# A practical guide for dietitians

### Other sources of iron

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.

# Iron is important to help prevent tiredness, support your immune system and especially important for brain development.<sup>1</sup>

### Did you know?

- Eating more sustainably, as per the Eatwell guide where red meat is reduced to no more than 70g per person per day, will not compromise current iron status.<sup>2</sup>
- Iron deficiency anaemia (low haemoglobin levels) is no greater in vegetarians and vegans compared to meat eaters.
- Although iron stores (ferritin levels) in vegetarians and vegans is significantly lower when compared to meat eaters, they are still within the normal range.
- The body increases dietary iron absorption when status is low and / or at times of higher demand e.g. pregnancy.
- Iron from high phytate plant sources, is less bioavailable, but over time, the body optimises iron utilisation and reduces excretion.
- Phytates iron inhibitory factors can be reduced by including a vitamin C food or drink alongside plant iron sources. Additionally, food processes such as soaking, sprouting, high temperature treatments (e.g. canning), milling and yeast leavening helps to reduce phytate content of food and therefore improve plant iron absorption.

#### How much do we need?

	DRV for iron mg <sup>3</sup>		Who poods to up their intekes?			
	Male	Female	Who needs to up their intakes?			
2-3 year olds	6.9					
4-6 year olds	6.1					
7-10 year olds	8.7		Teenage girls.			
11-18 year olds	11.3	14.8	Adults – especially women of child-bearing age.			
19 – 64 year olds	8.7	14.8 <50y & 8.7 >50y	Over 75 year olds			
65 year and older*	8.7					

#### Top tips for optimising iron status

- Include iron rich plant foods with all meals and snacks.
- Include a source of vitamin C with meals in the form of salad, fruit or fruit juice.
- Include starchy root vegetables, tubers or fruit with your meals lower in phytates but high in fibre.
- Use canned beans and pulses and rinse well or soak dried beans and discard water.
- Avoid tea and coffee around meal times (around 2 hours either side).
- Iron or zinc dietary supplements should only be recommended to individuals who have iron deficient anaemia or at high risk and dietary iron intakes will not suffice.
- How to add an iron boost to meals and snack times:
  - Breakfast time: fortified breakfast cereals, wheatgerm toast, beans on toast. Serve with a small glass of fruit juice.
  - Lunch: falafel, humous, bean salad, jacket potato and baked beans, peanut butter on toast. Accompany your lunch with lots of salads or a piece of fruit.
  - Dinner: Add beans, nuts and/or seeds to your main meal, serve with a salad or glass of fruit juice and some green vegetables like kale, peas or baby spinach.
  - o Snacks: nuts, seeds and dried fruit like apricots are a great choice.

Food	Serving size household	Serving size g	Iron mg /serving
Fortified breakfast cereals	Small bowl	30g	2.8 - 4.4
Porridge oats	2-3 tbsp	30g	1.1
Wheatgerm bread	2 slices	80g	2.3
Wholemeal bread	2 slices	80g	1.9
Soya beans, boiled and drained	4 tbsp	100g	3
Baked beans, canned in tomato sauce	Small can	200g	2.8
Red lentils, boiled	4 tbsp	100g	2.4
Red kidney beans, canned and drained	4 tbsp	100g	2
Butter beans, canned and drained	4 tbsp	100g	1.5
Chickpeas, canned and drained	4 tbsp	100g	1.5
Soya bean nuts (roasted edamame beans) <sup>5</sup>	Small handful	25g	1.0
Kale, boiled and drained	4 heaped tbsp	80g	1.6
Baby spinach	Small cereal bowl	80g	1.5
Peas, frozen and boiled	3 heaped tbsp	80g	1.5

#### Plant food sources of iron<sup>4</sup>

#### One Blue Dot Other Sources: Iron

Dried figs	2-3	30g	1.2
Raisins	1 heaped tbsp	30g	1.1
Dried apricots	3-4	30g	1
Prunes, dried	3-4	30g	0.8
Prunes, canned	6	80g	1.8
Cashew nuts	Handful	30g	1.9
Hazelnuts	Handful	30g	1
Pistachios / almonds / walnuts	Handful	30g	0.9
Peanuts	Handful	30g	0.6
Peanut butter - smooth	Thickly spread on 2 slices	40g	0.8
Tahini paste	1 heaped tsp	19g	2.0
Sesame seeds	1 tbsp	7g	0.7
Pumpkin seeds	1 tbsp	10g	1.0
Hummus	2 tbsp	60g	1.1
Falafel	2	60g	1.7

### Animal protein comparisons:

70g serving of beef = 2-2.5mg iron 70g serving of lamb = 1.3 - 1.8mg iron Large egg = 1.3mg iron

### **Useful links**

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

### References

- 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
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