

A practical guide for dietitians

Other sources of selenium

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.

Selenium is an antioxidant and is involved with the normal function of the immune and thyroid system and sperm production.¹

How much do we need?

	DRV for selenium mg ²		Who needs to up their intakes?
	Male	Female	
2-3 year olds	15		The majority of the population, especially aged 11 years onwards.
4-6 year olds	20		
7-10 year olds	30		
11-14 year olds	45		
15-18 year olds	70	60	
19 years and over	75	60	

Top tips for meeting selenium needs

- 5-6 Brazil nuts daily will provide 64-76mcg selenium daily which will meet recommendations for older teens and adults. Whilst 2-4 will meet the needs of the younger age groups.
- Brazil nuts (an excellent source), brown rice, pasta, wheatgerm or seeded bread, baked beans, green and brown lentils, kidney beans, cashew nuts and pecans and sunflower, chia and flax/linseeds.
 - Breakfast time: Sprinkle of seeds or nuts on to breakfast cereals, wheatgerm or seeded bread for toast.
 - Lunch: opt for wheatgerm or seeded bread or rolls, kidney bean or lentil soup sprinkled with seeds, sprinkle nuts and seeds on salads.

- Dinner: Add kidney beans, chickpeas, nuts and / or seeds to any of your main meals.
- Snacks and drinks: 5-6 Brazil nuts.

Plant food sources of selenium³

Food	Serving size household	Serving size g	Selenium mcg /serving
Rice – basmati white boiled	One serve	180g	9
Rice – brown - boiled	Average	180g	7.2
Pasta, white boiled	One serve	125g	10
Wheatgerm or seeded bread	2 slices	80g	10
Green and brown lentils, boiled	4 tbsp	100g	40
Kidney beans, canned and drained	4 tbsp	100g	6
Baked beans, canned in tomato sauce	Small can	200g	6
Mushrooms, fried	4 tbsp	80g	19
Brazil nuts	3-6	30g	76
Cashew nuts	handful	30g	8.7
Pecans	handful	30g	3.6
Flaxseeds / linseeds ⁴	1 tbsp	10g	2.6
Sunflower seeds	1 tbsp	10g	5.3
Chia seeds ⁴	1 tbsp	7g	3.9

Animal protein comparisons

140g mackerel = 8.4mcg selenium

70g serving of turkey = 11.9 – 13.3mcg selenium

The selenium content of foods can vary significantly according to the content of the soil, farming practice, fish species & season.



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
2. 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
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. USDA Agricultural Research Service NDL. USDA National Nutrient Database for Standard Reference, Release 28 [Internet]. 2018 [cited Apr 2018]. Available from: <https://ndb.nal.usda.gov/ndb/>