

GETTING ENOUGH IRON IS A CHALLENGE FOR WOMEN



40% AUSTRALIAN WOMEN AGED BETWEEN 14 AND 50 YEARS HAVE INADEQUATE INTAKES OF DIETARY IRON.



The **estimated average requirement (EAR)** for iron, used to estimate the prevalence of inadequate intakes within a population group, is 8mg per day for females aged 14 to 50 years.

While the **recommended dietary intake (RDI)**, used to evaluate whether iron intake in an individual's diet is adequate, is 15mg and 18mg per day for females aged 14-18 years and 19-50 years, respectively.

Available estimates suggest about one in five women of childbearing age suffer from some form of iron deficiency. The prevalence of iron deficiency is more common in women who are pregnant or breastfeeding, have heavy periods, or don't eat much meat. Low iron stores can affect mental and physical wellbeing.

Iron-rich food sources – bioavailability is key

Although cereals make the greatest contribution to total iron intake, beef and lamb are the most bioavailable sources of dietary iron in the Australian diet.

Major contributors of dietary iron include ready-to-eat breakfast cereals, many of which are fortified with iron (17%), bread (10%) and cereal-based products such as pizza, cakes, and biscuits (16%). Beef and lamb's contribution is 12%.

Absorption of iron is about 18% from omnivore diets compared to about 10% from a vegetarian diet. To compensate for the lower bioavailability of iron from plant foods, higher dietary intakes are recommended for people following a vegetarian or vegan diet.

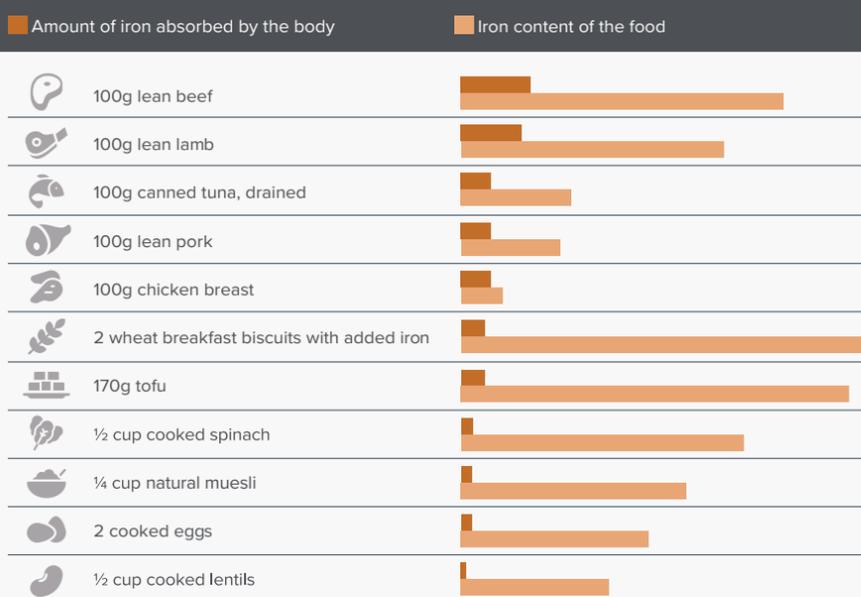
Several studies have shown that consumption of foods containing haem iron, including meat, poultry and fish, are the main dietary predictors of iron status. The role of meat, poultry and fish as sources of dietary iron are particularly important in women on energy restricted diets.

Knowledge and consumption – gaps vs dietary guidelines

Consumption of red meat by Australian women usually occurs in a home-prepared evening meal, typically three to four times a week. The average per capita consumption of red meat in women is below amounts recommended in the *Australian Dietary Guidelines* (50g vs. 65g per day, cooked weight, respectively).

There is some evidence that improving nutrition knowledge amongst young women, which is generally low to moderate, may help to improve not only dietary iron intake but also intakes of zinc, omega-3 and vitamin B12.

Sources of iron



Iron-rich food sources

This visual shows how more iron is absorbed from meat, fish and poultry than iron-fortified breakfast cereals and spinach despite having lower amounts of total iron because they contain haem iron.

- About 25% of haem iron is absorbed by the body compared to 5 to 15% from non-haem iron.
- The redder the meat, the higher the iron content. The proportion of haem iron in beef and lamb is approximately 60%, 40% in pork, 30% in chicken and 25% in fish.

Iron-rich, healthy meal ideas

- Amounts of red meat recommended in the *Australian Dietary Guidelines* can be eaten across three to four healthy, balanced meals a week.
- It is important to suggest a variety of different meals with portion sizes ranging from 100 to 200g raw weight per serving (equivalent to 70g to 160g cooked weight).
- For vegetarian options, include foods that provide around 25mg of vitamin C to assist with the absorption of non-haem iron.
- Combining a plant-based source of iron (such as tofu, spinach, or grains) with a source of vitamin C (such as berries, oranges, tomatoes, or broccoli) can help optimise the absorption of non-haem iron.

HOW TO ORDER FREE RESOURCES

Meat & Livestock Australia's nutrition resources provide practical tips for planning and serving healthy, balanced meals. These patient-friendly resources include portion guidance for meeting iron, protein and carbohydrate needs for different dietary requirements and life stages.

WHO IS MLA?

Meat & Livestock Australia (MLA) is an industry owned Rural Research and Development Corporation that delivers marketing, research and development services to Australia's red meat and livestock industry. Our activities in nutrition research and communications aim to support the consumption of Australian red meat in healthy, balanced meals.



For a full list of references and more information, visit www.mlahealthymeals.com.au