

A practical guide for dietitians

Other sources of iodine

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.

Iodine is a major component of thyroid hormones and is especially important during pregnancy for the developing brain and neurological system.^{1,2}

How much do we need?

	Recommended daily intakes mcg iodine		Who needs to up their intakes?
	UK ³	WHO ⁴	
0-3 months	50	90	Pregnant and lactating women and the very young
4-12 months	60	90	
1-3 years	70	90	
4-5 years	100	90	
5-6 years	100	120	
7-10 years	110	120	
11-12 years	130	120	
13-14 years	130	150	
15 years +	140	150	
Pregnancy	-	250	
Lactation	-	250	

Top tips for meeting iodine needs

- A sustainable diet which includes fish, some dairy products, and iodine-fortified plant-based alternatives should provide adequate iodine.
- Individuals who choose to remove dairy from their diet will need to ensure that milk is replaced with an iodine-fortified plant-based alternative and adequate consumption of fish and / or seaweed. However, levels in fish and seaweed are extremely variable and care



should be taken to consume seaweed in moderation (4-5g) as they may contain toxic levels.

- Individuals avoiding both dairy and fish from their diet should take an iodine supplement (not from seaweed) of no more than 150mcg per day.
- Seaweed is a concentrated source of iodine, but it can provide excessive amounts (particularly so in the case of brown seaweed such as kelp) and therefore eating seaweed more than once a week is not recommended, especially during pregnancy.
- Opting for an iodine-enriched plant-based drink: Alpro Soya Original Chilled, M&S Oat Drink and Alpro Growing Up Drink for 1-3 year olds.

Plant food sources of iodine⁵

Food	Serving size household	Serving size g	Iodine mcg /serving
Seaweed – Nori or Kemp	Average	5g	50 – 3,800
Iodine fortified plant-based alternatives to milk**	A glass	200ml	45-58

Animal protein comparisons:

140g pollock = 136mcg

75g crabmeat = 163mcg

Useful links

Click [here](#) to access the One Blue Dot Nutritional Considerations: Iodine document which summarises the evidence around protein intakes in the UK.

References

1. Fuge R, Johnson C. Iodine and human health, the role of environmental geochemistry and diet, a review. Applied Geochemistry. 2015;63:282-302.
2. Velasco I, Bath S, Rayman M. Iodine as Essential Nutrient during the First 1000 Days of Life. Nutrients. 2018;;10.
3. PHE. Government recommendations for energy and nutrients for males and females aged 1 – 18 years and 19+ years [Internet]. 2016 [cited Aug 2018]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/618167/government_dietary_recommendations.pdf



4. WHO-UNICEF. Assessment of iodine deficiency disorders and monitoring their elimination. Third Edition [Internet]. 2008 [cited 9/25/2018]. Available from: http://www.who.int/nutrition/publications/micronutrients/iodine_deficiency/9789241595827/en/
5. 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.

