

Iron

Why is iron important?

Iron deficiency is the most common nutrient deficiency in the world¹ so it is important for everyone to know which plant-based foods are the best sources of iron.

Our bodies use iron to make haemoglobin in red blood cells, which carry oxygen in our blood. Iron is also used to make myoglobin, which stores oxygen in our muscle cells. Iron is also part of many important enzymes, which are substances that speed up chemical reactions. If your body is low in iron, you may become tired and you could develop iron-deficiency anaemia.

How much iron do you need?

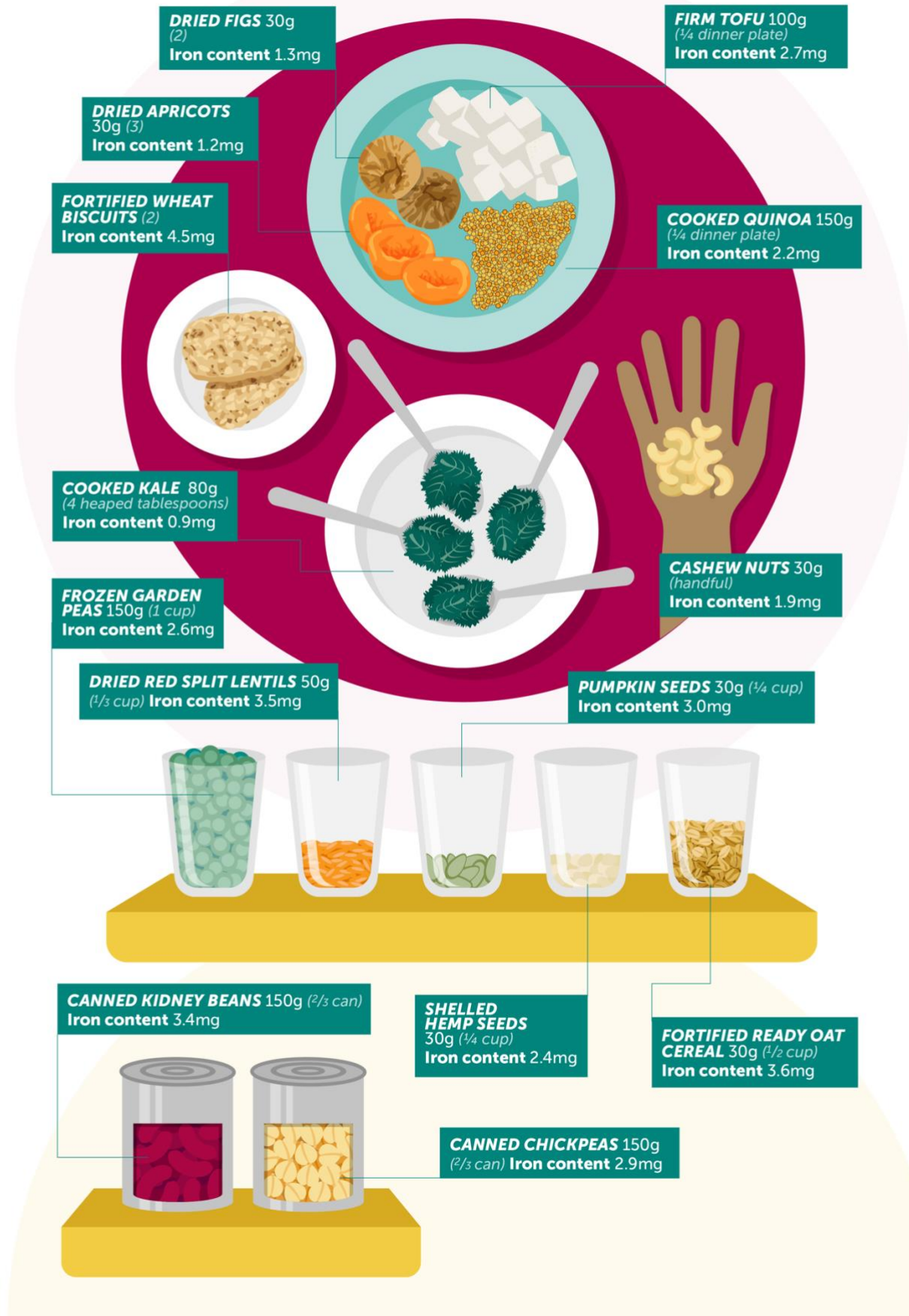
In the UK, the following daily iron intakes are recommended²:

Age Group*	Recommended daily intake (mg)	
0–3 months	1.7	
4–6 months	4.3	
7–12 months	7.8	
1–3 years	6.9	
4–6 years	6.1	
7–10 years	8.7	
11–18 years	Non-menstruating 11.3	Menstruating 14.8
Adults	Non-menstruating 8.7	Menstruating 14.8

*Please note that this information sheet is aimed at adults. Guidelines about pregnancy, breastfeeding and childhood are outlined in our information about different [life stages](#) available at www.vegansociety.com/nutrition.

IRON

MEAL PLANNING TIP: choose iron-rich foods throughout the day



How can you get enough iron?

You can get all the iron you need from a well-planned vegan diet because there are lots of plant foods containing reliable sources of non haem heme iron, such as leafy greens and kidney beans.^{3,4} More examples are provided on page two (see infographic).

Routine iron supplementation is not recommended for people following a vegan diet because plenty of iron-rich foods are available.

Iron absorption

Lots of factors affect the amount of iron your body absorbs from your diet. The most important factor is your body's need for iron: more is absorbed when you are short of iron and less is absorbed when your stores are full.⁵

Some factors can make it difficult for your body to absorb iron. Tea, coffee and a component of our diets called phytates can all reduce iron absorption. Some people find it helpful to avoid drinking tea or coffee with meals and for at least an hour before or after.

By contrast, vitamin C is an essential nutrient that can increase iron absorption. Luckily, foods rich in vitamin C are abundant in vegan diets, including bell peppers, broccoli, cabbage, Brussels sprouts, kiwi fruits, oranges, strawberries, pineapples, grapefruits and orange juice. Here are some ways that you can combine these foods with iron sources at meal times:

- serve a small glass of orange juice alongside fortified wheat biscuits topped with shelled hemp seeds and raisins to help with non-haem iron absorption
- add bell peppers to a houmous and mixed bean wrap.
- add pineapple to a lentil curry.

Using cast iron pans may also be helpful because a small amount of iron may be transferred to food during cooking.⁶

Iron tips to take away

- Ensure that you choose iron-rich foods throughout the day.
- At meal times, boost iron absorption by including a good source of vitamin C.
- If you consume tea and coffee, drink outside of meal times.

Further information

You might be interested to check out the following webpages at www.vegansociety.com:

- [Nutrition overview](#)
- [Life stages](#), including pregnancy, breastfeeding and different age groups

References

1. World Health Organization. *Micronutrient deficiencies*; 2016
www.who.int/nutrition/topics/ida/en/ (accessed 05 October 2023)
2. Committee on Medical Aspects of Food And Nutrition. *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom* London: HMSO; 1991
3. Public Health England. *Composition of foods integrated dataset*; 2015
www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid (accessed 05 October 2023)
4. United States Department of Agriculture. *FoodData Central* <https://fdc.nal.usda.gov/> (accessed 05 October 2023)
5. Scientific Advisory Committee on Nutrition. *Iron and Health*
www.gov.uk/government/uploads/system/uploads/attachment_data/file/339309/SACN_Iron_and_Health_Report.pdf (accessed 05 October 2023)
6. Quintaes KD, Amaya-Farfan J, Tomazini FM, Morgano MA, de Almeyda Hajisa NM & Neto JT. Mineral Migration and Influence of Meal Preparation in Iron Cookware on the Iron Nutritional Status of Vegetarian Students. *Ecology of Food and Nutrition* 2007;46:125-141