

# A practical guide for dietitians

## Other sources of Vitamin D

A more sustainable diet does not necessarily have to exclude red meat or dairy altogether – therefore meat and dairy nutrient intakes need not be compromised.

This information sheet provides some useful and practical guidance with regard to plant food sources of nutrients associated with meat and dairy consumption.

**Vitamin D is important for bone development and strength as well as dental and immune health, steroid hormone production, muscle function, regulation and absorption of calcium.<sup>1,2</sup>**

### How much do we need?

Sunlight exposure between March and September is our primary source of vitamin D. Food sources become more important during the months between October and March.

	Recommended daily intakes mcg Vit D	Who needs to up their intakes?
All age groups	10	<ul style="list-style-type: none"><li>• Under 5's.</li><li>• Individuals with limited outdoor exposure e.g. institutionalised individuals and the elderly.</li><li>• Dark skinned individuals (natural melanin in the skin blocks vitamin D production. Especially South Asian women in the UK.</li><li>• Those who cover up their skin.</li><li>• Most of the population during the winter months.</li></ul>

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### Top tips for good Vitamin D status

- Reducing red meat and dairy (which in the UK does not contain vitamin D) will have little if any impact on vitamin D status.
- Very few foods provide vitamin D naturally: oil-rich fish, eggs and cod liver oil are rich sources whilst meat, liver and fortified margarines, plant-based drinks and yogurt alternatives are good sources.
- Exposure of the skin to sunlight during the months of March and September for 10-20 minutes is the best way to top up vitamin D levels.
- The government recommends 10mcg vitamin D dietary supplements for:
  - Under 5's.
  - Individuals with limited outdoor exposure e.g. institutionalised individuals and the elderly.
  - Dark skinned individuals (natural melanin in the skin blocks vitamin D production). Especially South Asian women in the UK.
  - Those who cover up their skin.
  - During the months of October through to March (when we cannot rely on sunlight for vitamin D production) all individuals should consider a supplement.

### Plant food sources of Vitamin D<sup>3</sup>

Food	Serving size household	Serving size g	Vit D mcg /serving
A few fortified breakfast cereals (cornflakes, bran flakes, malted flakes, rice cereal, honey loops and Ready brek®)	Small bowl	30g	1.2-2.5
Fortified margarines	Spread on 2 slices of toast	20g	1.5
Egg, boiled	1 large	68g	2.2
Fortified plant-based alternatives to milk <sup>4</sup>	A glass	200ml	1.5
Fortified plain soya alternative to yogurt <sup>5</sup>	Average serve	150g	1.1

### Animal protein comparisons

140g oily fish = 11-22.5mcg Vitamin D

1tsp cod liver oil = 6.3mcg Vitamin D

## References

1. EFSA. EU Register on Nutrition and Health Claims [Internet]. 2016 [cited 9/14/2018]. Available from: [http://ec.europa.eu/food/safety/labelling\\_nutrition/claims/register/public/?event=search](http://ec.europa.eu/food/safety/labelling_nutrition/claims/register/public/?event=search)
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3. Forestfield Software Ltd.. Diet Plan7. McCance & Widdowson 7th summary edition of the composition of foods plus the revised composition of food integrated data set (CoFids). Patent Diet Plan7. 2018.
4. Alpro. Soya drink nutritionals: the average of the 7 calcium fortified plain soya drinks on the market to date excluding 'specialised' variants (formulated to meet the nutrition needs of 1-3 year olds (n=1), 'superfortified' with protein, fibre or calcium (n=3) and 12 organic drink (which cannot be fortified). Alpro; 2018.
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