A practical guide for dietitians

Alternative sources of zinc

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.

Zinc is important for immunity, fertility and reproduction, cognitive development, DNA synthesis, wound healing and bone metabolism.¹

How much do we need?

	DRV for zinc mg ² Male Female		Who needs to up their intakes?		
	Male				
2-3 year olds	5.0		Teenage boys and especially girls		
4-6 year olds	6.5				
7-10 year olds	7.0				
-			and women aged 19-64 years.		
11-14 year olds	9.0				
15 years and older	9.5	7.0			

Top tips for meeting zinc needs

- A sustainable healthy balanced diet which includes recommended intakes of red meat (no more than 70g per day) and / or Quorn[™] (mycoprotein) meat replacements should provide adequate zinc.
- Quorn[™] (mycoprotein), All-bran type breakfast cereal, wheatgerm or wholemeal bread, beans, nuts, seeds especially sesame, pumpkin, chia and hemp seeds as well as flax/ linseeds.
 - Breakfast time: All-bran fortified type cereal served with a sprinkle of nuts and seeds or wholemeal/wheatgerm toast spread with peanut butter.
 - Lunch: opt for wheatgerm or wholemeal bread or rolls, bean soup sprinkled with seeds, sandwich fillings of peanut butter or humous, sprinkle nuts and seeds on salads.
 - Dinner: replace meat with Quorn[™] (mycoprotein) or replace half the meat with soya beans, kidney beans, chickpeas, nuts and / or seeds.
 - Snacks and drinks: nuts and seeds on their own or sprinkled on a plant-based alternative to yogurt, a small pot of humous with wholemeal pitta bread.

Plant food sources of zinc³

Food	Serving size household	Serving size g	Zinc mg /serving
Quorn™ (mycoprotein) ⁴	1/5 th of 500g pack	100g	7
Tofu, firm, steamed or fried	~1/4 block	75g	1.5
Sundried tomatoes, in oil	3-5	35g	0.3
All-bran type cereal	Small bowl	30g	1.5
Wheatgerm bread	2 slices	80g	1.8
Wholemeal bread	2 slices	80g	1.3
Soya beans, boiled	4 tbsp	100g	0.9
Lentils, green/brown, boiled	4 tbsp	100g	1.4
Lentils, split red, boiled	4 tbsp	100g	1
Red kidney beans, canned and drained	4 tbsp	100g	0.7
Chickpeas, canned and drained	4 tbsp	100g	0.8
Cashew nuts	Handful	30g	1.7
Brazil nuts	3-6	30g	1.3
Almonds	Handful	30g	1.0
Pecans	Handful	30g	1.6
Peanuts	Handful	30g	1.1
Peanut butter - smooth	Thickly spread on 2 slices	40g	1.2
Soya nuts (roasted edamame beans) ⁵	Small handful	25g	1.8
Tahini paste	1 heaped tsp	19g	1.0
Hummus	2 tbsp	60g	0.8
Hemp seeds ⁵	1 tbsp	10g	1.0
Pumpkin seeds	1 tbsp	10g	0.7
Flax seeds / linseeds ⁵	1 tbsp	10g	0.5
Sesame seeds	1 tbsp	7g	0.4
Chia seeds ⁵	1 tbsp	10g	0.4

Animal protein comparisons:

70g serving of beef = 5.3 - 6.7mg zinc 140g crab = 9.2mg zinc

Useful links

Click <u>here</u> to access the One Blue Dot Nutritional Considerations: Protein document which summarises the evidence around protein intakes in the UK.

References

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- 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
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