves). Therefore, robust processes and appropriate labelling of food in hospital is vital to help patients feel confident that whatever they choose does not contain any inappropriate ingredients.

Despite all the measures, some conservative service users may only drink filtered water and food bought from home and refuse any that is served in hospitals, which can compromise their nutrition and hydration status. Familiar food is important especially in times of illness. Therefore, it is important that all religious and cultural service user groups are provided appropriate meal choices to encourage uptake and enhance recovery.

In any care setting, menus must meet the diverse needs of the population and clearly communicate the appropriate options available. Typical examples of cultural diets within the UK include African, Caribbean, Asian and Eastern European.

## 2.1 Halal

Diet	Halal
Recommended Menu Code	Approved Halal signs from a Food Authority usually have the word "Halal" in English and will be printed on the food packaging.
Suggested Menu Type	À la carte or included as standard choice dependent on the demographics of the healthcare setting.
Patient Groups Suitability	<p>People of the Muslim faith.</p> <p>Diets for complex medical conditions will also need to be made available as suitable Halal options - e.g. Halal gluten free, allergen free, low potassium or modified texture diets.</p>
Rationale for Diet and Menu Planning Guidance	<p>The word "Halal" is an Arabic term meaning "permissible" and refers to a food which is safe to consume by Islamic teachings (11). Non-halal (Haram) refers to food that are forbidden to consume as part of the Islamic dietary laws.</p> <p>Meat is the most strictly regulated of food groups and only Halal meat is allowed. e.g. beef, mutton, goat, lamb and farm birds such as chicken.</p> <p>Any permissible animals are slaughtered while pronouncing the name of God "Allah" whilst the carotid artery is severed. Fish is considered Halal and does not need to follow the same process.</p> <p><b>Foods that are forbidden to consume under the Islamic dietary law include:</b></p> <ul style="list-style-type: none"> <li>• Alcohol as a drink or as a food ingredient</li> <li>• Pork and pork products, ingredients and derivatives e.g. ham, bacon, lard, gelatine products and certain food additives</li> <li>• Meat not slaughtered by Halal methods or meat of already dead animals</li> <li>• Birds of prey</li> <li>• Blood and any by-products</li> </ul> <p>Halal menus should contain main meals sourced from an approved Halal food supplier who can provide Halal certified labels. There may be elements of the main meal service that will be suitable for a Halal diet including:</p> <ul style="list-style-type: none"> <li>• Pre-packed dairy products like cheese, milk and yoghurt</li> <li>• Most vegetarian or vegan dishes</li> <li>• Most fish or seafood dishes</li> </ul>

Diet	Halal
	<p>Food preparation and cooking procedures form an important part of Islamic teachings and should follow good HACCP controls. Patients may enquire about the food origin, supplier information and preparation procedures and if not satisfied may refuse to eat.</p> <p>Food handlers and food service providers need to be aware of the dietary practices of this religious group to ensure optimum food intake at all meal and drink occasions (12). They must follow procedures, have documentary evidence of all meals, and ensure ingredient lists are readily available.</p> <p><b>Annual Fasting Month - “Ramadan”</b></p> <p>This falls in the 7th month under the lunar Islamic calendar. As a pillar of Islam, Muslims fast (sawm) during the month of Ramadan and abstain from all food and drink between sunrise and sunset.</p> <p>Food service staff should be aware of this and be able to accommodate and cater for meals during this month as they may be outside the normal meal service times. The 2 meals are taken before sunrise (Sahoor) and after sunset (“Iftar”) and there should be abstinence from all food and drink during this period unless medically indicated.</p> <p>Some patient groups may also choose not to fast because they are of older age, children, acutely ill, pregnant or breastfeeding mothers.</p>
Source	Food Services Specialist Group (FSSG)



## 2.2 Kosher

Diet	Kosher
Suggested Menu Type	À la carte
Patient Groups Suitability	People of the Jewish faith
Rationale for Diet	<p>The term 'Kosher' means a food is fit to consume and follows principles of 'Kashrut' - a set of Jewish dietary laws that determines which foods are suitable to be eaten and how they should be prepared (13).</p> <p>Food that is not Kosher is referred to as 'trief'. The application of the terms 'Kosher' can only be applied to permitted animal products or their dishes that have been correctly handled throughout the food chain.</p>
Menu Planning Guidance	<p>Jewish dietary laws are complex, but one of the main principles is the practice of keeping meat and milk separate. In Kosher kitchens, different sets of cutlery, crockery, cooking utensils and washing up bowls should be made available for meats and for dairy meals. Food that is neither milk- nor meat-based is called "parev" (neutral) and can be eaten with meat or milk-based foods. It is customary to leave an interval between eating meat-based foods and milk-based foods; the time can vary but for most Anglo- Jewish people this is between three and six hours. In addition to this, a Kosher diet only permits certain foods from animals, including:</p> <ul style="list-style-type: none"> <li>• Meat from animals that chew the cud and that have cloven hooves e.g. goat, sheep and cattle. Meat from animals that do not meet these criteria, e.g. pork, is forbidden</li> <li>• Poultry e.g. chicken, turkey, goose and duck</li> <li>• Fish with fins and easily detachable scales, e.g., tuna, cod, salmon and herring. All shellfish e.g. shrimps, crabs, mussels and lobsters are forbidden</li> <li>• Eggs without blood spots</li> </ul> <p>The following products must also be certified to be fit for consumption. Generally, these are available from kosher meal suppliers or kosher food shops.</p>

Diet	Kosher
<p>Menu Planning Guidance</p>	<ul style="list-style-type: none"> <li>• Milk, cheese, yoghurt and other dairy products</li> <li>• Bread, biscuits &amp; cakes</li> <li>• Margarine</li> </ul> <p>Due to the very strict dietary laws, it is not possible to source kosher ingredients and fresh cook in a hospital kitchen. Individual kosher meals must therefore be purchased from a certified kosher meal provider with the required credentials and where food production must be overseen to ensure strict compliance to the Jewish dietary laws.</p> <p><b>Practical tips</b></p> <ul style="list-style-type: none"> <li>• It's preferable that a separate a la carte menu is used with suitable options</li> <li>• Meals should be cooked according to their instructions. Kosher meal manufacturers double wrap meals in packaging so they can be heated in any appliance without absorbing the taste and smells of other foods heated in the same appliance. Patients should be served their meal in its original packaging with the seal unbroken.</li> <li>• Help may be offered with opening the packaging if required, but this should be done in front of the patient so that they can be assured the meal is certified kosher and has not been contaminated.</li> <li>• Sealed, disposable cutlery should be offered.</li> <li>• If help with packaging is offered, this should be done with a disposable knife from a sealed cutlery pack.</li> <li>• For orthodox patients, sundry items such as bread and milk may need to be purchased in addition to kosher certified meals.</li> <li>• Special meals suitable for the 8-day festival of Passover must be provided. There are several major Jewish festivals that occur during the calendar year. Each festival has its own special significance, rituals and customs and even special foods.</li> </ul>

Diet	Kosher
Menu Planning Guidance	<ul style="list-style-type: none"> <li>• There are implications for oral and enteral nutrition support formulas. A list of suitable dietary products and meal replacements is available from London based kosher meal supplier - The Hospital Kosher Meal Service (HKMS). Feeds containing glycerine, lactose and gelatine are all animal based and would not be permitted.</li> </ul> <p>Due to the supervisory requirements throughout the production process to ensure strict kashrus laws are adhered to, Kosher meals will often cost more than a standard hospital meal. Considerations should be made when menu costing and budgeting for patient meals.</p>
Source	With grateful thanks to Sharon Patashnik of Hospital Kosher Meals Service for her contribution to this section. For cultural awareness training please contact <a href="mailto:Sharon.patashnik@btinternet.com">Sharon.patashnik@btinternet.com</a>

## 2.3 Asian Vegetarian

Diet	Asian Vegetarian
Menu Diet Code	Diet symbols may vary according to the NHS Trust
Suggested Menu Type	A la carte or included as standard choice dependent on the demographics of the healthcare setting
Patient Groups Suitability	<p>Vegetarian Hindus, Sikhs and Jains</p> <p>South Asian Community belonging to Indian subcontinent – especially from Punjab and Gujarat</p> <p>East African Communities</p>

<p>Rationale for Diet and Menu Planning Guidance</p>	<p><b>Hinduism</b></p> <p>Hinduism teaches that all form of life is sacred and interdependent on each other and subject to the laws of rebirth. Under this belief a strict vegetarian individual is considered at a higher spiritual level though there is no requirement to follow a vegetarian diet.</p> <p>Hindu vegetarians generally base their diets on plants, including pulses, grains, vegetables, and fruits. Other dietary guidelines include (5):</p> <ul style="list-style-type: none"> <li>• Following a lacto-vegetarian diet - therefore all dairy products are acceptable.</li> <li>• Egg or egg containing foods are not consumed as egg is considered a source of life. Products that may contain egg-based ingredients, like cakes, biscuits, desserts or nutritional supplement drinks should have their ingredients list checked to ensure they are appropriate for Hindu patients.</li> <li>• Beef is strictly prohibited as the cow is considered sacred in Hindu Religion. This also includes any beef products or derivatives i.e. beef stock.</li> <li>• Less orthodox Hindu patients may eat lamb, mutton, chicken or fish.</li> <li>• Vegetarian fat should be used in cooking and preparation.</li> </ul> <p>As with other orthodox service users of other religions, documentary evidence and certification by food suppliers and caterers, supplier ingredient lists and HACCP procedures should be available for the reassurance that no prohibited food has been in contact with vegetarian food during food preparation, cooking and service (12).</p> <p><b>Sikhism</b></p> <p>Most Sikhs are devout vegetarians who do not eat meat, fish and egg products or any derivatives (5). Halal meat, beef and pork are also unacceptable to Sikhs.</p> <p><b>Jainism</b></p> <p>Jainism is a religion that outlines many ethical principles covering every aspect of daily life. There most important principle is 'AHIMISA' which means killing is strictly forbidden. Jains tend to be strictly orthodox vegetarian</p>
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<p>Rationale for Diet and Menu Planning Guidance</p>	<p>One of the beliefs is that certain single celled creatures “NIGODAS” exist. These are not visible to us but may be abundant in certain foods which are forbidden to eat. The general dietary laws for Jainism include (12):</p> <ul style="list-style-type: none"> <li>• No animal foods are eaten, including meat, fish, eggs and usually cheese</li> <li>• No root vegetables - i.e., potatoes, onion, ginger, carrots and beetroot or any derivatives of these</li> <li>• No alcohol, honey or various substances that involve fermentation</li> <li>• Preferably boiled water</li> <li>• Yoghurt may need to be warmed to stop the multiplication of single celled creatures (i.e. yoghurt cultures)</li> <li>• Preferably no food is eaten before sunrise or after sunset.</li> <li>• Food must be fresh – no leftovers are served for the next day.</li> </ul> <p>Most Asian/Hindu vegetarian food that does not contain the above root vegetables are generally acceptable. Fresh food from home is sometimes bought for orthodox patients to ensure there are no forbidden ingredients.</p> <p>Due to the restriction of vegetables, fresh fruits, grains and dairy products, Jain patients need to combine different foods at mealtimes for a nutritionally balanced meal. At times, this is a challenge for food service providers and especially for patients who are on complex diets such as modified texture.</p> <p>For all groups, any missed meal opportunity may contribute to further malnutrition and therefore all measures should be adopted to ensure suitable meal choices are available.</p>
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## 2.4 Vegan

Diet	Vegan
Recommended Menu Code	VG
Recommended Menu Type	<p>Vegan dishes should be offered on the standard menu as they are suitable for the wider population.</p> <p>A supplementary vegan a la carte menu may be required in addition to the standard menu to ensure patients who follow a vegan diet have an adequate choice of meals.</p>
Patient Group Suitability	Vegans, vegetarians, flexitarians, people of Muslim faith, vegetarian Hindus, vegetarian Sikhs
Rationale for Diet	<p>In 2019 there were 600,000 vegans in Great Britain compared to 150,000 in 2014 (14).</p> <p>Veganism is a philosophy and way of living that is protected by the Human Rights Act 1998 and the Equality Act 2010 in England, Wales and Scotland.</p> <p>Ethical, environmental, health, cultural and/or religious factors may influence someone's decision to be vegan.</p> <p>Catering for a vegan diet meets the CQC's standards that state "When a person has specific dietary requirements relating to moral or ethical beliefs...these requirements must be fully considered and met." (10)</p> <p>The Committee on Climate Change have made reductions in meat and dairy a central part of their recommendations to government in meeting our emissions reduction targets (15). Their land use report calls for public sector to lead the way in encouraging more plant-based diets through more plant-based options in catering settings.</p> <p>Vegan options also tend to be high in fibre and low in saturated fat, making them particularly valuable for staff, visitors, and patients who are nutritionally well. Increasing availability of vegan options to normalise these choices can be a positive behaviour change strategy to improve health and sustainability.</p>

<p>Menu Planning Guidance</p>	<p>A vegan diet does not contain any products of animal origin including meat, fish, shellfish, dairy, eggs and honey. Some cereal products may also be fortified with an animal source of vitamin D3, making them unsuitable for vegans.</p> <p>Always ensure vegan margarine and fortified plant-based milk alternative drinks are available.</p> <p>While some vegan sources of protein such as beans and pulses provide less protein per gram compared to meat containing dishes, it is still possible for both nutritionally well and nutritionally vulnerable patients who follow a vegan diet to meet their daily nutrition targets. It is important that a variety of higher protein and energy sources be included in vegan main meals, snacks and drinks, including:</p> <ul style="list-style-type: none"> <li>• Bean, peas, legumes and pulses</li> <li>• Fortified dairy alternative products</li> <li>• Soya mince</li> <li>• Tofu and tempeh</li> <li>• Vegan mycoprotein</li> <li>• Wholemeal cereal products, such as wholemeal pasta, rice, quinoa, bread and breakfast cereals</li> </ul> <p>Higher protein targets are possible in vegan diets, however there are recognised limitations in inpatient settings including product availability, portion size variations and meal operating services. With current limitations, protein and/or energy dense snacks and drinks play an important role in meeting daily nutritional targets for vegan patients.</p> <p>Those within product development and NHS supplier industry settings should consider exploring protein dense, vegan suitable ingredients.</p> <p>Cross-contamination with non-vegan foods during storage, preparation, cooking or serving is avoided as far as is reasonably practicable. Patients should not rely on vegan menu options if they have milk, fish, crustacean, mollusc and/or egg food allergies and should refer to their allergen or 'free-from' menu.</p>
<p><b>Source</b></p>	<p>Andrea Rymer, Registered Dietitian, The Vegan Society</p>

## Practical ideas for catering to vegan diets:

Breakfast	<ul style="list-style-type: none"> <li>• Cooked Breakfasts: Scrambled tofu (P), Soya Sausage (P), baked beans (P), mushrooms, hash browns (E)</li> <li>• Toast with vegan margarine/marmite/jam/preserves/peanut butter</li> <li>• Ready oats (EC) or porridge made with calcium fortified plant milk</li> <li>• Wheat biscuits made with calcium fortified plant milk (EC)</li> <li>• Vegan cereals made with calcium fortified plant milk</li> </ul>
Starter	<ul style="list-style-type: none"> <li>• Vegetarian non-dairy soups, fortified with red lentils (P), silken tofu (P), nutritional yeast (P) vegetable oil/vegan margarine/soya cream (E)</li> </ul>
Main Meals	<ul style="list-style-type: none"> <li>• Chickpea stew/casserole</li> <li>• Soya mince and bean chilli (P) + vegan cheese (E)</li> <li>• Thai curry made with soya or vegan mycoprotein pieces or tofu (P)</li> <li>• Tofu and vegetables in black bean/sweet and sour sauce</li> <li>• Lentil dahl (E) (P) (EC)</li> <li>• White bean stew with dumplings (E)</li> <li>• Vegan meatballs in tomato sauce (P)(EC)</li> <li>• Vegan lasagne made with lentils and soya mince (E) (P)</li> <li>• Vegan shepherds/cottage pie made with lentils and/or soya mince (P)</li> <li>• Vegan macaroni cheese, made with white sauce and silken tofu/soaked cashew cream sauce with vegan cheese</li> </ul>
Sides/ Accompaniments	<ul style="list-style-type: none"> <li>• Mashed potato* (E), roast potatoes (E), chips (E), jacket potato, sauté potatoes, boiled potatoes, yam, sweet potatoes, plantain</li> <li>• Cous-cous (E), quinoa (E), rice (E), pasta (E), rice and peas (E) (P), fried rice (E)</li> <li>• Bread rolls, sliced bread, chapati, croutons</li> <li>• Vegetables boiled/steamed/roasted or fortified with vegan margarine/vegetable oil (E)</li> <li>• Salad items with oil-based dressing</li> </ul>
Desserts	<ul style="list-style-type: none"> <li>• Flapjack*(E), fruit crumbles*(E), rice pudding*(E), vegan sponges (E), powdered custard made with plant milk (E), sorbet, soya ice-cream</li> </ul>



<b>Snacks and drinks</b>	<ul style="list-style-type: none"> <li>• Rich tea, coffee biscuits, ginger biscuits, bourbon creams, oat biscuits</li> <li>• Dried fruit and nuts (E)(P)</li> <li>• Dried chickpeas or edamame beans (P)</li> <li>• Crisps</li> <li>• Fruit pots/fresh fruit</li> <li>• Soya yoghurts, soya dessert pots</li> <li>• Crackers or oat cakes with vegan cheese and pickle or hummus (E)(P)</li> <li>• Toast with range of spreads (see breakfast)</li> <li>• Flapjack* (E)</li> <li>• Nourishing drinks: vegan hot chocolate made with soya milk (E)(P), fruit juice, vegan milkshake powder made with soya milk (E)(P), vegan malted drinks made with soya milk (E)(P)</li> <li>• Drinks: water, tea, coffee with plant milk, herbal teas (without honey)</li> </ul>
<b>Finger foods &amp; sandwiches</b>	<ul style="list-style-type: none"> <li>• Vegan sausage rolls (P), falafel, onion bhajis, spring rolls, vegetable sticks/pitta bread/breadsticks with hummus (P)</li> <li>• Sandwiches/wraps: Falafel and salad, hummus and salad, pureed pea and mint, scrambled tofu and vegan mayo (EC)(P), Humus and roasted veg, vegan cheese and pickle, coronation chickpea (E)(P), lentil pate (EC), meat alternatives (P), onion bhaji and mango chutney (E)</li> </ul>

\*Ensure vegan margarine and plant-based dairy alternatives are used in recipes.

E = Higher Energy, P = Higher Protein, EC = Easy to Chew

All dietary codes are estimated and may have nutritional variations according to Trust site specifications. These foods are common examples that are suitable for vegans, however it is important to check food labels to ensure that there are no animal derived ingredients.


Some trusts may operate a no nut policy, and therefore some examples from the table may not be suitable.

### 3. Therapeutic Diets

The details here are given so that any changes to the general standards can be considered and incorporated at the menu planning stage. Therapeutic diets covered in this section:

3.1	Modified Texture
3.2	Finger Foods
3.3	Renal Suitable
3.4	Food Allergy
3.5	Gluten Free
3.6	Other Therapeutic Diets
3.6.1	Low FODMAP
3.6.2	Catering for Immune-supressed Patients (Previously Neutropenic)
3.6.3	Liver Disease (Decompensated)
3.6.4	Test or Investigation

#### 3.1 Modified Texture

Diet	Modified Texture
Recommended Menu Code	
Suggested Menu Type	À la carte menu
Patient Group Suitability	<ul style="list-style-type: none"> <li>• Patients with difficulty swallowing, also known as dysphagia. This can be associated with several conditions including:                             <ul style="list-style-type: none"> <li>• Stroke</li> <li>• Progressive neurological disorders, including dementia, Parkinson’s disease, motor neurone disease, multiple sclerosis and muscular dystrophy</li> <li>• Cancer, including head and neck, lung and oesophageal</li> <li>• Respiratory conditions, including chronic obstructive pulmonary disease, emphysema and asthma</li> <li>• Learning disability, developmental and acquired disorders</li> <li>• Disorders of the immune system</li> <li>• Traumatic brain injury</li> <li>• Critical care extubation and tracheostomy</li> </ul> </li> </ul>

Rationale for Diet	<p>If dysphagia is not treated appropriately, it can result in choking, chest infections, dehydration, malnutrition and unintentional weight loss leading to negative health outcomes, poor quality of life and in some cases death.</p> <p>Texture modified diets are part of the multidisciplinary treatment of dysphagia. They are based on the IDDSI framework, which consists of a continuum of 8 levels (0 - 7), where drinks are measured from Levels 0 – 4 and foods are measured from Levels 3 – 7 (8). The IDDSI Framework provides a common terminology to describe food textures and drink thickness (6).</p>
Source	<p>We are grateful to the Food Services Specialist Group Committee for updating this section and the BDA Older People’s Specialist Group for their original contribution.</p>

## Menu Planning Guidance

### **What are the IDDSI guidelines?**

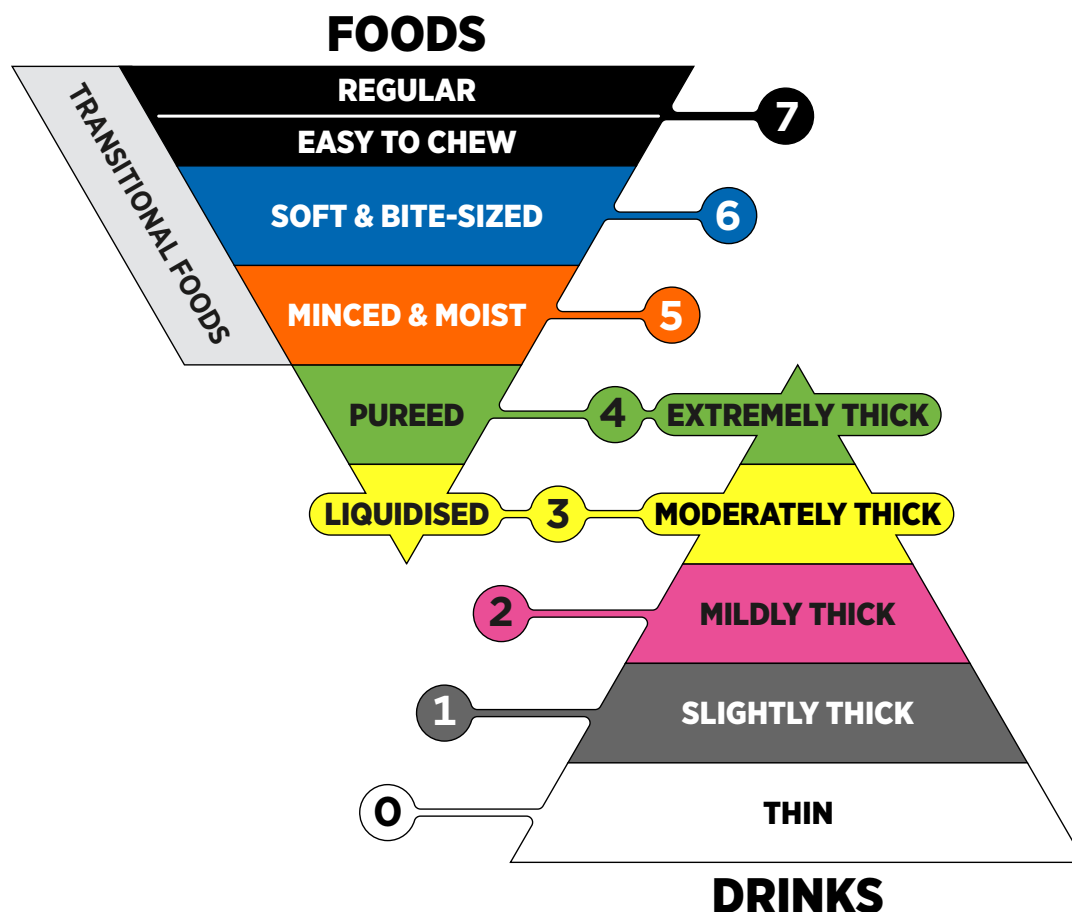
Always refer to the official IDDSI website for the most up to date framework, level descriptions, testing methods and resources:

<https://iddsi.org/>

Hospital caterers need to ensure that patients have access to appropriate meals, snacks and drinks that meet both their nutrition requirements and their required food consistency based on the IDDSI guidelines.

# The IDDSI Framework

Providing a common terminology for describing food textures and drink thicknesses to improve safety for individuals with swallowing difficulties.



© The International Dysphagia Diet Standardisation Initiative 2019 @ <https://iddsi.org/framework/>

## What levels do I need to cater for?

While the IDDSI guidelines recognise that it is safer for patients to progress through all the food texture levels in the framework (as appropriate), it is accepted that not all organisations will be able to offer all levels. Therefore, the levels offered should be agreed locally depending on the needs of the patients and in consultation with the Speech and Language Therapy team.

Best practice is to offer separate à la carte menus that cater for levels 3, 4, 5 and 6. The standard menu should contain regular level 7 foods with an adequate amount of Easy to Chew options as outlined in section 1.4 of this chapter (Easy to Chew).

Special consideration should be given to menus for paediatrics as choking hazards in children differ to adults due to their smaller trachea size. Again, IDDSI have provided detailed guidance on their website.

### **What role does the Dietitian play?**

People who are clinically at risk should be provided with a suitable menu after their assessment by a Speech and Language Therapist. It is the role of the dietitian to ensure that:

- 
- Suitable choices are available, including snacks, to provide daily nutrient requirements
  - Options fit the outlined budget
  - Catering staff are adequately trained to provide suitable choices
  - Processes are implemented to ensure required modified texture diets are communicated to catering staff.
- 

### **Can texture modified diets be made in-house?**

If the texture modified diet is produced in-house, great care needs to be taken to ensure the consistency of the finished product is in line with IDDSI guidelines.

It is difficult to create uniform textures due to the variability of foods (e.g. fibrous vegetables versus cooked pasta), methods of processing and temperatures. Dietitians, speech and language therapists, nurses and caterers should work closely to ensure that people have access to the most appropriate and safe texture modified meals for their swallowing abilities.

If the consistency of the product cannot be guaranteed when produced in-house, it may be necessary to purchase texture modified meals from a specialist provider whose meals comply with the IDDSI framework.

### **What breakfast and snack items are suitable for texture modified diets?**

Any specific items should be tested in line with the IDDSI testing methods (16) and agreed locally with your Speech and Language Therapy team.

Some common food items that can be suitable for different texture modified diets include:

Texture Modified Diet	Breakfast and Snack Options
Level 3 Liquidised	Smooth hot oat cereal or infant rice cereal made to the appropriate texture (requires clinical guidance), runny pureed fruit, moderately thick oral nutrition support drinks
Level 4 Puree	Smooth hot oat cereal or infant rice cereal made to the appropriate texture (requires clinical guidance), puree infant foods, thick yoghurt (no bits), custard, pureed fruit
Level 5 Minced & Moist	Smooth hot oat cereal or infant rice cereal made to the appropriate texture (requires clinical guidance), thick yoghurt (no bits), custard, pureed fruit, rice pudding
Level 6 Soft & Bite Sized	Smooth hot oat cereal or infant rice cereal made to the appropriate texture (requires clinical guidance), wheat biscuit completely softened in milk (where milk is fully absorbed), thick yoghurt (no bits), custard, pureed fruit, rice pudding, banana (cut into 1.5cm pieces)

Please note: Transitional foods that change into a thin texture in the mouth may not be suitable for people on a texture modified diet. These include ice cream, jelly, mousse and cream, whilst on thickened fluids.

### 3.2 Finger Foods

Diet	Finger Foods
Recommended Menu Code	FF
Recommended Menu Type	À la carte menu or appropriate items coded on the standard menu
Patient Groups Suitability	<p>Patients who have difficulty handling or recognising cutlery. This may include young children or patients with the following conditions:</p> <ul style="list-style-type: none"> <li>• Arthritis</li> <li>• Stroke</li> <li>• Progressive neurological disorders, including dementia, Parkinson's disease, motor neurone disease, multiple sclerosis, and muscular dystrophy</li> <li>• Learning disability, developmental and acquired disorders</li> <li>• Traumatic brain injury</li> </ul>

Rationale for Diet	<p>Patients who find it difficult to use cutlery are at risk of not meeting their nutrition requirements, as they may be reliant on assistance with eating.</p> <p>Finger foods are foods that can be easily eaten by hand. Access to finger foods helps to prolong independent eating and allows patients to eat at their own pace, resulting in an improved oral intake for certain patient groups.</p> <p>Due to the benefits, the availability of finger foods for these patient groups in healthcare settings is included as a requirement in the Patient-Led Assessments of the Care Environment (PLACE) (17).</p>
Source	Food Services Specialist Group (FSSG)

## Menu Planning Guidance

### What needs to be considered when planning finger food options?

#### **Adequate options that cover all meal components and snacks**

Ensure there is a good variety of finger food options available for breakfast, main meals and snacks so that patients can meet their daily nutrition requirements. Avoid the main meal menu being only “party food” and include adequate vegetable and starchy side options to accompany the main component of lunch and supper meals.

#### **Suitable textures**

Dry foods can be obvious choices at mealtimes however they can lack the moistness and flavour of cooked products served in gravy or sauce. Alternatively, foods can't be too messy to eat. Consideration of what foods are served with and the overall experience of eating a finger food meal is important.

#### **Temperature**

Cold and room temperature foods are quick and easy to serve and provide flexible snack options. Some main meal components need to be cooked before serving, which will need to work in line with the existing catering operations.

## What are appropriate finger food ideas?

Breakfast	Toast with spread cut into quarters, cereal bars, boiled eggs, mini sausages, omelette strips, cut up fresh fruit, drained tinned fruit, dried fruit, yoghurt in pouches or tubes
Main meal component	Chicken goujons, fish fingers, fish cakes, omelette strips, fish cakes, samosas, mini sausages, small kebabs or koftas, mini pies or sausage rolls, cold meat or smoked fish slices, boiled eggs, mini quiches or quiche fingers, spring rolls, pizza slices, dim sum, sushi, meatballs, falafel, sandwiches cut into quarters
Side component for main meals	Raw or cooked vegetable sticks or spears (e.g. carrot, peppers, broccoli, cauliflower, cucumber), cherry tomatoes, chips or potato wedges, boiled new potatoes, pitta bread wedges, cut up bread or rolls, crisps
Dessert	Mini fruit pies, cut up fresh fruit, drained tinned fruit, mini muffins, cake slices
Snack	Quartered sandwiches, cake slices, cold mini sausages rolls or pork pie, chopped fruit, dried fruit, cheese portions, crackers, biscuits, vegetable sticks with hummus, crisps, malt loaf or fruit bread with cream cheese or spread, scone with jam and spread

More ideas can be found in the Caroline Walker Trust practical guide for supporting older people and older people with dementia (18).

## What are the operational considerations when providing finger foods?

### Hand hygiene

While hand hygiene is always important, processes and facilities that enable catering staff and patients to wash and sanitise their hands is crucial.

### Preparation and presentation

Extra preparation is required when putting together finger food meals, whether it is done by a back of house catering team or at ward level. This can include removing packaging, cutting up foods, draining liquid or sauces and decanting. Catering staff may need further training to ensure they are plating and presenting finger food meals in an appealing and accessible way. For example, rolling up cold meats, slicing fruit into smaller pieces, quartering sandwiches and serving small pots of sauce.



**Food safety**

Care should be taken to serve hot finger foods at a comfortable/suitable temperature. While patients should be given adequate time to eat at their own pace, it's also important to ensure high risk foods (e.g. sandwiches, cold meats) are not left out for too long.

**3.3 Renal Suitable**

Diet	Renal Suitable
Recommended Menu Code	RS
Recommended Menu Type	Specialist à la carte menu or appropriate items coded on the standard menu
Patient Groups Suitability	<ul style="list-style-type: none"> <li>• Patients who are receiving dialysis (Haemodialysis or Peritoneal Dialysis)</li> <li>• Patients with Chronic Kidney Disease (stages 3-5) who are not on dialysis</li> <li>• Patients with high blood potassium levels (hyperkalemia)</li> </ul>
Rationale for Diet	<p>While there is no single 'Renal Diet', different dietary modifications may be necessary at different stages of kidney disease. Input from a specialist renal dietitian who has a good understanding of these patients' dietary needs is essential.</p> <p>Patients with kidney disease may need to follow a diet that restricts any of the following:</p> <ul style="list-style-type: none"> <li>• Protein</li> <li>• Potassium</li> <li>• Phosphorus</li> <li>• Sodium (salt)</li> <li>• Fluid</li> </ul> <p>Dietary restrictions will be dependent on the patient's medical condition. Patients on renal dietary restrictions may need alternatives and additional snacks to meet their requirements. Many patients with kidney disease will be in the nutritionally vulnerable group due to the nature of their illness and possible renal-specific dietary restrictions. As kidney disease progresses, the risk of malnutrition also increases (19).</p> <p>Due to the variation of patients with kidney disease, it is important to consider age, ethnicity, length of stay, type of dialysis and the percentage of nutritionally compromised patients. Menus need to be designed to enable all patients to achieve a nutritionally complete diet within these</p>

Rationale for diet	constraints. Collaboration between caterers and specialist renal dietitians is crucial to meet the needs of this patient group.							
Nutritional Criteria for Diet Coding	<b>Table 12.7: Recommended parameters for renal meals</b>							
		Energy (kcal)		Protein (g)		Sodium (mg)	Potassium (mg)	Potassium (mmol)
		NW	NV	NW	NV			
	Main course	300	500	12	21	644	1092	28
	Dessert	200	300	3	6	161	312	8
Total	500	800	15	27	805	1404	36	
	NW: Nutritionally Well NV: Nutritionally Vulnerable							
Source	We are grateful to the BDA Renal Nutrition Specialist Group for their original contribution and revision of this section.							

## Menu planning guidance

### Protein requirements

The protein requirement for patients is based on their Ideal Body Weight (IBW) and will be a minimum of 0.8-1.0g protein per kg IBW. For patients on renal replacement therapies, requirements are in keeping with protein requirements recommended by SACN for the nutritionally vulnerable group of patients (1.1g/kg IBW/d) as listed in Chapter 9.

Therefore, menus should be based on meeting the nutrient targets provided in Chapter 9. Table 11.7 above provides details of the recommended nutritional parameters to be used when planning renal menus.

Additional protein items may need to be provided for vegetarians and vegans, those on fluid restrictions and renal replacement therapies. It is recognised that a large majority of renal patients will fall in the nutritionally vulnerable category, and menus should reflect this wherever possible.

40% of the protein requirements of the nutritionally vulnerable group are typically met by breakfast, snacks and milk (approximately 1 pint or 550mls in total = 20g protein). However, on a fluid restricted diet only ½ pint milk or 275mls is allowed, which causes a deficit of 10g

protein. This deficit must be replaced and is best achieved by increasing the protein portion of the main meals. If this is not possible, for example where the protein portion of a plated meal cannot be increased, having milky puddings such as yoghurts, higher protein snacks, or the option of a cooked breakfast available, should be considered.

### **Potassium restrictions**

Some patients will require a lower potassium diet. This will usually be the equivalent of 60-80mmols (or 2340-3120mg) per day, based on their IBW. Generally, the allowance is 1mmol potassium per kg IBW, but practice does vary.

Some vegetable and potato products may not be suitable depending on cooking methods. In general, cooking methods should leach rather than conserve potassium when preparing and cooking potatoes, fruits and vegetables. These items should be boiled before being offered to patients on a lower potassium diet. Local renal dietitians will advise on suitable low potassium cooking methods and dishes.

The availability of the estimated potassium content of dishes is necessary to allow accurate coding of the menu. The availability and accuracy of this information does pose challenges as suppliers are not required to declare this by law under the Food Information for Consumers (FIC) regulations. The potassium content information is likely to be calculated from food composition data tables due to expensive analysis methods. Nutritional analysis software can also be used – see Chapter 8 for some examples.

Salt substitutes containing potassium chloride should not be used.

Where poor appetite and potassium restrictions combine to make meeting requirements difficult, an à la carte menu allowing individualised choices may prove very helpful.

As a guide, to ensure suitable lower potassium main course options are available, meals should be planned with the aim to provide a maximum of 28mmol (1092mg) per main course and 8mmol (312mg) per dessert. The following table shows an example of how this can be broken down:

**Table 12.8: Potassium Main Course Breakdown**

Meal component	Example Potassium Content (mmol)
Entree	<10
Vegetable side	<8
Carbohydrate side	<10
Dessert	<8
Total meal	<36

Mains with higher potassium levels can be served but ideally with lower potassium accompaniments, such as rice, pasta, or bread, as opposed to potatoes. The potassium content given above for vegetables is based on two 80g servings, i.e. 4mmol (156mg) from each serving. Regardless of the type or amount of carbohydrate or vegetables served, the priority should always be on ensuring the total meal does not exceed the maximum potassium recommendation.

### Phosphate restrictions

Some patients will require a lower phosphorus diet to help control serum phosphate levels. Recommendations suggest that a low phosphorus diet should contain no more than 1400mg (45mmol) of phosphorus per day. However, this will often pose challenges for patients requiring a higher protein diet. Alternative high protein choices need to be provided to replace the following higher phosphorus foods when they are on the menu:

- Hard and processed soft cheese
- Kidney, liver
- Fish with edible bones
- Processed meats – e.g. ham, corned beef
- Chocolate
- Malted milk drinks
- Nuts
- Foods containing baking powder (e.g. scones).

Please note our reference to dietary phosphorus and serum phosphate. To avoid patient confusion around phosphorus and phosphate, dietary phosphorus is often referred to as phosphate in patient leaflets.

**Salt intake**

The aim for salt intake in renal disease is less than 6g day, which is in line with general guidance for salt intakes. If a higher salt option is on the menu, e.g. traditional curries, meat pies, sausage, ham or other processed items, it should be balanced by also offering menu choices lower in salt.

**Renal day patients**

Suitable dietary choices should be available for renal day patients where necessary (such as those on haemodialysis units), or in-patients requiring food outside standard mealtimes. Suggested suitable items would be:

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- Sandwich with suitable filling (e.g., egg, tuna, chicken)

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  - Fruit: apple, satsuma, drained tinned fruit

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  - Plain cake or biscuit

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  - Yoghurt or fromage frais.

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### 3.4 Food Allergy (hypersensitivity)

Diet	Allergy
Suggested Menu Type	À la carte
Patient Groups Suitability	<p>Patients with allergies (and/or intolerances) to any one or combination of the following:</p> <ul style="list-style-type: none"> <li>• Cereals containing gluten – e.g. wheat, oats, rye, barley, spelt, Khorasan wheat (Kamut), triticale</li> <li>• Crustaceans – e.g. prawns, crabs, lobster, langoustine (scampi)</li> <li>• Molluscs – e.g. clams, squid, oysters, scallops</li> <li>• Eggs</li> <li>• Fish</li> <li>• Peanuts</li> <li>• Soya</li> <li>• Milk – including milk derivatives, e.g. lactose, whey, casein</li> <li>• Nuts – including almonds, hazelnuts, walnuts, cashews, pecan, brazil nuts, pistachio, macadamia</li> <li>• Celery</li> <li>• Mustard</li> <li>• Sesame seeds</li> <li>• Sulphur dioxide – where added at &gt;10mg/kg or 10ml/L in the finished product</li> <li>• Lupin</li> </ul> <p>Please note, the allergens listed above are those governed by UK foods laws (20). People may suffer from a food allergy not included in this list.</p>

Rationale for Diet	<p><b>UK food law</b></p> <p>Food allergies can be life threatening for individuals and must be taken seriously by food services. UK legislation requires all food services, including hospitals, to provide information about the presence of any of the 14 specified allergens in any of the food they serve to patients, staff or visitors.</p> <p>Caterers must also be able to evidence the exact ingredients used, including the brand names and pack sizes where applicable (this also includes any alternative ingredients used) (21). They must also take note of any precautionary 'may contain' labels on packaging.</p> <p>From 1 October 2021, the requirements for prepacked for direct sale (PPDS) food labelling changed in Wales, England, and Northern Ireland. Also known as Natasha's Law, this labelling regulation helps to protect consumers by providing allergen information on the packaging (22). Any food business that produces PPDS food is required to label it with the name of the food and a full ingredients list. Allergenic ingredients must be highlighted within the ingredients list.</p> <p><b>Allergen management</b></p> <p>It is vital that information related to people's food allergies is collected as early as possible and that it is communicated quickly and effectively to hospital caterers, ward staff and hospital dietitians. It is recommended that all healthcare facilities have a food allergy policy or a wider food and nutrition policy that includes allergen management.</p> <p><b>Allergen free menu</b></p> <p>To help cater to people with food allergies, it is recommended that hospitals have an 'Allergen Free' menu that is free from all 14 of the allergens governed by UK food law. This will help to minimise the risk of cross contamination and prevent patients from choosing an inappropriate option. Patients should also be free to choose from the standard menu and need to be provided with accurate allergen information to make a safe choice.</p>
Source	<p>We are grateful to The Anaphylaxis Campaign and allergy UK for their original contribution to this section. Thank you to the BDA's Food Allergy Specialist Group for their feedback and comments to this edition.</p>

## Menu planning guidance

### **What allergen information should be included on menus?**

Information on menus should be kept to a minimum to reduce clutter and confusion. For this reason, allergen information should not be printed on standard menus for patients, instead include a statement on menus such as:

**“Further information regarding food allergens is available upon request; please ask your Ward Host/Nutrition Assistant or Nurse”.**

Allergen information for each menu item can be held in a separate matrix (hard copy and/or electronic) at ward level, so catering staff and clinical staff can determine meal suitability for patients with a food allergy or multiple allergies.

### **What is the responsibility of suppliers when it comes to allergen management?**

It is vital that suppliers provide product specifications including the full ingredient lists that highlight any of the 14 allergens governed by UK food law. Failing that, the allergen information contained on the food labels can be used. Food labels should be checked on receipt into a facility to check that their allergens have not been changed.

All foodstuffs, from complete meals to individual recipe ingredients e.g. tomato sauce, breakfast cereals, that are brought into a hospital should have their ingredients checked and any of the 14 allergens identified, using either their specifications or food labels.

### **What is the responsibility of caterers when it comes to allergen management?**

Food service staff should be proficient in allergen management, including the provision of allergen information, the risks of cross-contamination and cleaning methods. They should also understand the importance of effective food service systems to ensure the correct meal reaches the right patient. Information including online training can be obtained from the Food Standards Agency to support food service staff (23).

Some general tips for caterers include:



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- Keep and refer to as necessary accurate and up-to-date ingredient lists from suppliers

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  - Have allergen management procedures in place in all steps of the food service pathway from receipt of ingredients to serving the patient with their meals

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  - If major allergens are included in a dish, the name of the dish should reflect this - refer to Food Standards Agency for guidance

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  - Major allergens should not be used where you would not expect to find them, for example, cashew nuts should not be used in pesto sauce or peanut flour in a curry.
- 

### **How suitable is a 'may contain' statement for hospital catering?**

Precautionary warnings for allergen labelling that food 'may contain' or is 'not suitable for' should only be used after a thorough risk assessment and the risk of cross-contamination cannot be eliminated or managed safely and poses a real risk to the patient. They should not be used as a substitute for good allergen management practices. If a product has a 'may contain' statement this information should be passed onto the patient. Further information regarding application of precautionary allergen labelling can be found on the Food Standards Agency website (24).

## 3.5 Gluten Free

Diet	Gluten Free
Recommended Menu Code	GF
Suggested Menu Type	Standard or à la carte
Patient Groups Suitability	<p>A gluten free diet is required for patients with:</p> <ul style="list-style-type: none"> <li>• An allergy to gluten containing cereals</li> <li>• Coeliac disease</li> <li>• Dermatitis herpetiformis</li> </ul>
Rationale for Diet	<p>A gluten free diet is the only medical treatment for coeliac disease and the skin condition dermatitis herpetiformis. In addition, some patients may request a gluten free meal to alleviate other health issues, for example gluten sensitivity, irritable bowel syndrome or they may have coeliac disease but not have a medical diagnosis.</p> <p>European regulation (Regulation (EU) No 828/2014) covers the labelling of gluten free foods and has been retained in UK law (25). It is applicable to foods served in catering facilities and all pre-packaged foods in the UK. By law, the term 'gluten free' may be applied only to food which has 20 parts per million (ppm) or 20 mg/kg or less of gluten.</p> <p>Making a gluten free claim for foods requires strict controls of ingredients, how they are handled and how they are prepared. A gluten free claim is a guarantee that the food is suitable for people requiring a strict gluten free diet. If there is any risk of cross contamination of a food or drink item at any stage, then the gluten free code should not be used for this item.</p> <p>For people with coeliac disease or dermatitis herpetiformis in a healthcare setting where their personal choice is restricted, a menu with gluten free choices that meets their nutritional needs must be made available.</p>
Source	We are grateful to Norma McGough and Coeliac UK for their contribution to this section.

## Menu Planning Guidance

### **What is the safest way to provide gluten free meals to patients?**

Depending on your food service system there are different options for catering to a gluten free diet, including:

#### **Pre-packaged gluten free meal solutions**

This may involve buying in a complete meal solution from a specialist dietary meals supplier or meals from regular suppliers that are labelled gluten free. Meals labelled gluten free must contain no more than 20ppm gluten. This also applies to all items on a menu, for example cereals, soups, yoghurts, desserts and biscuits.

#### **Fresh cook meals**

Depending on your production environment, you may be able to prepare gluten free meals in house to provide more choice for patients. Production of meals in a diet preparation area requires training of staff and separation of processes, equipment and ingredients. Meals can be produced with acceptable gluten levels of 20ppm or less when conditions and procedures are put in place to control cross contamination. Coeliac UK has produced guidance on preparing gluten free meals for caterers in collaboration with the Food Standards Agency (26).

Hospitals need to ensure that ingredients used to prepare gluten free meals do not contain gluten. Ingredient suppliers must provide you with information on the 14 allergens governed by UK food law in ingredients lists or product specifications for all the products you purchase from them. This includes cereals containing gluten. They should also follow Food Standards Agency guidance on communicating risk of contamination with allergens during manufacturing.

### **Can items on menus be identified as having no gluten containing ingredients?**

Identifying individual meals as having 'No Gluten Containing Ingredients' (NGCI) on menus or using the 'NGCI' coding is not permitted. However, it is acceptable to produce a separate menu listing dishes that do not contain any gluten containing ingredients and where controls are in place to avoid cross contamination with gluten containing ingredients.

## **What policies are required to support the safe provision of a gluten free diet?**

Healthcare establishments must:

- 
- Have a written policy for providing gluten free meals. This should cover the meals and snacks available to patients requiring a GF diet, the menus available for patients to choose from and the controls in place to ensure GF meals and snacks are sourced, prepared and served to eliminate cross contamination
  - Ensure a policy is in place to cover training for all staff involved in providing meals i.e. dietitians, front line food service assistants, catering and nursing staff
  - Provide written materials for patients that help support informed choices and reflect the training of catering staff and the gluten free options available.
- 

## **What needs to be considered operationally to prevent cross contamination of gluten?**

Care should be taken to ensure cross contamination does not occur at any stage of food preparation, for example:

- 
- Gluten free bread must be toasted using a clean grill or toaster bags due to the risk of cross contamination
  - If bulk multi-portion dishes are used, any meals from a supplier labelled as gluten free must be served with care to avoid cross contamination with other gluten containing foods
  - Ensure separate utensils, probes and containers are used for gluten free foods where possible or that items are cleaned thoroughly between use
  - Front line food service assistants, catering and nursing staff require adequate training to ensure they are competent in providing patients with a gluten free diet.
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## 3.6 Other Therapeutic Diets

The following diets may also require consideration depending on your type of healthcare facility and patient groups. It is best to consult with your Dietetics department to determine which type of catering solution would be best suited.

These solutions may include:

- A separate a la carte menu
- Coding on a standard menu
- Supplementary options that can be used together with a standard menu, e.g., an extra snack menu
- Alternative portion sizes of standard menu options
- Guidance to help create bespoke menus for individual patients, e.g., providing ingredient and nutrition information for each menu item.

### 3.6.1 Low FODMAP

Diet	Low FODMAP
Patient Groups Suitability	Patients with irritable bowel syndrome
Rationale for Diet	<p>A low FODMAP (Fermentable, Oligosaccharides, Disaccharides, Monosaccharides And Polyols) diet is a diet restricted in short-chain fermentable carbohydrates and is often used for people with irritable bowel syndrome when general lifestyle and dietary advice have been trialled and symptoms still persist (27). A low FODMAP diet can be an effective treatment for gut symptoms such as bloating, abdominal pain and altered bowel habit.</p> <p>It is important to try and establish which stage of the diet patients are on, if they are at a reintroduction stage, they may be able to consume foods from one or more of the groups below without problems and the diet will be less restrictive.</p>

<p>Menu Planning Guidance</p>	<p>Each patient following this diet should be treated individually, so close liaison with a dietitian trained in low FODMAP diets and the catering department will be required.</p> <p>Foods to avoid when following a full low FODMAP diet include:</p> <p><b>Oligosaccharides</b> (fructans, galacto-oligosaccharides) Wheat, barley, rye, onion, leek, white part of spring onion, garlic, shallots, artichokes, beetroot, fennel, peas, chicory, pistachio, cashews, legumes, lentils and chickpeas</p> <p><b>Disaccharides</b> (lactose) Milk, custard, ice cream and yoghurt</p> <p><b>Monosaccharides</b> (fructose) Apples, pears, mangoes, cherries, watermelon, asparagus, sugar snap peas, honey and high fructose corn syrup</p> <p><b>Polyols</b> (sorbitol, mannitol, maltitol, xylitol) Apples, pears, apricots, cherries, nectarines, peaches, plums, watermelon, mushrooms, cauliflower and sugar free chewing gum/ mints/sweets</p>
<p>Source</p>	<p>We are grateful to Adele Thompson, Gastroenterology Dietitian for her contribution to this section.</p>

### 3.6.2 Catering for immunosuppressed patients (previously neutropenic diet)

Diet	Safer Eating with Neutropenia
Patient Groups Suitability	<p>Some patients who have suppressed immune systems are recommended to follow food safety advice. These patients may include:</p> <ul style="list-style-type: none"> <li>• Some cancer patients</li> <li>• Haematology patients</li> <li>• Bone marrow transplant (haematopoietic stem cell transplantation) patients. This is used to treat leukaemia, lymphomas, some solid tumours, autoimmune or hereditary immune disorders and other haematological conditions</li> <li>• Organ transplant patients</li> <li>• Those with Acquired Immunodeficiency Syndrome (AIDS)</li> </ul>
Rationale for Diet	<p>Following food safety advice is the new recommendation for patients that have been previously advised to follow a neutropenic, clean or low microbial diet.</p> <p>It is used for patients who are immunosuppressed and therefore at an increased risk of infection. Dietary restrictions are recommended to reduce the risk of infection, but nutrition must not be compromised.</p> <p>These patient groups are frequently in-patients for prolonged periods and may have regular readmissions for treatment, so menu fatigue can occur. Where possible these patients should be offered the widest choice with a variety of menus and food service styles to combat menu fatigue and altered taste perception.</p> <p><b>General Food Safety Advice</b></p> <p>Care needs to be taken to protect all patients from pathogenic bacteria and the risk of food poisoning. All healthcare caterers should have up to date local Hazard Analysis Critical Control Point (HACCP) protocols and follow general food safety advice, including (28):</p>

<p>Menu Planning Guidance</p>	<ul style="list-style-type: none"> <li>• Adequate food safety training for food service and nursing staff (minimum Level 2 Food Safety is recommended for anyone handling food)</li> <li>• Adequate hand washing training and facilities for all healthcare staff, including food service staff</li> <li>• Effective cleaning of trays, cutlery and crockery – preferably using a dishwasher with a rinse cycle hot enough to kill bacteria</li> <li>• Meal time policies that support serving any immunosuppressed patients first</li> <li>• Procedures to ensure hot food is thoroughly cooked, reaching a temperature of at least 75°C</li> <li>• Regular stock checks to ensure all foods and drinks are served within their use by/best before dates and any out-of-date items or items with damaged packaging are disposed of</li> <li>• Frequent fridge temperature checks and avoidance of overfilling fridges</li> </ul> <p>Some hospitals may allow microwave-cooked meals for patients if the HACCP protocols (see Chapter 5 for further HACCP information) are followed, core temperature has been carefully checked and noted, and they are cooked strictly to manufacturer’s guidelines.</p> <p>Check with your hospital for their policy regarding foods brought in by visitors.</p> <p><b>Food safety advice for neutropenic patients</b> Please see Table 12.9 below for more specific food safety advice for neutropenic patients, i.e. patients with a neutrophil count of &lt;1.0 (29).</p>
<p>Source</p>	<p>We are grateful to the Haematology subgroup of the BDA Oncology Specialist Group for their original contribution to this section and Natasha Jones, Chairperson of the Haematology Sub Group for her contribution to the revision of this section.</p>



**Table 12.9 Food safety advice for neutropenic patients (<neutrophils of <1.0)**

Foods You Can Eat	Foods To Avoid
<p><b>Cheese, milk and other dairy products</b></p> <ul style="list-style-type: none"> <li>• All hard pasteurised cheeses such as cheddar, Stilton if pasteurised and parmesan</li> <li>• Soft pasteurised cheeses such as cottage cheese, mozzarella, feta, cream cheese, paneer, labneh, ricotta, halloumi, goats' cheese without a white coating on the outside (rind) and processed cheese spreads</li> <li>• Thoroughly cooked soft unpasteurised cheeses, until steaming hot</li> <li>• Thoroughly cooked soft cheeses with a white coating on the outside, until steaming hot</li> <li>• Thoroughly cooked soft blue cheeses, until steaming hot</li> <li>• Pasteurised milk, yoghurt, cream and ice cream. Kefir</li> </ul>	<p><b>Cheese, milk and other dairy products</b></p> <ul style="list-style-type: none"> <li>• Mould-ripened soft cheeses with a white coating on the outside, such as brie, camembert and chèvre (unless cooked until steaming hot)</li> <li>• Soft blue cheeses such as danish blue, gorgonzola and roquefort (unless cooked until steaming hot)</li> <li>• Any unpasteurised cows' milk, goats' milk or sheep's milk</li> <li>• Any foods made from unpasteurised milk, such as soft goats' cheese</li> <li>• Probiotic drinks &amp; yogurts or supplements e.g Yakult, Actimel, Proviva - check label on yogurts</li> </ul>
<p><b>Eggs</b></p> <ul style="list-style-type: none"> <li>• Raw, partially cooked and fully cooked British Lion eggs (eggs with a lion stamp on them)</li> <li>• Supermarket brands: mousse and mayonnaise, which will use British Lion eggs</li> <li>• Eggs that are not British Lion, as long as the whites and yolks are cooked thoroughly until solid</li> </ul>	<p><b>Eggs</b></p> <ul style="list-style-type: none"> <li>• Raw or partially cooked eggs that are not British Lion</li> <li>• Duck, goose or quail eggs, unless cooked thoroughly until the whites and yolks are solid</li> </ul>
<p><b>Vegetables / Fruit</b></p> <ul style="list-style-type: none"> <li>• Ensure all fruit/ vegetables &amp; salads are washed ( including prepacked ready washed salad)</li> <li>• Sprouted seeds - cook all sprouted seeds until they're steaming hot throughout before eating.</li> <li>• Sushi – vegetable and rice options</li> </ul>	<p><b>Vegetables / Fruit</b></p> <ul style="list-style-type: none"> <li>• Damaged b ruined fruit and veg</li> <li>• Sprouted seeds – uncooked</li> </ul>

<p><b>Fish</b></p> <ul style="list-style-type: none"> <li>• Cooked fish and seafood</li> <li>• Cooked smoked fish, such as smoked salmon and trout</li> <li>• Cooked shellfish, such as mussels, lobster, crab, prawns, scallops and clams from reputable seller and well cooked</li> </ul>	<p><b>Fish</b></p> <ul style="list-style-type: none"> <li>• Raw fish or seafood</li> <li>• Uncooked smoked fish</li> <li>• Uncooked shellfish or shellfish from an unknown source</li> </ul>
<p><b>Meat and poultry</b></p> <ul style="list-style-type: none"> <li>• Meats such as chicken, pork and beef, as long as they're well-cooked with no trace of pink or blood; be especially careful with poultry, pork, sausages and burgers</li> <li>• Cold, pre-packed meats such as ham and corned beef</li> <li>• Salami and pepperoni cooked</li> <li>• Pasteurised pate in a jar</li> </ul>	<p><b>Meat and poultry</b></p> <ul style="list-style-type: none"> <li>• Raw or undercooked meat</li> <li>• All types of pâté, including vegetarian pâté</li> <li>• Salami and pepperoni - unless cooked</li> </ul>
<p><b>Other</b></p> <ul style="list-style-type: none"> <li>• Pepper / herbs and spices – pre packed fresh sealed jars from supermarket</li> <li>• Honey - fresh jar, check use by Super market bought sealed packages e.g cereal, nuts, dried fruits, biscuits etc</li> </ul>	<p><b>Other</b></p> <ul style="list-style-type: none"> <li>• Pepper / herb and spices – loose bought products from deli / farm shops</li> <li>• Avoid loose bought 'refill stations' for e.g. cereals, nuts &amp; dried fruits</li> </ul>

## 3.6.3 Liver Disease (decompensated)

Diet	Liver
Patient Groups Suitability	Patients with decompensated liver disease
Rationale for Diet	Malnutrition is extremely common in people with liver disease occurring in up to 60% of those with advanced disease (30). The need to meet higher energy and protein requirements is paramount and fat or protein restriction is no longer advocated in most situations. Where these are required, a dietitian can use healthier eating choices from the menu or advise the patient on the number of protein portions per day from the standard menu.
Menu Planning Guidance	<p>All menus should provide the opportunity for patients with liver disease to meet their energy and protein requirements (1.2 – 1.5g protein/kg body weight/day), including:</p> <ul style="list-style-type: none"> <li>• Adequate high energy and high protein meal options that are clearly coded</li> <li>• Snacks between meals</li> <li>• An additional snack/drink containing 50g carbohydrate in the evening - fasting is nutritionally detrimental and these snacks prevent long periods of fasting and improve utilisation of nitrogen (31)</li> </ul> <p>Please note: sodium restriction may be required for some patients. This should not be restricted lower than 80mmol sodium per day (1840mg sodium or 4.6g salt) and higher energy and protein requirements should still be met. A renal diet may also be required for patients with liver and renal disease.</p>
Source	We are grateful to Julie Leaper and Susie Hamlin (Clinical Liver Leads for the BDA Gastroenterology Specialist Group) for their original contribution to this section and Dianne Wild for her contribution to the revision of this section.

### 3.6.4 Test or investigation

Diet	Test or Investigation
Patient Groups Suitability	<p>Patients who need a medical assessment or treatment that requires dietary manipulation, including:</p> <ul style="list-style-type: none"> <li>• A swallow assessment</li> <li>• Pre-surgery preparation or post-surgery recovery</li> <li>• Part of treatment for some gastroenterology conditions, including – Inflammatory Bowel Disease, Intestinal Failure, Strictures, Adhesions, IBS, Diverticulitis</li> <li>• Reduce high stoma output</li> <li>• Control gastro symptoms following certain procedures including radiotherapy of the abdominal or pelvic area, stoma formation and gastrectomy</li> </ul>
Rationale for Diet	<p>Some diets are temporary and are not necessarily nutritionally adequate. They are usually required for a test or investigation and are not suitable long term.</p> <p>A diet low in fibre reduces the residue left after digestion and slows the rate at which food moves through the bowel which can help to reduce common GI symptoms such as diarrhoea, bloating, wind and urgency. The term low residue is often used interchangeably with low fibre.</p> <p>Some pre-surgery preparation or post-surgery recovery may require patients to follow a 'fluid only', 'clear fluid' or 'free fluid' diet (32).</p>
Menu Planning Guidance	<p>General information about what low fibre diets and fluid only diets contain can vary. Therefore, local guidance should be used for these diets.</p> <p>The effect of fibre is individual for each patient with varying tolerance levels. There are also no technical 'cut-offs' for low fibre diets, however foods that are higher in fibre should be reduced or avoided if a patient requires a low fibre diet. These include:</p> <ul style="list-style-type: none"> <li>• Wholegrain or wholemeal breads, crackers, pasta, rice and cereals</li> <li>• Biscuits, cakes or pastries made with wholemeal flour and/or dried fruit or nuts</li> <li>• Pulses, legumes, lentils</li> <li>• Nuts, coconut, dried fruit</li> <li>• Potato skin or cold potato salad</li> </ul>

Diet	Test or Investigation
Menu Planning Guidance	<ul style="list-style-type: none"> <li>• Meat skin, gristle and bone</li> <li>• Quorn products</li> <li>• Raw vegetables/salad, cooked vegetables with skins, tough stalks or seeds, vegetable soups or juices with pulp</li> </ul>
Source	Food Services Specialist Group (FSSG)

## 4. Specific patient groups

There are several special patient groups within the general hospital population whose nutritional requirements may vary from the standards already specified. These may include but are not limited to children, patients in critical care and mental health patients and those most vulnerable or those highlighted through nutritional screening. Menus need to be planned or additional options offered to take varied requirements into consideration. Operational processes and cost need to be considered in these cases.

The following section covers the following specific patient groups:

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4.1 Children

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4.2 Critical illness

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4.3 Obesity

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4.4 Older adults

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4.5 Cancer

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4.6 Mental health

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### 4.1 Children

The principle of nutritionally well and nutritionally vulnerable inpatients applies to children in hospital as much as it does to adults. Therefore, menus should provide a range of options to cater for both types of patients.

#### Objectives

To ensure that all children and young people admitted to hospital:

- 
- have options available to allow them to eat a well-balanced diet of healthy food, as outlined by national guidelines
  - have available sufficient food of good quality to meet their nutritional requirements
- 

## Recommendations

Good eating habits can be encouraged by the hospital menu and by the availability of healthy snacks, including fresh fruit, and drinks, including water. The Eatwell Guide (see Chapter 8) shows the five food groups and the balance to aim for throughout the day.

Although this does not apply to children under the age of two years as they have different nutritional needs, children between the ages of two and five years should gradually move towards eating the same foods as the rest of the family, in proportions as shown in The Eatwell Guide.

Healthy eating recommendations for those aged over five years are:

- 
- Total fat should not provide more than 35% of dietary energy
  - Saturated fat should not provide more than 11% of dietary energy
  - Free sugars should not provide more than 5% of dietary energy.
- 

For hospitalised children and young people, the relative proportions of food groups in The Eatwell Guide may not be appropriate. They may have a greater reliance on energy dense foods and snacks, i.e., foods higher in fat and/or sugar, to meet their nutrient requirements.

The focus of nutritional provision from hospital food should be on achievement of an adequate energy intake. An average day's intake from breakfast, two main meals, two to three snacks and milk (or a suitable alternative), should meet the Estimated Average Requirement (EAR).

## Nutrient needs

The UK Department of Health's Dietary Reference Values (DRVs) can be used as a guideline for nutritional requirements, although it must be remembered that these are applicable for healthy groups of children and may not necessarily be appropriate for individual nutritionally vulnerable children.

Following a day parts approach as recommended in this document (see Chapter 10) and Eating Well at School from the Caroline Walker Trust (33) the following guidelines on energy, protein and salt can be extrapolated for hospital menus. In line with recommendations for adults, hospital menus for children should offer five portions of fruits and vegetables a day and at least one serving of oily fish a week.

**Table 12.10: Nutrient provision guidelines for children**

	Breakfast	Lunch	Snacks & Drinks	Supper
<b>Energy % EAR</b>	20%	30%	20%	30%
<b>Protein % RNI</b>	20%	30%	20%	30%
<b>Salt % SACN recommendations</b>	20%	30%	20%	30%

It is advisable that menus for children in hospital have the capacity to meet both the minimum and maximum nutritional requirements.

The following table suggests average nutrient guidelines for lunch and supper for nutritionally well children. This is based on the Scientific Advisory Committee on Nutrition (SACN)'s EARs for children (34), SACN's salt targets for children (35), and the Reference Nutrient Intakes (RNIs) for protein (36).

**Table 12.11: Average nutrient guidelines for lunch and supper for nutritionally well children**

Gender	Mixed (average)	Mixed (average)	Mixed (average)	Mixed (average)
<b>Age</b>	4-6 years	7-10 years	11-14 years	15-18 years
<b>Energy (kcal)</b>	429	528	675	675
<b>Fat (g)</b>	17	21	26	26
<b>Saturated fat (g)</b>	5	6	8	8
<b>Free sugars (g)</b>	5	7	9	9
<b>Protein (g)</b>	6	9	13	15
<b>Salt (g)</b>	0.9	1.5	1.8	1.8

Analysis of free sugar provision from main meals may not be helpful, as sugar may be a useful source of energy in hospitalised children who have increased energy requirements and/or reduced appetite. Similarly, sick children may need a higher fat intake than healthy children in the community.

A 2015 SACN report also looked at the amount of carbohydrates and fibre being consumed, and the link to health outcomes (37). It is recommended that starchy carbohydrates, wholegrain where possible, should form 50% of daily calorie intake and that adequate fibre is consumed to promote overall health.

**Table 12.12: Recommended fibre intake for nutritionally well children**

Age	2-5 years	5-11 years	11-15 years	>16 years
<b>Daily fibre intake (g)</b>	15	20	25	30

Again, it is worth noting that some children’s fibre requirements may vary depending on their medical condition and a high fibre intake may contraindicate some treatment pathways.

Children’s nutrition and hydration needs can only be met by offering three main meals, snacks and drinks daily. Patient and parental food choices from the menu will influence the nutritional adequacy of the individual child’s diet.

Younger children (under four years) may obtain more of their nutrition spread across frequent meals, snacks and drinks. The above guidelines cannot be used for this age group.

## Special dietary requirements

As with adult patients, some children will require special therapeutic diets. These should be tailored to the specific needs of each individual child where possible and in consultation with a specialist paediatric dietitian. Some examples of therapeutic diets commonly required in paediatric patients include:

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- Milk, egg, fish and nut free diets
- 
- Ketogenic diet
- 
- Low fat diet
- 
- Low protein diet
- 
- Carbohydrate counting (for insulin dosing in type 1 diabetes).
-



Please note that for some of these diets the recommended macronutrient amounts would not apply.

**We are grateful to Louise McAlister, Specialist Paediatric Dietitian at Great Ormond Street Hospital (GOSH) for her original contribution to this chapter and to Louise Meredith and Sarah Khweir from the BDA's Paediatric Specialist Group for their updates to this section.**

## 4.2 Critical illness

During critical illness, the body initiates an inflammatory response which can have significant effects on metabolism. Throughout an intensive care (ICU) stay and recovery process, critically ill patients have increased calorie and protein requirements. Many patients admitted to the ICU may already be malnourished, with further significant weight loss and muscle wastage occurring during critical illness. Some patients may lose as much as 2% muscle mass per day in the first seven days (38).

In most cases the nutritional needs of these patients will be initially met via the enteral or parenteral route. The nutrition that patients receive in their post-ICU phase of recovery is considered equally as important as that received during acute critical illness, particularly for those already nutritionally compromised, frail or with sarcopenia (39).

As a patient moves into the recovery phase following critical illness, they are likely to start eating and drinking on the ICU before they step down to the ward. Their energy and protein requirements remain increased (39).

Patients are at risk of an inadequate intake of calorie and protein after their feeding tube is removed and artificial nutrition is stopped, which often occurs prematurely (40).

Oral intake after extubation is impaired and there is a high incidence of swallowing dysfunction (41). Consequently, the use of therapeutic modified texture diets is frequently indicated, making it essential for critical care patients to have access to appropriate texture modified options.

Observational data suggest that patients consume less than half of their energy and protein needs orally after stepping down to a ward (42, 43). Several symptoms have been identified as barriers to adequate nutritional intake in patients following critical illness (44, 45). These included:

- 
- Poor appetite

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  - Early satiety

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  - Taste changes

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  - Weakness resulting in inability to feed oneself

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  - Emotional influences

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  - Dysphagia.

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It is therefore vital to ensure that food provided is firstly high in calories and crucially protein and secondly is of an appropriate consistency for the patient - see section 3.1 Texture Modified Diets in this chapter.

Many patients will often continue to need additional support from oral nutritional supplements or enteral feeding. However, providing the appropriate diet once patients are on the ward should help aid the transition to oral intake and reduce reliance on artificial nutrition support.

**We are grateful to Ella Terblanche and Terpsi Karpasitiof of the BDA Critical Care Specialist Group for their contribution to this section.**

## 4.3 Obesity

It is important to recognise that the nutritional needs of patients living with obesity will vary depending on their clinical condition and treatment plan.

Most of the options offered on hospital menus should be nutritious and appealing to help all patients meet their nutritional requirements during their admission. While healthier options (i.e., options lower in fat, salt and added sugar) can be promoted to patients living with overweight or obesity, they should be free to choose the options that appeal to them the most and should not be unnecessarily restricted unless medically indicated (i.e., in preparation for surgery). For some patients who usually have a higher calorie intake, the hospital menus will likely provide a natural deficit, regardless of the option.

Patients living with overweight or obesity are likely to have at least one co-morbidity, which may affect their nutritional requirements. The nutritional status of patients living with overweight and obesity should be regularly monitored, in line with the accepted nutritional status screening tool. This is important as it is possible to be undernourished with regards to vital nutrients, while carrying excess body fat. Likewise, it is possible that a patient living with overweight or obesity may already have lost or be losing substantial body weight, and still be classified as overweight.

Bariatric patients will be covered under the specific guidance of the bariatric unit, with the advice and guidance of the bariatric team including the dietitian; this group falls outside of the scope of this guidance.

Children living with overweight or obesity also require nourishing, familiar foods during a hospital stay, whilst also encouraging healthy habits. For children over the age of 5 years, general healthy eating principles apply, although any special dietary requirements resulting from medical conditions will take priority.

The new national Eatwell Guide (46) recommends water and low-calorie drink choices for all the population. In all hospitals and healthcare premises there should be:

- 
- Readily available water
  - Reduced availability of high calorie/sugar drinks
  - Available guidance for families and visitors on appropriate drinks choices.
- 

Healthy food and drink options should also be promoted to all staff, patients and visitors in retail outlets within healthcare facilities (see Chapter 5 for more information).

It is important that catering staff do not restrict a patient's meal choices based on their BMI. If a patient does require a weight management intervention or dietary advice to improve their health outcome, this should be provided sensitively by clinical staff at an appropriate time.

**We are grateful to Hilda Mulrooney & Helen Croker and the Obesity Group of the British Dietetic Association for their contribution to this section.**

## 4.4 Older adults

Almost 43% of patients admitted to an NHS hospital in England in 2019-2020 were aged 65 or over (47). While older adults do make up a large proportion of hospital patients, it is important to remember that this is a mixed group with varying needs. A patient aged 65 may have very different requirements to someone aged 85. For this reason, age alone should not be used a determinant of patient's nutrition needs.

It is important to consider other measures such as a frailty score and malnutrition screening scores to identify nutritionally vulnerable older patients.

## Nutrition needs

The healthy eating message for the general population may not be applicable to nutritionally vulnerable older adults. Several factors put older people at greater risk of malnutrition, such as decreased appetite, increased requirements from comorbidities and a reduced capacity to buy and prepare meals.

Studies have shown that a higher protein intake in older adults can help to reduce the risk of developing chronic protein-energy malnutrition in this population (48). Therefore, it is important that the focus of hospital catering is not just on the number of calories or 'higher energy' meals available on menus, but more importantly increasing nutrient dense and protein rich options.

The PROMISS project, which promotes active and healthy aging suggests that older adults should aim for a minimum of 1g protein, per kilo of body weight per day. To optimally stimulate protein synthesis in the body, it is also recommended that older adults consume at least 30 g of protein per meal, in at least one meal per day, and if possible, in two meals per day (48).

For older adults living with diabetes the nutritional requirements can differ to the general recommendations for people with diabetes. Healthier eating options may reduce energy intake further for those who are underweight. Higher energy, higher protein options may be more appropriate for some patients. Dietitians can provide advice for specific individual requirements and discussion with the healthcare team may be indicated.

Drinking enough fluids is also important in this group, due to a reduction in regular thirst signals. Women should aim for around 1600ml/day and men around 2000 ml/day (49). All fluids count towards this total, including water, juice, soups, tea, coffee, milky drinks and nutritional supplements. Drinks that provide more nutrients and protein, such as milky drinks are a useful way for older adults to meet both their nutrition and hydration requirements.

## Dementia / cognitive impairment

People who have dementia have been found to account for ten times more admissions to hospitals when compared to age-matched controls (50). Dementia is a degenerative disease from early difficulties with complex tasks to terminal phases where patients become increasingly immobile and bed bound. The risk of malnutrition increases as dementia progresses (51). A recent meta-analysis found an individualised patient centred approach to address peoples' different needs to be the most beneficial (52).

NHS England provide the most up to date guidelines and resources related to providing care for patients with dementia on their website (53).

## Practical guidance

To enhance nutritional intake for patients with dementia consider the following strategies:

- 
- Ensure food and fluid is available 24 hours/day. People may be more alert at different times of day and may wish to eat at different times

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  - Ensure texture modified foods are available for those with dysphagia

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  - Provide adapted crockery and cutlery for those who have physical or visual impairment

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  - Provide finger food options to help people with Dementia eat independently and at their own pace

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  - Utilise food fortification and small portions of nutrient dense meals and snacks for those with a poor appetite

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  - Include high energy and high protein dessert options on menus as people living with Dementia have been found to have a strong preference for sweeter foods and foods higher in carbohydrates over proteins and fats (54)

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  - Ensure dietary needs (food consistency, level of assistance, likes and dislikes) are assessed on admission and a care plan is completed and regularly updated with any changes

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  - Activities and good communication with staff, family and volunteers may engage a person who has dementia and therefore they may eat more if they are feeling content

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  - Music may help.

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## Further information

More information including practical strategies to address behavioural issues and sample menus can be seen in the Caroline Walker Trust's resource, *Eating Well: Supporting Older People and older People with Dementia* (18).

**We are grateful to Elaine Lane & the BDA Older People's Specialist Group for their contribution to this section.**

## 4.5 Cancer

Some people with cancer are at high risk of weight loss, sarcopenia (muscle wasting), frailty and malnutrition because of both the physical and psychological effects of the disease and the treatment of it. Many oncology patients may experience difficulties in eating either due to the cancer itself causing an obstruction or due to their treatment causing side effects that impact their nutrition intake. Common side effects include:

- 
- Loss of appetite

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  - Tiredness / fatigue

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  - Nausea and vomiting

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  - Sore/dry mouth

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  - Sore throat

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  - Taste changes

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  - Diarrhoea

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  - Constipation

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  - Weight loss

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  - Dysphagia

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  - Early satiety

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  - Colitis.

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Side effects vary from person to person but the benefits of good nutrition throughout the phases of treatment and recovery must not be underestimated. The food a patient with cancer may require will change over time and it is important to adapt food intake to cope with the body's changing needs.

Good nutrition helps wounds and damaged tissues heal faster, improves the body's immune function, maintains muscle mass, and helps people maintain an optimum nutritional status. Even if there are no nutritional problems identified, the importance of good nutrition by means of a healthy, well-balanced diet cannot be overlooked and should be reflected in the patient menu. Some treatments, for example for hormone dependent cancers such as breast and prostate, may encourage weight gain so a balance of healthier and higher energy menu choices is essential.

## Practical guidance

The catering provision for oncology patients should be flexible and may include:

- 
- Offering smaller portions of main meals

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  - Having appropriate high protein/ high energy foods available

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  - Provision of extra snacks and nourishing drinks e.g., high energy milkshakes and full fat milk

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  - Provision of moist meals with extra sauces or gravy and dessert with sauces or custard

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  - Texture modified meals for those with swallowing difficulties.

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Some patients may opt for alternative or complementary diets. A complementary diet uses specific foods or practices as part of the usual dietary intake alongside conventional cancer treatment. Examples include avoiding refined carbohydrates, ketogenic or acid-alkaline diets.

Alternative diets are a form of diet that is used instead of the conventional cancer treatments. Such alternative diets may claim to cure cancer and may have possible harmful effects because they are often so restrictive that it is impossible to obtain adequate nutrition.

There is no scientific evidence for such diets. It is important that patients who are self-restricting their diets and who are at risk not meeting their nutrition requirements are flagged to a clinical dietitian for assessment. For some patients, the wish to follow an alternative diet may be as much about nurturing hope as health.

**We are grateful to the BDA Oncology Specialist group for the review of the current publication.**

## 4.6 Mental health

Mental health inpatient services provide care for patients with a wide range of psychiatric diagnoses, and may include acute psychiatric care, secure care and rehabilitation services. Patients may be detained under the Mental Health Act or may choose to be admitted informally (55). Their length of stay can vary from days to years. Child and Adolescent Mental Health Services (CAMHS) inpatient services are highly specialised for treating young people with the most complex needs.

Good nutritional care is a core responsibility for the physical and mental health of all patients and the principles of good nutritional care will apply to these services as in any other setting. Regulation 14 from the CQC, states that 'Every food provider should have a food and drink

strategy that covers; the nutrition and hydration needs of patients; healthier eating for the whole hospital community and sustainable procurement of food and catering services' (10). There is also additional guidance for specific units such as Eating Disorder Units (56) and secure services (57).

Patients in mental health facilities may have any of the therapeutic dietary needs already explored in this chapter, however they will often also fall into one of two categories:

- 
- A patient with malnutrition or at high risk of malnutrition
  - A patient living with overweight or obesity.
- 

Patients with mental health problems are at higher risk of developing chronic conditions such as diabetes and dyslipidaemia (58). Rates of obesity are much higher in people with severe mental health problems than in the general public, and people diagnosed with schizophrenia are reported to have a 2–3 times greater premature mortality rate than the general population, mainly due to cardiovascular disease (59).

The food service environment plays an integral part in supporting patients in making informed choices for good health. Timing of meals and snacks should be carefully considered as patients may rise late, missing breakfast and go to bed late, so tend to snack in the evenings. Medications used in the treatment of many mental health conditions are associated with increased thirst and hunger, therefore where service users are at risk of weight gain, lower calorie snacks and drinks should be made available. Medication may adversely affect bowel function, so a higher fibre intake, encouragement towards physical activity and ensuring adequate fluids should be encouraged.

Older adults with mental health needs, such as dementia, where unintentional weight loss is a concern, may benefit from a menu that includes:

- 
- Easy to chew options
  - Higher energy and protein options
  - Finger food
  - Snacks between meals.
- 

Poor condition of teeth and gums may reduce consumption of fruits and vegetables; therefore, the daily provision of vitamin C containing juices each day is of value. The menus provided for Older People in mental health facilities (OPMH) should reflect their specific nutritional needs such as nutrient density and texture modification.



Nutritionally complete finger foods menu should be considered across all wards and units for all ages, e.g. OPMH, secure units, Autism spectrum disorder (ASD). Some patients may present with very limited food choices and would therefore benefit from additional support from ward staff and around menu selection (e.g. dysphagia, salivation issues, ASD).

Patients with ASD may present with very limited food preferences. Menus should be clear in their descriptions and offer simple as well as composite dishes. For those who are very mentally unwell, distorted eating patterns and restrictive eating may result so a flexible approach to food provision will be needed to ensure nutritional adequacy.

In long stay settings where the environment may be restricted, a positive mealtime experience is of the utmost importance. Attention should be given to adequate staffing and possibility of shared mealtimes, especially in CAMHS units where role modelling has real value in shaping future behaviours and social eating.

In secure facilities, patients should have the ability to make their own hot and cold drinks and snacks safely. They should also be provided with meals that:

- 
1. Offer choice

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  2. Ensure a balanced diet and meet dietary requirements

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  3. Are sufficient in quantity

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  4. Reflect individual cultural and religious needs.

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Menu fatigue can be problematic for long stay patients, so menus should offer as many choices as practically possible. They should also be reviewed regularly, involving patients where possible.

Healthier eating options should be available at all mealtimes and be clearly identified on menus to help support patients making positive lifestyle choices. Mealtime environments should be conducive to making healthier choices and improving the dining experience should be part of each ward/unit's priority.

The Eatwell Guide and further adaptations such as the Vegan Eatwell Guide or principles of the Mediterranean Diet are appropriate as a basis for educating patients on eating well for their overall health (46). The R.E.A.L food guide is also used within eating disorder services (60).

The emergence of studies highlighting the impact of diet on mental health, such as the SMILES trial, has the potential to change the landscape of food service within mental health (61). The food provision for mental health patients should provide key nutrients that in support mental health, cognitive function and physical health, including omega-3 fatty acids (specifically EPA and DHA), and a number of key vitamins and minerals (62).

Patients on medications that increase sun sensitivity requiring a high factor sunscreen, and long stay patients, who may spend a significant part of their day indoors, may be particularly at risk of Vitamin D deficiency and may require Vitamin D supplementation (58, 63).

## Practical guidance

- 
- Consider providing separate healthier eating menus to units or wards where the main nutritional risk to service users is excessive weight gain and metabolic syndrome and nutrient dense menus where the top nutritional risk is malnutrition
- 
- Pictorial menus are a useful way to involve patients with cognitive or communication difficulties with making their own mealtime choices
- 
- For long-stay settings, consider multi-week cyclical menus with theme days to reduce risk of menu fatigue.
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**Table 12.13: Recommended menus for mental health facilities**

Menu Type	Suitable for	Recommended Features
Healthier eating menu	Nutritionally well, service users at risk of excessive weight gain	<ul style="list-style-type: none"> <li>• Healthier eating option available at each mealtime</li> <li>• Flexible portion sizes</li> <li>• Include higher fibre, lower energy options with a good source of protein to support larger appetites by aiding satiety</li> <li>• To meet nutrient targets for nutritionally well</li> </ul>
Nutrient dense menu	Nutritionally vulnerable, older adults	<ul style="list-style-type: none"> <li>• Higher energy/protein option available at each mealtime</li> <li>• Easy to chew option at each mealtime</li> <li>• Flexible portion sizes</li> <li>• Include small portions of higher energy and protein options to support reduced appetites</li> <li>• To meet nutrient targets for nutritionally vulnerable</li> </ul>

**We are grateful to the BDA Mental Health Specialist group for the review for the current publication.**

## References

1. United Kingdom. Health and Social Care Act 2012: Elizabeth II. Chapter 7. London: The Stationary Office; 2012.
2. Public Health England. Healthier and Sustainable Catering: Nutrition Principles. London: PHE; 2017 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/648744/healthier\\_and\\_more\\_sustainable\\_nutrition\\_principles.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/648744/healthier_and_more_sustainable_nutrition_principles.pdf) [Accessed 3rd April 2023]
3. Department of Health. Guide to creating a front of pack (FoP) nutrition label for pre-packed products sold through retail outlets. 2016. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/566251/FoP\\_Nutrition\\_labelling\\_UK\\_guidance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/566251/FoP_Nutrition_labelling_UK_guidance.pdf) [Accessed 3rd April 2023]
4. British Association for Parenteral and Enteral Nutrition. 'MUST' Report. <https://www.bapen.org.uk/screening-and-must/must/must-report> [Accessed 3rd April 2023]
5. NHS Scotland. Food in Hospitals: National Catering and Nutrition Specification for Food and Fluid Provision in Hospitals in Scotland. Edinburgh: APS Group Scotland; 2016. <https://www.nss.nhs.scot/media/1097/1479818118-food-in-hospitals-revised-march-2016.pdf> [Accessed 3rd April 2023]
6. International Dysphagia Diet Standardisation Initiative (IDDSI). IDDSI Framework and Detailed Level Definitions. 2019. [https://iddsi.org/IDDSI/media/images/Complete\\_IDDSI\\_Framework\\_Final\\_31July2019.pdf](https://iddsi.org/IDDSI/media/images/Complete_IDDSI_Framework_Final_31July2019.pdf) [Accessed 3rd April 2023]
7. NHS Improvement. Patient safety alert: Resources to support safer modification of food and drink. 2018. <https://www.england.nhs.uk/publication/patient-safety-alert-safer-modification-of-food-and-fluid/> [Accessed 3rd April 2023]
8. International Dysphagia Diet Standardisation Initiative (IDDSI). IDDSI Framework. <https://iddsi.org/> [Accessed 3rd April 2023]
9. Vegetarian Society. Health and Nutrition: Protein. <https://vegsoc.org/info-hub/health-and-nutrition/protein/> [Accessed 3rd April 2023]
10. Care Quality Commission. Regulation 14: Meeting nutritional and hydration needs. <https://www.cqc.org.uk/guidance-providers/regulations-enforcement/regulation-14-meeting-nutritional-hydration-needs> [Accessed 3rd April 2023]
11. Halal Food Authority. Definition of Halal. <http://www.halalfoodauthority.com/WhatIsHalal.html> [Accessed 3rd April 2023]

12. Henley A, Schott J. Culture, religion and patient care in a multi-ethnic society: A handbook for professionals. Third Edition. London: Age Concerns Books; 1999.
13. Kashrut Division of the London Beth Din (KLBD). What is Kosher? <https://www.kosher.org.uk/article/what-kosher> [Accessed 3rd April 2023]
14. The Vegan Society. Key Facts. <https://www.vegansociety.com/about-us/further-information/key-facts> [Accessed 3rd April 2023]
15. The Committee on Climate Change. The Sixth Carbon Budget: The UK's path to Net Zero. <https://www.theccc.org.uk/publication/sixth-carbon-budget/> [Last accessed 23.06.22]
16. International Dysphagia Diet Standardisation Initiative (IDDSI). IDDSI Testing Methods. <https://iddsi.org/Testing-Methods> [Accessed 3rd April 2023]
17. NHS Digital. Patient-Led Assessments of the Care Environment (PLACE). <https://digital.nhs.uk/data-and-information/areas-of-interest/estates-and-facilities/patient-led-assessments-of-the-care-environment-place#place-assessment-forms-and-supporting-guidance-documents> [Accessed 3rd April 2023]
18. Crawley H, Hocking E. Eating Well: supporting older people and older people with dementia Practical guide. London: Caroline Walker Trust; 2011. <https://cwt.org.uk/wp-content/uploads/2014/07/EW-Old-Dementia-Practical-Resource.pdf> [Accessed 3rd April 2023]
19. BDA Renal Nutrition Group. British Dietetic Association evidence-based guidelines for the protein requirements for adults undergoing haemodialysis and peritoneal dialysis. <https://onlinelibrary.wiley.com/action/downloadSupplement?doi=10.1111%2Fjhn.12052&file=jhn12052-sup-0001-DataS1.pdf> [Accessed 3rd April 2023]
20. Food Standard Agency for Guidance. Allergen guidance for food businesses. <https://www.food.gov.uk/business-guidance/allergen-guidance-for-food-businesses> [Accessed 3rd April 2023]
21. British Dietetic Association. Allergen Toolkit for healthcare catering. <http://www.hospitalcaterers.org/media/1162/allergen-toolkit.pdf> [Accessed 3rd April 2023]
22. Food Standard Agency. Allergen labelling changes for prepacked for direct sale (PPDS) food. <https://www.food.gov.uk/allergen-labelling-changes-for-prepacked-for-direct-sale-ppds-food> [Accessed 3rd April 2023]
23. Food Standard Agency. Food allergy and intolerance training. <https://allergytraining.food.gov.uk/> [Accessed 3rd April 2023]

24. Food Standards Agency. Precautionary allergen labelling. <https://www.food.gov.uk/business-guidance/precautionary-allergen-labelling> [Accessed 3rd April 2023]
25. Coeliac UK. Gluten free and the law. <https://www.coeliac.org.uk/food-businesses/caterers-and-restaurateurs/gluten-free-and-the-law/> [Accessed 3rd April 2023]
26. Coeliac UK. Caterers and restaurateurs. <https://www.coeliac.org.uk/food-businesses/caterers-and-restaurateurs/> [Accessed 3rd April 2023]
27. Dr Schar Institute. Irritable Bowel Syndrome (IBS) Treatment. <http://www.drschaer-institute.com/uk/irritable-bowel-syndrome/therapy-1079.html> [Accessed 3rd April 2023]
28. Food Standards Agency. Safer food, better business for caterers. <https://www.food.gov.uk/business-guidance/safer-food-better-business-for-caterers> [Accessed 3rd April 2023]
29. British Dietetic Association Haematology Sub-Group of the Oncology Specialist Group. Guidance: Safer eating with Neutropenia. <https://www.bda.uk.com/uploads/assets/dc580f02-2a3f-400e-908cca4e91dffa63/Neutropenic-Diets-Guidance-Jan-2020.pdf> [Accessed 3rd April 2023]
30. Saunders J, Brian A, Wright M, and Stroud M. Malnutrition and Nutrition Support in Patients with Liver Disease. *Frontline Gastroenterology*. 2010;1:105-111. <https://fg.bmj.com/content/flgastro/1/2/105.full.pdf>
31. Swart GR, Zillikens MC, van Vuure JK, van den Berg, JW. Effect of a late evening meal on nitrogen balance in patients with cirrhosis of the liver. *The British Medical Journal*. 1989; 299(6709):1202-1203. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1838097/pdf/bmj00258-0032.pdf>
32. Weimann A, Braga M, Carli F, Higashiguchi T, Hübner M, Klek S, Laviano A, Ljungqvist O, Lobo DN, Martindale R, Waitzberg DL, Bischoff SC, Singer P. ESPEN guideline: Clinical nutrition in surgery. *Clinical Nutrition*. 2017;36:623-650. [https://www.espen.org/files/ESPEN-guideline\\_Clinical-nutrition-in-surgery.pdf](https://www.espen.org/files/ESPEN-guideline_Clinical-nutrition-in-surgery.pdf)
33. Crawley H. Eating well at school: Nutritional and practical guideline. London: The Caroline Walker Trust; 2005. <https://www.cwt.org.uk/wp-content/uploads/2014/07/EatingWellatSchool.pdf> [Accessed 3rd April 2023]
34. Scientific Advisory Committee on Nutrition (SACN). Dietary Reference Values for Energy. London: TSO; 2011 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/339317/SACN Dietary Reference Values for Energy.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/339317/SACN_Dietary_Reference_Values_for_Energy.pdf) [Accessed 3rd April 2023]

35. Scientific Advisory Committee on Nutrition (SACN). Salt and Health report: recommendations on salt in diet. London: TSO; 2003. <https://www.gov.uk/government/publications/sacn-salt-and-health-report> [Accessed 3rd April 2023]
36. Public Health England. Government Dietary Recommendations: Government recommendations for energy and nutrients for males and females ages 1-18 and 19+ years. London: Public Health England; 2016. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/618167/government\\_dietary\\_recommendations.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/618167/government_dietary_recommendations.pdf) [Accessed 3rd April 2023]
37. Scientific Advisory Committee on Nutrition (SACN). Carbohydrates and Health Report. London: TSO; 2015. <https://www.gov.uk/government/publications/sacn-carbohydrates-and-health-report> [Accessed 3rd April 2023]
38. Puthuchery ZA, Rawal J, McPhail M, et al. Acute Skeletal Muscle Wasting in Critical Illness. *Journal of the American Medical Association*. 2013;310(15):1591–1600. <https://jamanetwork.com/journals/jama/fullarticle/1879857>
39. Singer P, Reintam Blaser S, Berger MM, et al. ESPEN guideline on clinical nutrition in the intensive care unit. *Clinical Nutrition*. 2018;38(1):48 – 79. [https://www.clinicalnutritionjournal.com/article/S0261-5614\(18\)32432-4/fulltext](https://www.clinicalnutritionjournal.com/article/S0261-5614(18)32432-4/fulltext)
40. van Zanten ARH, De Waele E, Wischmeyer PE. Nutrition therapy and critical illness: practical guidance for the ICU, post-ICU, and long-term convalescence phases. *Critical Care* 2019; 23(1): 368. <https://ccforum.biomedcentral.com/articles/10.1186/s13054-019-2657-5>
41. Tsai MH, Ku SC, Wang TG, et al. Swallowing dysfunction following endotracheal intubation: Age matters. *Medicine (Baltimore)*. 2016;95(24): e3871. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4998458/>
42. Chapple LS, Deane AM, Heyland DK, et al. Energy and protein deficits throughout hospitalization in patients admitted with a traumatic brain injury. *Clinical Nutrition*. 2016;35(6):1315-1322. <https://pubmed.ncbi.nlm.nih.gov/26949198/>
43. Ridley EJ, Parke RL, Davies AR, et al. What Happens to Nutrition Intake in the Post-Intensive Care Unit Hospitalization Period? An Observational Cohort Study in Critically Ill Adults. *JPEN J Parenter Enteral Nutr*. 2019;43(1):88-95. <https://pubmed.ncbi.nlm.nih.gov/29924393/>
44. Albrich L, Chapple LS, Nock A, Ridley EJ, Hickson M. Nutrition-related symptoms in adult survivors of critical illness who are eating orally: a scoping review protocol. *JBI Evidence*

Synthesis. 2020;18(6):1326-1333. [https://journals.lww.com/jbisrir/Fulltext/2020/06000/Nutrition\\_related\\_symptoms\\_in\\_adult\\_survivors\\_of.13.aspx](https://journals.lww.com/jbisrir/Fulltext/2020/06000/Nutrition_related_symptoms_in_adult_survivors_of.13.aspx)

45. Merriweather JL, Griffith DM, Walsh TS. Appetite during the recovery phase of critical illness: a cohort study. *European Journal of Clinical Nutrition*. 2018;78:986–992. <https://doi.org/10.1038/s41430-018-0181-3>
46. Public Health England. The Eatwell Guide: The Eatwell Guide Booklet. 2016. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/742750/Eatwell\\_Guide\\_booklet\\_2018v4.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/742750/Eatwell_Guide_booklet_2018v4.pdf) [Accessed 3rd April 2023].
47. NHS Digital. Hospital Admitted Patient Care Activity 2019-20. 2020. <https://digital.nhs.uk/data-and-information/publications/statistical/hospital-admitted-patient-care-activity/2019-20> [Accessed 3rd April 2023]
48. Age Platform Europe. PRevention Of Malnutrition In Senior Subjects in the EU (PROMISS). <https://www.age-platform.eu/project/promiss#:~:text=PROMISS%20%3E%20Theme%3A%20Malnutrition%20%3E%20Timeline%3A%20April%202016,Europe%2C%2090-95%25%20of%20older%20adults%20live%20at%20home.> [Accessed 3rd April 2023]
49. Volkert D, Beck AM, Cederholm T, et al. ESPEN guideline on clinical nutrition and hydration in geriatrics. *Clinical Nutrition*. 2019;38(1):10-47. doi: 10.1016/j.clnu.2018.05.024
50. Natalwala A, Potluri R, Uppal H, Heun R. Reasons for hospital admissions in dementia patients in Birmingham, UK, during 2002-2007. *Dementia and Geriatric Cognitive Disorders*. 2008;26(6):499-505. doi: 10.1159/000171044.
51. Alzheimer's UK. 2016 All-Party Parliamentary Group Report. <https://www.alzheimers.org.uk/about-us/policy-and-influencing/2016-appg-report> [Accessed 3rd April 2023]
52. Abdelhamid A, Bunn D, Copley M, et al. Effectiveness of interventions to directly support food and drink intake in people with dementia: systematic review and meta-analysis. *BMC Geriatrics* 2016;16:26. <https://bmcgeriatr.biomedcentral.com/articles/10.1186/s12877-016-0196-3>
53. NHS England. Dementia. <https://www.england.nhs.uk/mental-health/resources/dementia/> [Accessed 3rd April 2023]
54. Yu, D. Eating and Drinking Difficulties in Dementia. <https://www.bda.uk.com/resource/eating-and-drinking-difficulties-in-dementia.html> [Accessed 3rd April 2023]



55. Department of Health and Social Care. Code of practice: Mental Health Act 1983. London:TSO; 2015. <https://www.gov.uk/government/publications/code-of-practice-mental-health-act-1983> [Accessed 3rd April 2023]
56. Clarke H, Gardner M. Standards for Adult Inpatient Eating Disorder Services - Second Edition. London: Royal College of Psychiatrists; 2017. [https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/quality-networks/eating-disorders-qed/2nd-edition-standards-for-adult-inpatient-eating-disorder-services.pdf?sfvrsn=86374031\\_2](https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/quality-networks/eating-disorders-qed/2nd-edition-standards-for-adult-inpatient-eating-disorder-services.pdf?sfvrsn=86374031_2) [Accessed 3rd April 2023]
57. Georgiou M, Oultram M, Haque Q. Standards for Forensic Mental Health Services: Low and Medium Secure Care - Third Edition. London: Royal College of Psychiatrists; 2019. [https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/quality-networks/secure-forensic/forensic-standards-qnmhs/standards-for-forensic-mental-health-services-fourth-edition.pdf?sfvrsn=2d2daabf\\_6](https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/quality-networks/secure-forensic/forensic-standards-qnmhs/standards-for-forensic-mental-health-services-fourth-edition.pdf?sfvrsn=2d2daabf_6) [Accessed 3rd April 2023]
58. National Institute for Health and Care Excellence (NICE). Psychosis and schizophrenia in adults: prevention and management [CG178]. 2014. <https://www.nice.org.uk/guidance/cg178> [Accessed 3rd April 2023]
59. Public Health England. Working together to address obesity in adult mental health secure units: a systematic review of the evidence and a summary of the implications for practice. PHE; 2017 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/591875/obesity\\_in\\_mental\\_health\\_secure\\_units.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/591875/obesity_in_mental_health_secure_units.pdf) [Accessed 3rd April 2023]
60. Hart S and McMaster C. THE REAL Food Guide for CBT-T Clinicians: Basic Food and Eating Training for Eating Disorders. <http://www.leicestereatingdisorders.co.uk/uploads/uploads/CBTT/real-food-guide.pdf> [Accessed 3rd April 2023]
61. Jacka FN, O'Neil A, Itsiopoulos C, et al. The SMILES trial: an important first step. BMC Medicine. 2018;16(1):237. <https://bmcmmedicine.biomedcentral.com/articles/10.1186/s12916-018-1228-y>
62. Mental Health Foundation. Diet and mental health. <https://www.mentalhealth.org.uk/sites/default/files/food-for-thought-mental-health-nutrition-briefing-march-2017.pdf> [Accessed 3rd April 2023]
63. Department of Health and Social Care. Vitamin D - advice on supplements for at risk groups. <https://www.gov.uk/government/publications/vitamin-d-advice-on-supplements-for-at-risk-groups> [Accessed 3rd April 2023]





# Appendices

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Appendix 1: Qualitative Menu Assessment Checklist

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Appendix 2: Sample Job Description

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Appendix 3: Person Specification

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Appendix 4: Business Case Guidance

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Appendix 5: Regulation 14 of the CQC (Meeting Nutritional and Hydration Needs)

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Appendix 6: Hospital Food Standards (HFS) Panel Report on Standards for Food and Drink in NHS Hospitals, 2014

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Appendix 7: Report of the Independent Review of NHS Hospital Food, 2020

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Appendix 8: The Government Buying Standard for Food and Catering Services, 2021

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Appendix 9: National Standards for Healthcare Food and Drink, 2022

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Appendix 10: Legislation and Guidelines for Northern Ireland, Wales, and Scotland

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Appendix 11: Tolerances for the Nutrition Declaration on Foods Other than Food Supplements

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Appendix 12: Rounding Guidelines for the Nutrient Declaration in Nutrition Labelling of Foods

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## Appendix 1: Qualitative Menu Assessment Checklist

<b>1 Potatoes, bread, rice, pasta and starchy carbohydrate</b>		<b>Yes</b>	<b>Comment</b>
a	Is there a choice of higher and lower fibre cereals at breakfast?		
b	Is there a selection of breads available? e.g. white, wholemeal and Gluten Free (GF)		
c	Does the menu contain a good variety of appropriate carbohydrate based sides that suits both the meals served and the patient group?		
d	Is there at least one carbohydrate based side available at each meal service?		
<b>2 Fruit and vegetable</b>		<b>Comment</b>	
a	Is the total food offer including snacks, capable of providing at least 5 portions of fruit and vegetables a day?		
b	Does the food offer include fresh fruit throughout the day, at main meals and as a snack option?		
c	Are a variety of fruit based desserts available on the menu? E.g. fruit crumble, fruit pie		
d	Does the menu offer 2 different vegetables or a vegetable and a side salad at each main meal?		
e	Is there an easy to chew vegetable at each main meal?		
<b>3 Beans, pulses, fish, eggs, meat and other proteins</b>		<b>Comment</b>	
a	Is there a higher protein breakfast option available that is appropriate for the patient group? E.g. eggs, yoghurt or fortified porridge		
b	Is there an identified source of protein in all vegetarian and vegan meal choices?		
c	Does the menu provide 2 portions of sustainably sourced fish every week, one of which being an oily fish?		

<b>4 Dairy and alternatives</b>		<b>Comment</b>	
a	Is 400mls of milk or dairy alternatives for drinks allocated per patient per day?		
b	Is there a range of milks/dairy alternatives appropriate for the patient group available throughout the day? E.g. semi skimmed milk, full fat milk and calcium fortified dairy alternatives		
c	Are milk based desserts available at each main meal? E.g. custard, rice pudding, yoghurt		
d	Is additional milk available for nutritionally vulnerable patients? E.g. for milky drinks or for mixing appropriate supplements		
<b>5 Oils and spreads</b>		<b>Comment</b>	
a	Is butter available?		
b	Is a dairy alternative spread available?		
c	Are standard preserves available?		
<b>6 Drinks</b>		<b>Comment</b>	
a	Is chilled water available throughout the day?		
b	Are decaffeinated varieties of tea and coffee available?		
c	Is sugar-free squash available?		
d	Are other drink options appropriate for the patient group available? E.g. malted milk, herbal teas, fruit teas		
<b>7 Overall choice on standard menu</b>		<b>Comment</b>	
a	Does the menu cycle reflect the needs of the patient group? i.e. longer cycles for long stay patients		
b	Does the menu follow the standard menu structure, outlined in Chapter 9, offering a variety of hot and cold meals at lunch and dinner and avoiding a soup and sandwich only offer.		
c	Is there a higher energy choice available on the menu at each main meal?		
d	Is there a healthier eating choice each main meal?		

e	Is there an easy to chew choice at each main meal?		
f	Is there a vegetarian or vegan choice available at each main meal?		
g	Are there vegetarian options available, other than cheese and egg-based options?		
h	Are pastry products available no more than once per mealtime or less?		
i	Is there adequate choice on the menu during the cycle with reasonable repetition for that patient group?		
<b>8</b>	<b>Other menus</b>		<b>Comment</b>
a	Is there a menu(s) capable of catering for different therapeutic diets? E.g. texture modified, renal suitable, allergen free		
b	Is there a menu(s) capable of catering for different religious or cultural groups? E.g. Halal, Kosher, Vegan		
c	Is there a menu(s) capable of meeting the needs of specific patient groups? E.g. children, mental health, maternity		
<b>9</b>	<b>24 hour provision</b>		<b>Comment</b>
a	Is there an out of hours menu and process in place for cooking and delivering safe hot and cold meals out of regular service hours?		
b	Are suitable meals for special diets available on the out of hours menu? E.g. allergen free, texture modified, vegan		
c	Is there a minimum of 7 drinks offered throughout the day to patients?		
d	Is there a minimum of 2 snacks available per day that are appropriate for the patient group and their dietary needs?		
	Other local considerations		

## Appendix 2: Sample Job Description

### Food Service Dietitian Job Description - Band 7

#### Aims

- 
- To be an expert nutrition and dietetic resource to the Catering department providing support to ensure compliance with recommended healthcare nutrition and hydration standards to provide an effective food and drink service for patients, staff and visitors
- 
- To work in partnership with the multidisciplinary team (Catering, Dietetics, Speech & Language Therapy and Nursing) on a strategic level in the development, delivery and evaluation of the food and drink service in order to achieve healthcare food service best practice
- 
- To drive continuous improvements on catering matters and improve practices at ward level
- 

#### Main responsibilities

##### Food service

- 
- To ensure the Trust provides food and drink that meets the nutritional requirements of all patients, including therapeutic requirements
- 
- To liaise with the Nutrition & Dietetics department to scope all patient nutritional requirements to ensure they are included in the Trust's food and drink service specification
- 
- To champion the needs of patient groups with special dietary needs with nursing staff and catering to ensure the dietary needs of all patients are met
- 
- To keep up to date on all relevant nutritional standards, guidelines and legislation and translate these into Trust targets and policies
- 
- To assess compliance of current practice to relevant food and drink legislation, guidelines and standards and aim for ongoing improvement
- 
- To advise on relevant nutrition and dietetics matters and provide expertise which draws upon the reviewing of current research, publications and best practice
- 
- To be involved in the sign off process of new ingredients and/or products to ensure they comply with relevant guidelines and standards
- 
- To lead on patient menu reviews, ensuring that all nutritional, diet coding and allergen content meets national standards and encompasses all reasonable dietary requirements, religious beliefs and the wide range of cultural diets.
- 
- To develop and apply meaningful diet coding criteria to menus ensuring that all proposed menus are coded correctly for patients in line with the BDA Nutrition & Hydration Digest guidelines
-

- 
- To analyse the nutritional and allergen content of all recipes (if meals are prepared onsite) and ensure diet coding and ingredient information is available at ward level
- 
- To review the nutritional and allergen content of all recipes (if meals are bought in) and ensure diet coding and ingredient information is available at ward level
- 
- To liaise with any external organisations involved in the food supply chain to ensure compliance with hospital food standards and Trust specifications
- 
- To assist with catering presentations, sampling days and preparing dietetic catering information on new and/or existing food service tenders (if the service is outsourced)
- 
- To conduct menu capacity analysis reviews to ensure menus are capable of providing adequate nutritional value
- 
- To work towards healthier food for staff and visitors, in line with the Government Buying Standards for Food and government dietary advice such as The Eatwell Guide
- 

### **Leadership and management**

- 
- Plan, develop, deliver and evaluate appropriate training to others within the organisation
- 
- Plan, set and monitor nutritional standards in food and drink service provision across the Trust. This will include advocating for and contributing to the adaptation of national standards for use in the local setting
- 
- Provide leadership and guidance to the Trust board on relevant food service issues, lead on related documents and policies e.g. Trust nutrition and hydration policy, Trust food and drink strategy, Trust food and drink service specification
- 
- Liaise with Directorates, Divisions, stakeholders, and other professions regarding service planning and development
- 
- Provide leadership by representing the catering and facilities departments and the dietetic profession on relevant groups and working parties within the Trust
- 

### **Personal and Professional Development**

- 
- To proactively keep abreast of current research, best practice and trends in nutrition and dietetics, both clinically and as applies to food and drink services, using this to underpin and maintain a CPD portfolio.
-



## Service Improvement and Governance

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- To work to decrease food waste.
  - To seek feedback from patient satisfaction/experience surveys and consultation projects to facilitate service improvement
  - To be involved in the resolution of patient complaints regarding the food and drink service where relevant
  - To play a major role in the implementation and maintenance of a digital patient meal ordering system in conjunction with the Catering Manager and IT Systems Team, including signing off all relevant nutrition and allergen information to ensure patient safety/menu compliance
  - To undertake audits of meal services and provide feedback and recommendations to improve the food and drink service.
- 

## Notes

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1. Organisational values may be included as part of the job description
  2. There may or may not be supervisory aspects to the role e.g. dietetic student training, managing of junior staff depending on the organisation
  3. Key working relationships would include at the very least catering, dietetic team, nursing, speech and language, doctors and wards across the trust. However, line of reporting could vary depending on Trust organisational structure
  4. Food service dietitians should be involved in staff recruitment and selection of roles related to their role. For example, sitting on interview panels and involvement in the development and retention of dietetic staff and diet chefs.
-

## Appendix 3: Person Specification

### Food Service Dietitian Person Specification - Band 7

Attribute/ skills	Essential	Desirable	Measurement
Education	<ul style="list-style-type: none"> <li>• Recognised Degree and/ or postgraduate diploma</li> <li>• HCPC Registered</li> <li>• Evidence of ongoing relevant CPD</li> <li>• 5 Years post-registration experience</li> <li>• Leadership skills training</li> </ul>	<p>Food Service specific courses</p> <p>Master's level qualification</p>	<p>CV/Application form</p> <p>Original certificates/ diplomas</p> <p>Interview</p>
Skills/abilities	<ul style="list-style-type: none"> <li>• Excellent interpersonal and communication skills</li> <li>• Time management/ organisational skills</li> <li>• Flexible and able to respond to last minute requests</li> <li>• Ability to prioritise a busy workload</li> <li>• Ability to work as a team member and autonomously as a specialist within dept guidelines</li> <li>• Use of recipe analysis software</li> <li>• An appreciation of the required level of data accuracy in nutritional analysis</li> <li>• Computer literacy including email, Microsoft Word, Excel and PowerPoint</li> </ul>	<p>Experience presenting to senior management (may include Board level management)</p> <p>Access to formal and informal opportunities for professional update and networking</p> <p>Need to be: Assertive Proactive</p> <p>Experience of service quality improvement</p>	<p>Application form</p> <p>Interview</p> <p>Assessments</p> <p>Portfolio</p>

Skills/Abilities	<ul style="list-style-type: none"> <li>• Demonstrates an awareness of diversity</li> <li>• Ability to think conceptually</li> </ul>		
Experience	<ul style="list-style-type: none"> <li>• Evidence of relevant experience in adult and paediatric catering and food service provision</li> <li>• Experience of working in a hospital environment within the NHS</li> <li>• Experience in project management</li> <li>• Demonstrates highly developed motivational and negotiating skills to effect change</li> <li>• Experience of conducting audit, research, quality improvement projects and/or service evaluations</li> <li>• Experience of supervision of junior staff</li> </ul>	<p>BDA member and FSSG member</p> <p>Mentoring and/or line managing</p>	<p>Application form</p> <p>Interview</p> <p>References</p> <p>Portfolio</p>
Communication Skills	<ul style="list-style-type: none"> <li>• Strong presentation skills to large groups of people</li> <li>• Excellent interpersonal skills</li> <li>• Ability to communicate highly complex/sensitive information</li> <li>• Evidence of reflective practice</li> <li>• Demonstrates highly developed teaching skills</li> </ul>	<p>Experience presenting to senior management (may include Board level management)</p>	<p>Application form</p> <p>Interview</p> <p>Assessments</p> <p>References</p> <p>Portfolio</p>

Communication Skills	<ul style="list-style-type: none"> <li>• Candidates are able to speak and write English to the appropriate standard necessary to fulfil the job requirements</li> </ul>		
Physical Qualities	<ul style="list-style-type: none"> <li>• Sufficient to fulfil the duties of the post with any aids and adaptations</li> </ul>		
Values	<ul style="list-style-type: none"> <li>• Demonstrate ability to meet Trust values</li> </ul>		CV/Application form Interview

## Appendix 4: Business Case Guidance

### Business Case Guidance

Here is some guidance for writing a business case for a Food Service Dietetic role in order to obtain funding for the role. It is not a comprehensive list but provides some points to consider. Ask your Trust whether there is a business case template or required format for writing a business case.

- 
- State why the role is needed and provide evidence to support this. It is now a requirement under the National standards for healthcare food and drink to have a named food service dietitian and these standards will form part of the legally binding standards in the NHS Standard Contract as well as already being part of the NHS Long Term Plan (1)
- 
- Describe the current food service situation – use current guidance to support (1), (2), (3), (4). Refer to any clinical incidents/near misses related to food service that may have occurred (5), (6)
- 
- State the benefits/advantages of the role e.g. cost-savings, improved patient satisfaction, less clinical incidents, improved partnership working, improved food and drink service, make service more patient-focused
- 
- Also state any disadvantages of not having the role, e.g. impedance on clinical dietetic time, increased risk of clinical incidents, especially around choking and allergies
- 
- Highlight how the role serves to further the Trust's overall Strategic Plan.
- 
- Summarise what you aim to achieve by having the role with a timeline, important working relationships and expected outcomes
- 
- Who would the role report to and where does it sit in the overall organisational structure? We would suggest considering a hard line report into Dietetics and a dotted line report into Facilities as workload is generated from Facilities. We recognise this may not suit all situations
- 
- Anticipate and address any potential pushback that could come from the review panel (or whoever signs off the budget), e.g. have any other methods of efficiency been explored and tried before considering the creation of this role. For instance, investing in technology or software to get the job done
- 
- Tasks such as report writing, menu planning and menu capacity analysis require extended periods of concentration; due consideration should be given to the flexibility to work from home, as a busy clinical environment may not provide the most conducive work environment for certain tasks
- 
- State anticipated costs such as salary (minimum expectation is NHS Band 7) (2) as well as

those associated with training, office equipment and any staff benefits. For instance, the role definitely requires a laptop and mobile, especially if covering multiple sites and to facilitate working from home

- 
- It is recommended that this role be a senior, specialised full-time role, taking into account the complex nature of hospital catering. The majority of the role also requires a lot of autonomy and high level decision-making, influencing and senior stakeholder engagement
- 
- Consider the number of user groups and sites in addition to number of beds as the basis for funding allocation because these all determine how many stakeholders need to be engaged, the number of menus required, amount of training required to equip food service staff and the delivery of the food and drink service. Bear in mind that if covering multiple sites, there may be different food and drink contracts and food/service suppliers across the sites which will increase workload
- 
- Realistic consideration needs to be given to how much the Food Service Dietitian can do; the more sites the more demanding the role. A workload of more than 2 to 3 sites will be very demanding for one person to manage. The remit needs to be very clear. It may be that only patient dining is covered and not retail or staff health & wellbeing. If retail and staff health and wellbeing are included, the remit needs to be clear as to what percentage of time will be spent on each aspect.
- 

## References

1. NHS England. National standards for healthcare food and drink NHS England » National standards for healthcare food and drink [Accessed 30th Nov 2022]
2. NHS Hospital Food Review. Report of the Independent Review of NHS Hospital Food [Accessed 31st May 2022]
3. The British Dietetic Association. Nutrition & Hydration Digest
4. NHS Digital. Patient-Led Assessments of the Care Environment (PLACE) Patient-Led Assessments of the Care Environment (PLACE) - NHS Digital [Accessed 31st May 2022]
5. NHS England. Patient safety alert: Resources to support safer modification of food and drink NHS England » Patient safety alert: Resources to support safer modification of food and drink [Accessed 30th Nov 2022]
6. NHS England. Patient safety alert: Risk of death from asphyxiation by accidental ingestion of fluid/food thickening powder NHS England » Patient safety alert – Risk of death from asphyxiation by accidental ingestion of fluid/food thickening powder [Accessed 30th Nov 2022]

## Appendix 5: Regulation 14 of the CQC (Meeting Nutritional and Hydration Needs)

### Regulation 14 of the CQC: Meeting Nutritional and Hydration Needs (1)

Regulation 14 (Meeting nutritional and hydration needs), which falls under the NHS Health & Social Care Act 2008, is the CQC regulation focused on ensuring that people who use NHS services have adequate nutrition and hydration to sustain life and good health. This includes reducing their risk of malnutrition and dehydration while they receive care and treatment. Regulation 14 is one of CQC's fundamental standards.

Where food is provided, healthcare organisations should have systems in place to ensure:

- 
- A choice of suitable, nutritious food and drink, provided in sufficient quantities to meet the patients' needs
- 
- Food and drink that meet the reasonable requirements arising from a patients' religious or cultural background
- 
- Ensure adequate finance to provide for food and drink
- 
- Provision of food and drink includes oral nutritional supplements and artificial nutrition in the form of intravenous fluids when appropriate
- 
- Help with eating and drinking is given to those people identified as vulnerable.
- 

### Reference

Care Quality Commission (CQC) Regulations for service providers and managers: relevant guidance. <https://www.cqc.org.uk/guidance-providers/regulations-enforcement/regulations-service-providers-managers-relevant-guidance> [Accessed 11th April 2023]

## Appendix 6: Hospital Food Standards (HFS) Panel Report on Standards for Food and Drink in NHS Hospitals, 2014

### The Hospital Food Standards Panel Report on Standards for Food and Drink in NHS Hospitals (1)

The five standards that the HFS state necessary compliance with to provide the highest quality and nutritional value of food for NHS patients, staff, and visitors are:

For patient catering:

- 
- 10 Key Characteristics of Good Nutritional Care (2)
  - The BDA Nutrition & Hydration Digest, 2nd Edition (3)
  - Malnutrition Universal Screening Tool (MUST) (4), or other validated nutrition screening tool.
- 

For staff & visitor catering:

- 
- Healthier and More Sustainable Catering - Nutrition Principles (5).
- 

For all catering:

- 
- Government Buying Standard for food and catering services (6).
- 

A 2017 report was published by the Department of Health (DH) (7) following the release of the HFS and showed that over half of NHS hospitals were fully compliant with the standards, with over 90% of hospitals confirming they were working towards them.

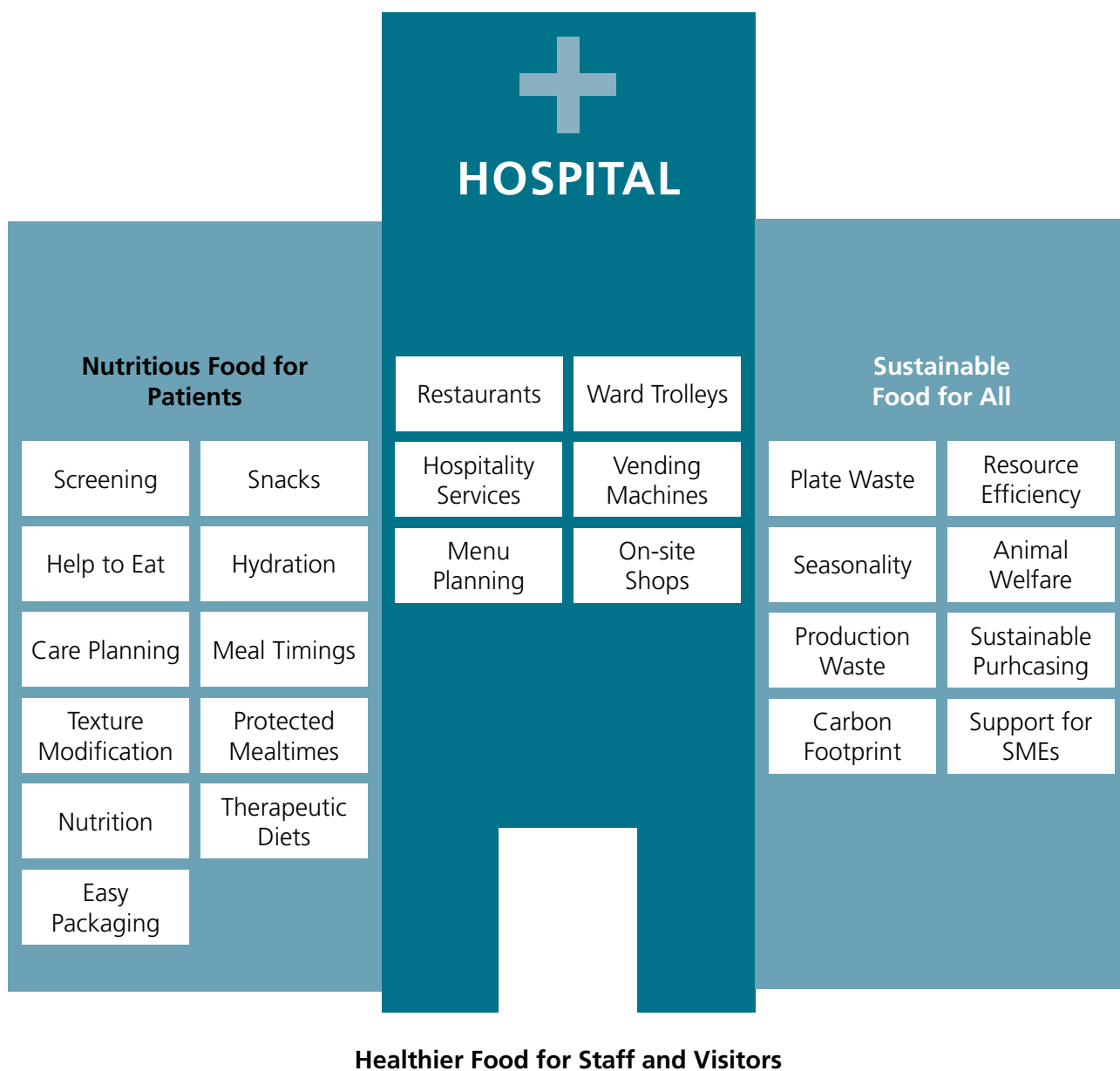
Since 2015 NHS Standard Contracts have included the recommendation for all NHS Hospitals to develop and maintain a food and drink strategy (8). A toolkit was produced to support the development of a food and drink strategy within each NHS Trust (Figure 1.2). The toolkit provides guidance regarding each of the key areas a food and drink strategy should address, which are as follows:

- 
- The nutrition and hydration needs of patients
  - Healthier eating for the whole hospital community, especially staff
  - Sustainable procurement of food and catering services.
-



Chapter 1 of the Digest; The Importance of Nutrition and Hydration, outlines evidence-based strategies to ensure optimal provision of nutrition and hydration in the healthcare setting. Healthier food for staff and visitors is covered in Chapter 5, and Chapter 4 looks more into the topic of sustainability.

**Figure 1.2: A Toolkit to Support the Development of a Hospital Food and Drink Strategy (30).**



## References

1. Department of Health and Social Care. Establishing food standards for NHS hospitals. <https://www.gov.uk/government/publications/establishing-food-standards-for-nhs-hospitals> [Accessed 11th April 2023]
2. NHS England. 10 Key Characteristics of 'Good Nutrition and Hydration Care'. <https://www.england.nhs.uk/commissioning/nut-hyd/10-key-characteristics/> [Accessed 25th May 2022]
3. British Dietetic Association. The Nutrition and Hydration Digest improving outcomes through food and beverage services, 2nd Edition. <https://www.bda.uk.com/uploads/assets/c24296fe-8b4d-4626-aeebb6cf2d92fccb/NutritionHydrationDigest.pdf> [Accessed 11th April 2023]
4. British Association for Parenteral and Enteral Nutrition. The 'MUST' Toolkit. <https://www.bapen.org.uk/screening-and-must/must/must-toolkit> [Accessed 11th April 2023]
5. Public Health England. Healthier and more sustainable catering. <https://www.gov.uk/government/publications/healthier-and-more-sustainable-catering-a-toolkit-for-serving-food-to-adults> [Accessed 11th April 2023]
6. Department for Environment, Food and Rural Affairs. The Government Buying Standards for Food and Catering Services (GBSF): updating the nutrition standards. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/802933/gbsf-nutrition-standards-consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/802933/gbsf-nutrition-standards-consultation.pdf) [Accessed 20th March 2023]
7. Department of Health. The Hospital Food Standards Panel's report on standards for food and drink in NHS hospitals. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/523049/Hospital\\_Food\\_Panel\\_May\\_2016.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/523049/Hospital_Food_Panel_May_2016.pdf) [Accessed 20th March 2023].
8. NHS England. NHS Standard Contract Service Conditions – Full Length. <https://www.england.nhs.uk/publication/nhs-standard-contract-service-conditions-full-length/> [Accessed 20th March 2023].

## Appendix 7: Report of the Independent Review of NHS Hospital Food, 2020

### Report of the Independent Review of NHS Hospital Food (1)

As introduced in the main body of Chapter 3, The report of the independent review of NHS hospital food was published in October 2020. The original release date of early 2020 was postponed due to the challenges faced by the NHS and the whole of the UK during the Covid-19 pandemic. The report covered eight recommendations for system level change, as follows:

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- Staff

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  - Nutrition and hydration

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  - Food safety

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  - Facilities

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  - Technology

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  - Sustainability

---

  - Enforcing standards

---

  - The way forward.

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Following on from the publication of the report, there have been several key areas of progress, including confirmation of an expert panel. The creation of an expert panel was one of the essential recommendations of the Review to drive change across NHS hospital catering.

Representation of the expert panel is outlined below:

## Expert Panel Roles and Responsibilities

Profession/Roles	Responsibilities
Dietetics (there is also an additional supplementary dietetic sub-group made up of other AHP's and professionals, such as allergy specialists)	<ul style="list-style-type: none"> <li>• Work in collaboration with other groups to develop dietetic appropriate menus and resources</li> <li>• Understand gaps in dietetic expertise at Trust level</li> <li>• Developing resources such as fact sheets, nutritional guides, and food service training materials for dietetic students</li> <li>• Sharing best practice around key areas in food service such as Mealtimes Matter, flexible food provision and good nutrition</li> </ul>
Food service/catering	<ul style="list-style-type: none"> <li>• Develop digital menus and recipe bank to enhance the patient experience</li> <li>• Identify new equipment that will benefit food production</li> </ul>
Medical	<ul style="list-style-type: none"> <li>• Focus on the 'last 9 yards'</li> </ul>
Nursing	<ul style="list-style-type: none"> <li>• Ask - what is best practice? How can we improve the patient experience?</li> <li>• Assess requirements for 24/7 food provision for staff</li> </ul>

Expert panel members from the above groups are all working within NHS Trusts. Each have different focus areas where they will channel their expertise, including:

- 
- Working with suppliers, for example to understand market trends and further understand shifts toward consumption of more plant-based protein
- 
- Net Carbon Zero, for example to enable continuing focus on minimising food waste as a primary goal and helping to contribute toward delivering a net zero NHS.
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As part of the ongoing work of the independent review, there have been 20 exemplar trusts chosen, a figure that is set to rise further as the work progresses. These trusts have been chosen to work with the expert panel, sharing their good practice and helping other local hospitals to move forward with their catering offer. Since the publication of the Independent Review, the Covid-19 pandemic presented challenges and has undoubtedly delayed progress. The Hospital Caterers Association (HCA) have published a report which further outlines the steps that have been taken, and more details on the way forward (2).

## References

1. Department of Health and Social Care. Report of the Independent Review of NHS Hospital Food. 2020. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/929234/independent-review-of-nhs-hospital-food-report.pdf) [Accessed 25th May 2022]
2. Hospital Caterers Association. The Hospital Food Review – “Making progress together”. <http://www.hospitalcaterers.org/hospital-food-review/> [Accessed 11th April 2023]

## Appendix 8: The Government Buying Standard for Food and Catering Services, 2021

### The Government Buying Standard (GBS) for Food and Catering Services (1)

The GBS outlines the standards required to procure sustainable food services, including areas such as:

- 
- Food produced to higher environmental standards
  - Animal welfare and ethical trading considerations
  - The impact catering services have on the environment.
- 

Nutritional standards are outlined as mandatory e.g., reducing salt and increasing fruit and vegetable consumption, or as best practice e.g., smaller sized savoury snacks and confectionery. The nutritional standards outlined within the current GBS were updated and published in August 2021, detailing some key changes, including increasing the percentage of products served within services which must meet the salt reduction targets, and some changes to wording within the document.

### References

1. Department for Environment, Food and Rural Affairs. The Government Buying Standards for Food and Catering Services (GBSF): updating the nutrition standards. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/802933/gbsf-nutrition-standards-consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/802933/gbsf-nutrition-standards-consultation.pdf) [Accessed 20th March 2023]

## Appendix 9: National Standards for Healthcare Food and Drink, 2022

### National Standards for Healthcare Food and Drink, 2022 (1)

As introduced in the main body of Chapter 3, the national standards cover four sections:

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1. Standards for all healthcare food and drink

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  2. Improving patient's food and drink

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  3. Improving retail, staff and visitor food and drink

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  4. Improving sustainable procurement and reducing food waste.

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NHS England will monitor progress through data collection, and organisations will be expected to report yearly on their compliance, and provide evidence based on the standards' maturity matrix (2).

Within sections 1 and 2 of the standards, the BDA Nutrition and Hydration Digest is listed as one of the standards to be met for food and drink within NHS hospitals. Organisations must show that they comply with the Digest to support their progress within the maturity matrix. The national standards signpost to a compliance assessment tool, which can be used to check against implementation of these standards.

## References

NHS England. National standards for healthcare food and drink. <https://www.england.nhs.uk/publication/national-standards-for-healthcare-food-and-drink/> [Accessed 4th April 2023]

NHS England. National standards for healthcare food and drink – The maturity matrix. <https://www.england.nhs.uk/long-read/national-standards-for-healthcare-food-and-drink-the-maturity-matrix/> [Accessed 4th April 2023]

## **Appendix 10: Legislation and Guidelines for Northern Ireland, Wales, and Scotland**

Additional information on legislation, guidelines, and standards for Northern Ireland, Scotland, and Wales

### Appendix 10.1

Promoting Good Nutrition (PGN), A Strategy for the Good Nutritional Care of Adults in all Care Settings in Northern Ireland 2011-2016 (1)

The Promoting Good Nutrition (PGN) strategy, which is focused on malnutrition, adopts, and translates the 10 Key Characteristics of Good Nutritional Care into a framework for action describing what good nutritional care looks like for each characteristic. The overall vision of the strategy is the prevention, identification, and management of malnutrition in all health and social care settings including the person's own home.

The strategy is based on a series of core principles. These include prevention of malnutrition and identifying risk, care planning that is person-centred and respects the equality and diversity of people, promotion of a food-first approach with direction to support effective nutritional intervention where food or food alone is not appropriate, and appreciation of the significant contribution of family, carers, and volunteers as well as the independent, community and voluntary sectors.

A regional implementation group was established by the Department of Health to develop and prioritise an action plan to realise the vision of the strategy. Each Northern Health and Social Care Trust (HSCT ) has a multidisciplinary nutrition steering group. Part of the remit of these groups is to ensure implementation and on-going adherence to the PGN strategy. The HSCT nutrition steering groups are currently chaired by the Directors of Nursing who provide reports both to their HSCT chief executive, the DH, and Chief Nursing Officer. HSCT Dietetic and catering departments work collaboratively to ensure patient hospital meals are analysed to ensure they meet the recommended standards and to code menus, as per local agreements to assist with patient selection.

One of the PGN task and finish groups developed a digital resource which aims to support social care workers to better understand what good nutrition is and how to support individuals who may be at risk of malnutrition and dehydration. This resource has more recently been updated, because of COVID-19, to support colleagues during the pandemic and it includes links to a dysphagia awareness training resource (2).



HSCT Dietetic managers meet regularly with Health and Social Care Board (HSCB) and Public Health Agency (PHA) Senior Pharmacy and AHP colleagues to co-design service provision within the clinical area of malnutrition. This has led to pharmaceutical clinical effectiveness. The two professions have recently facilitated a virtual stakeholder engagement event in advance of reviewing the oral nutrition chapter within the NI nutrition formulary (3).

The Regional Quality and Improvement Authority (RQIA), the statutory regulator for residential care homes uses both the PGN strategy and Public Health Agency guidance i.e., nutritional guidelines and menu checklist for residential and nursing homes to monitor practice within nursing and residential homes (4).

Updated minimum nutrition standards for catering in health and social care for staff and visitors were released in 2022 by PHA in collaboration with Health and Social Care, the Food Standards Agency and safefood (5). The aim of these standards is to make healthier food choices more available to staff and visitors in the health and social care setting.

## Appendix 10.2

More information on core standards for food and drink provision in health care settings in Scotland.

Healthcare Improvement Scotland (HIS) Food, Fluid and Nutritional Care Standards were first published in 2003 and updated in 2014 (6).

The purpose of HIS is to drive improvements that support the highest possible quality of care for the people of Scotland. There are six standards:

- 
- Policy and Strategy to ensure that each NHS board has a policy, and a strategic and co-ordinated approach, to nutritional care

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  - Assessment, screening, and care planning to ensure that all patients have a nutritional care assessment carried out and includes initial and ongoing screening for the risk of malnutrition, and that a person-centred care plan

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  - Planning and delivery of food and drink to ensure formal structures and processes are in place to plan the provision and delivery of food and drink in hospitals, in line with Food in Hospitals

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  - Provision of food and drink to patients in a way to minimise disruption to meals, ensure food provision meets specific dietary needs and increase patients' enjoyment

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  - Patient information and communication to ensure that patient views are sought and used to inform decisions made about the food, drink and nutritional care provided

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  - Education and training for staff to ensure that staff have the necessary knowledge

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These mandatory standards are monitored through the Excellence in Care Assurance Scheme (7). Health Boards are responsible for their implementation and are required to consider them under the clinical governance agenda.

The HIS standards are due for review. Monitoring of these mandatory standards is carried out by a peer reviewed self-assessment process, which should include an action plan to demonstrate how each health board would meet each specification. Action plans should then be submitted to Health Facilities Scotland (HFS) for approval.

HFS is a division of National Services Scotland and provides operational guidance, establishes professional and technical standards and best practice to NHS Scotland bodies on a range of healthcare facilities topics to improve health and well-being services. Working groups within HFS are taking forward various national action points related to food and drink provision in care settings in Scotland, including the development of a catering strategy which seeks to centralise catering provision for Scotland, a central national database of standard, nutritionally analysed recipes for use in NHS Scotland hospitals, and a National Catering Information System (NCIS). The need for a National Catering Information System (NCIS) was identified, with a requirement for improved ability to improve stock planning, management and control, production planning, purchasing and waste management, recipe costing, nutritional analysis and bedside electronic patient meal ordering and delivery.

Concerns about food security, food poverty, health and environmental consequences led to the Scottish Government publishing a national food and drink policy “Becoming a Good Food Nation” in 2014 (8). This policy set a new vision for Scotland: that by 2025 Scotland will be “a Good Food Nation”, where people from every walk of life take pride and pleasure in, and benefit from, the food they produce, buy, cook, serve, and eat each day.” It will place a duty on public authorities to:

- 
- Make a policy about food

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  - Have the food policy cover (where appropriate) the whole food system, including things like growing, harvesting, processing, marketing, selling, preparing, eating food, and disposing of the waste. It would also include how people access the best food for themselves and their families, and how food is managed in places like schools and hospitals

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  - Be clear about how they are going to measure progress

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  - Think about this food policy when making decisions

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  - Ask the public for their views when they are writing the policy

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  - Make the policy publicly available

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  - Look back at the policy every five years and update if needed

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  - Report about how well they are doing every two years.

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## Appendix 10.3

### The All Wales Catering and Nutrition Standards for Food and Fluid Provision for Hospital Inpatients (9)

To aid practical implementation of the standards, an 'All Wales' Menu Framework group operates to develop a suite of nutritionally analysed recipes that meet the standards, so that Health Boards can devise menus utilising the recipes from the framework. This is continually monitored and revised with new and revised recipes added at intervals following piloting and evaluation by an operational planning group. Other work that has come from the group are an All Wales approach to patient satisfaction with a survey of food services and an accredited nutrition and food skills module for ward based staff serving food to patients.

The hospital nutrition and catering framework encompasses the Nutrition Care pathway which states that "within 24 hours of admission to hospital all patients should be weighed and screened for risk of malnutrition using a validated nutritional screening tool" and details the pathway for the nutritional care throughout their hospital admission. The pathway is supported by the All Wales Food Record Chart and Fluid Chart with accompanying online training for nurses. An All Wales nutrition coordinators group led by nursing with dietetic and catering representation monitors the implementation of the nutrition care pathway and associated standards. These approaches to nutrition and hydration are encompassed within the NHS Wales Health and Care Standards which set out the Welsh Government's common framework of standards to support the NHS and partner organisations in providing effective, timely and quality services across all healthcare settings. Standard 2.5 relates to Nutrition and Hydration and guidance supports self-assessment of the range of nutritional care standards (10). In addition, a unique lead dietitian role has been established within the NHS Wales food procurement service and has achieved several positive outcomes in relation to nutritional quality and rationalisation of food procured for the NHS, as well as having an advisory role to support Health Boards.

Since the standards were mandated in 2012, there have been changes and challenges along the way which affect food procurement, such as the Covid 19 Pandemic and Brexit. These difficulties are ongoing; however, they have been successfully managed due to meetings and communication between the groups that were formed to ensure that the original framework was followed smoothly. These groups are:

- 
- Catering and Leadership Group – the managers and the leaders of the catering teams meet up quarterly to discuss topics, issues, and new products
-

- 
- All Wales Menu Framework Dietetic Group – dietitians from each Health Board in Wales meeting quarterly for discussions which are pertinent to their areas of expertise
  - All Wales Catering Group – this group consists of the cooks and staff who support in the kitchen, alongside dietitians. Recipes are developed and evaluated for patient suitability
  - All Wales Strategic Group – consists of a wide range of experts who are leads in their area and have an interest in the wider strategic plan on an All Wales basis.
- 

Over the past 4 years the Local Health Boards in Wales have procured electronic ordering system, allowing patients to order their meals at the bedside using modern technology which is directly linked to the kitchen.

## References

1. Department of Health, Social Services and Public Safety. Promoting Good Nutrition: A Strategy for good nutritional care for adults in all care settings in Northern Ireland 2011-2016. [https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/promoting-good-nutrition\\_0.pdf](https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/promoting-good-nutrition_0.pdf) [Accessed 11th April 2023]
2. Northern Ireland Social Care Council. Promoting Good Nutrition. <https://learningzone.niscc.info/learning-resources/90/promoting-good-nutrition> [Accessed 8th April 2023]
3. Northern Ireland Formulary. Guidance: Suggested 7 Steps to Appropriate Prescribing of Adult Oral Nutritional Supplements (ONS). <https://niformulary.hscni.net/formulary/9-0-nutrition-and-blood/9-4-oral-nutrition/> [Accessed 8th April 2023]
4. HSC Public Health Agency. Nutritional guidelines and menu checklist 2014 for residential and nursing homes. [https://www.publichealth.hscni.net/sites/default/files/Nutritional\\_guidlines\\_and\\_menu\\_checklist\\_march\\_2014.pdf](https://www.publichealth.hscni.net/sites/default/files/Nutritional_guidlines_and_menu_checklist_march_2014.pdf) [Accessed 8th April 2023]
5. Public Health Agency. Nutritional standards for catering in health and social care for staff and visitors. <https://www.publichealth.hscni.net/publications/nutritional-standards-catering-health-and-social-care-staff-and-visitors> [Accessed 8th April 2023]
6. Healthcare Improvement Scotland. Food, Fluid and Nutritional Care Standards. [https://www.healthcareimprovementscotland.org/our\\_work/standards\\_and\\_guidelines/stnds/nutritional\\_care\\_standards.aspx](https://www.healthcareimprovementscotland.org/our_work/standards_and_guidelines/stnds/nutritional_care_standards.aspx) [Accessed 11th April 2023]

7. Healthcare Improvement Scotland. Excellence in Care. Assuring and Improving Nursing and Midwifery Care in Scotland. [https://www.healthcareimprovementscotland.org/our-work/patient\\_safety/excellence\\_in\\_care.aspx](https://www.healthcareimprovementscotland.org/our-work/patient_safety/excellence_in_care.aspx) [Accessed 11th April 2023]
8. Scottish Government. Recipe for Success: Scotland's national food and drink policy, becoming a Good Food Nation. Available at: <https://www.gov.scot/publications/recipe-success-scotlands-national-food-drink-policy-becoming-good-food/> [Accessed 11th April 2023]
9. Welsh Government. All Wales Nutrition and Catering Standards for Food and Fluid Provision for Hospital Inpatients. <https://www.bapen.org.uk/pdfs/e-learning/WalesNutritionCateringStandardsHospitalInpatients.pdf> [Accessed 11th April 2023]
10. Welsh Government. Health and Care Standards and supporting Guidance. <http://www.wales.nhs.uk/governance-emanual/how-the-health-and-care-standards-are-st> [Accessed 11th April 2023)

## Appendix 11: Tolerances for the Nutrition Declaration on Foods Other than Food Supplements

### Tolerances for foods other than food supplements

Nutrient	Tolerance (includes uncertainty of measurement)
Carbohydrate Sugars Protein Fibre	<10 g per 100 g: $\pm 2$ g 10-40 g per 100 g: $\pm 20\%$ >40 g per 100 g: $\pm 8$ g
Fat	<10 g per 100 g: $\pm 1.5$ g 10-40 g per 100 g: $\pm 20\%$ >40 g per 100 g: $\pm 8$ g
Saturates Mono-unsaturates Polyunsaturates	<4 g per 100 g: $\pm 0.8$ g $\geq 4$ g per 100 g: $\pm 20\%$
Sodium	<0.5 g per 100 g: $\pm 0.15$ g $\geq 0.5$ g per 100 g: $\pm 20\%$
Salt	<1.25 g per 100 g $\pm 0.375$ g $\geq 1.25$ g per 100 g: $\pm 20\%$
Vitamins	+50% ** -35%
Minerals	+50% -35%

\*\*for vitamin C in liquids, higher upper tolerance values could be accepted

### References

1. European Commission Health and Consumer Directorate-General (EC). Guidance document for competent authorities for the control of compliance with EU legislation on Regulation (EU) No 1169/2011 with regard to the setting of tolerances for nutrient values declared on a label. <https://www.fsai.ie/getmedia/71c87819-77a7-4bf2-b741-2f11cf019c2d/eu-guidance-tolerances.pdf> [Accessed 20th March 2023]

## Appendix 12: Rounding Guidelines for the Nutrient Declaration in Nutrition Labelling of Foods

### Rounding guidelines for the nutrient declaration in nutrition labelling of foods

Nutritional element	Amount	Rounding
Energy		to nearest 1 kJ/kcal (no decimals)
Fat*, Carbohydrate *, Sugars*, Protein*, Fibre*, Polyols*, Starch*	≥10 g per 100 g or ml	to nearest 1 g (no decimals)
	<10 g and > 0.5 g per 100 g or ml	to nearest 0.1 g
	no detectable amounts are present or concentration is ≤ 0.5 g per 100 g or ml	"0 g" be declared
Saturates*, Mono-unsaturates* Polyunsaturates*	≥10 g per 100 g or ml	to nearest 1 g (no decimals)
	<10 and > 0.1 g per 100 g or ml	to nearest 0.1 g
	no detectable amounts are present or concentration is ≤ 0.1 g per 100 g or ml	"0 g" be declared
Sodium, not now declared but guide to values from analysis	≥1 g per 100 g or ml	to nearest 0.1 g
	<1 g and > 0.005 g per 100 g or ml	to nearest to nearest 0.01 g
	no detectable amounts are present or concentration is ≤ 0.005 g per 100 g or ml	0 g
Salt	≥1 g per 100 g or ml	to nearest 0.1 g
	<1 g and > 0.0125 g per 100 g or ml	to nearest 0.01 g
	no detectable amounts are present or concentration is ≤ 0.0125 g per 100 g or ml	"0 g" be declared
	Where there is no added salt but declared salt is >0.0125 the following statement shall be used underneath the nutrition table	The salt in this product is entirely from naturally occurring sodium

## Appendix 13: Compliance Assessment Tool

Standard	Key Performance Indicator (KPI)	Compliance (Y,N,N/A)	Examples of evidence	Comments	
Patient food and drink	<b>Food service dietitian input</b>	<p><b>Do you have access to a food service dietitian?</b></p> <ul style="list-style-type: none"> <li>- Each trust must assess how many posts, or what proportion of time spent on food and beverage services, are appropriate.</li> <li>- These posts should be responsible for overseeing patient, staff and visitor food and drink.</li> </ul>		Registered dietitian in post	
	<b>Menu planning</b>	<p><b>The process of menu planning was followed including: See Figure 9.1 and table 9.1</b></p> <ul style="list-style-type: none"> <li>- Multidisciplinary menu planning group</li> <li>- Assessment of patient demographics, clinical specialities, dietary needs</li> <li>- Consideration for national standards, budgetary or resource constraints and sustainability</li> <li>- Menu tastings</li> <li>- Menu capacity analysis</li> <li>- Planning draws on dietetic expertise and patient feedback</li> </ul>		<p>Existence of a menu planning working group, meeting minutes and/or project planner.</p> <p>Evidence must show involvement of Registered dietitian throughout the process.</p> <p>Patient satisfaction surveys and patient involvement</p>	
	<b>Standard menu structure</b>	<p><b>The standard menu structure should follow:</b></p> <ul style="list-style-type: none"> <li>- Early morning: drink</li> <li>- Breakfast</li> <li>- Mid-morning: drink + snack</li> <li>- Lunch: optional starter, main and pudding followed by a drink</li> <li>- Mid-afternoon: drink +/- snack</li> <li>- Dinner: optional starter, main and pudding followed by a drink</li> <li>- Evening: drink + snack</li> </ul> <p>Consideration given to the overall types of food and drink, the number and variety of choices offered and at which times of the day. There should be a minimum of 7 drinks and 2 snacks offered/available daily that are appropriate for the patient group and their dietary needs. See table 9.3</p>		<p>Standard menu</p> <p>Food and drink provision day overview</p>	



Patient food and drink	<b>Menu content</b>	<p><b>Demonstrates compliance with the food-based standards outlined in Appendix 1 - Qualitative Menu Assessment Checklist</b></p> <ul style="list-style-type: none"> <li>- Does the menu cycle reflect the needs of the patient group, including offering a variety of hot and cold meals at lunch and dinner and avoiding a soup and sandwich only offer.</li> <li>- At each main meal is there a higher energy choice, a healthier choice, an easy to chew choice and vegetarian or vegan choice available</li> <li>- Is there a menu(s) capable of catering for different therapeutic diets and religious or cultural diets? e.g. texture modified, renal suitable, allergen free, Halal, Kosher, Vegan</li> <li>- Is there an out of hours menu and process in place for cooking and delivering safe hot and cold meals out of regular service hours, this should include special diets e.g. allergen free, texture modified, vegan</li> </ul>		Completed Qualitative Menu Assessment Checklist	
	<b>Menu coding</b>	<p><b>Four key diets that should be identified on standard inpatient menus are:</b></p> <ol style="list-style-type: none"> <li>1. Healthier Eating</li> <li>2. Higher Energy</li> <li>3. Easy to Chew</li> <li>4. Vegetarian</li> </ol> <p>Other <b>optional</b> menu codes: Higher Protein, Vegan, Gluten Free, Renal Suitable</p>		Standard menu Food and drink provision day overview	

Patient food and drink	<p><b>Daily nutrition standards for adults</b></p> <p>All healthcare menus must meet the nutrition standards for both nutritionally well and nutritionally vulnerable patients.</p> <p>A completed menu capacity analysis according to the methodology described in chapter 11, demonstrating that all menus offered have the capacity to meet the daily nutritional standards for adults:  <b>Nutritionally well:</b> 1840-2772kcal, 56g protein, Nutritionally vulnerable: 1840-2772kcal, 79-92g protein</p> <p>It is recognised that the increased protein target for <b>nutritionally vulnerable</b> adults may require some product/recipe reformulation and/ or a review of current menus. It is therefore required that these changes be implemented within 18 months of the publication date of the Digest.</p>		Completed menu capacity analysis	
	<p><b>Minimum nutrition targets for specific menu</b></p> <p><b>Demonstrates that menus meet the minimum nutrition targets for specific menu components</b></p> <p><b>Complete meal nutrition targets (optional starter + main + dessert) for lunch &amp; supper meals (table 10.2)</b></p> <p>Nutritionally well: 500kcal, 15g protein, Nutritionally vulnerable: 800kcal, 27g protein</p> <p><b>Minimum nutrition targets for specific menu components (table 10.3)</b></p> <p>Starter soup (nourishing soup): 100kcal, 3g protein</p> <p>Main meal soup (fortified soup): 200kcal, 7g protein</p> <p>Main course: 300kcal, 10g protein</p> <p>Sandwich: 300kcal, 10g protein</p> <p>Salad: 300kcal, 10g protein</p> <p><b>Day parts model:</b></p> <p><b>(1) Breakfast targets:</b> Nutritionally well: 400kcal, 10g protein, Nutritionally vulnerable: 545kcal, 18g protein</p> <p><b>(2) Snack targets:</b> Nutritionally well: 150kcal, 2g protein, Nutritionally vulnerable: 300kcal, 7g protein</p>		Completed menu capacity analysis	

Staff and visitor food	<b>Food service dietitian input</b>	Nominated food service dietitian included in planning, implementation and monitoring of health and wellbeing strategies, programmes, policies and procedures in relation to staff and visitor catering		Nutrition Steering Groups Food & Drink strategy groups Contractor policy making In house wellbeing hubs and teams	
	<b>Menu planning</b>	Menu offers representing the demographics of the healthcare setting		Menus	
	<b>24/7 food provision for staff</b>	An out of hours menu or food offer for staff should contain both hot and cold food option which is appropriate to the demographic		Menus	
All	<b>Nutrition steering groups, leadership &amp; policies</b>	Organisations should have efficient nutrition steering groups that meet regularly and consist of various multidisciplinary members, with dietitians being an integral part of these groups. All of those involved in the decision making within health and care food service environments should have an awareness of the relevant standards and legislation, as well as the international, national, and local policies that influence these decisions. Organisations should have sufficient dietetic representation in food services to allow them to participate in, and/or lead on the development, monitoring and implementation of nutrition-related policies in this area.		Minutes from meetings	

Please note that these compliance points are unique to the 2023 version of the Digest. Other standards and checklists cover additional points that are not listed here, including but not limited to: the NHS Standard Contract, Healthier and More Sustainable Catering Nutrition Principles, Government Buying Standards for Food and Catering Services Nutrition Standards, Greener NHS, The National Standards for Healthcare Food and Drink, Regulation (EU) No 1169/2011, Food Information Regulations 2014 (SI 2014/1855), Calorie Labelling (Out of Home Sector) (England) Regulations 2021, Calorie Reduction: Guidelines for the Food Industry, Salt reduction: targets for 2024.

# Endorsements

The Nutrition & Hydration Digest brings a fundamental equality and necessity to healthcare food and drink. Throughout the Independent NHS Food Review and National Food Standards for Food and Drink, we based our intelligence around the expertise of our dietetic colleagues through the Digest. It is vital that we continue to refresh our publications to understand the everchanging challenges in healthcare catering, so it is a privilege to support and endorse the latest edition.

**Philip Shelley, Chair NHS Food Review, Senior Operational & Policy Manager, NHS England.**

If we want patients to leave hospital better fed, or as well-fed, as when they came in, we need expert help on menus. Diet is an individual thing, taking account of a patient's current health, their medical problems, their cultural or religious beliefs, their allergies and likes and dislikes. Hospitals need expert help from dietitians, and not least from the excellent British Dietetic Association's updated Nutrition and Hydration Digest.

**Dame Prue Leith, Advisor to the 2022 Hospital Food Report.**

The Older People Specialist Group (OPSG) of the BDA are delighted to have supported this revised version of the Nutrition and Hydration Digest. We particularly welcome the emphasis made to the specific needs of older adults, who represent a significant proportion of those admitted to hospital. Delivering nutritious and tasty food and drink in hospital can be challenging and complex. This document will be an asset to the hospital workforce so that they can deliver this crucial food service and help make sure older adults meet their needs, recover well and importantly enjoy what they are eating and drinking.

**Vittoria Romano, Chair of the BDA's Older People Specialist Group.**

The Hospital Caterers Association congratulates the BDA's Food Specialist Group on the publication of their third edition of the Nutrition and Hydration Digest. Dietitians join with the catering teams and nursing (the National Nutrition Nurses' Group) to form the 'Power of Three' to help improve nutritional outcomes for all patients. As National Chair of the HCA, I am pleased to endorse this important publication, which forms the backbone of NHS Catering.

**Brian Robb MIH, National Chair Director, Hospital Caterers Association.**

# Acknowledgements

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BDA Mental Health Specialist Group	National Hydration Network
BDA Obesity Specialist Group	NHS Supply Chain
BDA Older People Specialist Group	British Association for Parenteral and Enteral Nutrition (BAPEN)
BDA Oncology Specialist Group	Royal College of Nursing
BDA Paediatric Specialist Group	The Vegan Society
BDA Renal Nutrition Specialist Group	

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