

# Iron

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**T**he World Health Organization estimates that 80 per cent of the global population may not get enough iron, making iron deficiency the number 1 nutritional disorder. Is your iron knowledge a little rusty? Here's what you need to know about this important nutrient.

## 1 Iron is an essential mineral in the diet.

It's a vital component of all blood cells, and it helps carry oxygen to vital organs. A lack of iron can cause iron-deficiency anemia, which is characterized by weakness, irritability and decreased energy. Even a mild iron deficiency can affect work performance and learning ability and lower resistance to infections.

## 2 Women, men and children all need different amounts of iron.

Iron is an important mineral for everyone, but it is especially important for pregnant women and babies to ensure infant growth and development. Men need less iron than women since they store more of it and women lose iron through menstruation.

## 3 Vegetarians need more iron than nonvegetarians.

There are two types of iron: heme iron, found in meat, fish and poultry; and nonheme iron, from vegetables, fruit and grains. The body can absorb as much as 30 per cent of the iron from heme sources but only about five per cent of nonheme iron.

## 4 Eating spinach may hinder iron absorption.

Even though spinach, legumes and pasta are good sources of nonheme iron, these foods contain compounds

called phytates and oxalates, which hinder the absorption of that iron. However, you can always boost absorption by adding a food that's rich in vitamin C – for example, strawberries, oranges or peppers – to the iron-rich foods.

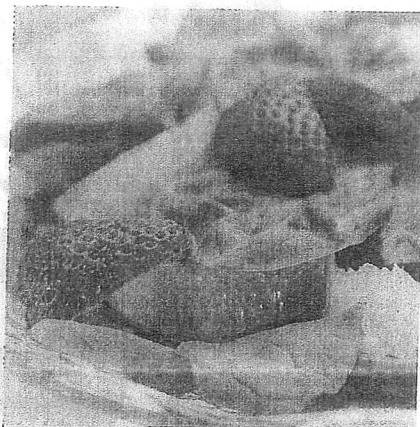
There are other ways to boost iron absorption, too; for example, mixing a food that's a good source of heme iron with one that's a nonheme iron source. (The heme iron helps the body absorb the nonheme iron.) So meat and potatoes are a great combination.

Tea, coffee and soy also decrease iron absorption from nonheme foods. So it might be a good idea to drink your latte separately from your meal.

## 5 Since an excess of iron can be harmful, take iron supplements only if your doctor or dietitian recommends them.

The most common iron supplements are iron salts such as ferrous fumarate and ferrous gluconate. Check the label for the amount of elemental iron; this number reflects the amount of iron that's available for absorption, says Estelle Wolf, a pharmacist in Thornhill, Ont.

Since iron supplements may cause unpleasant side-effects, such as constipation and nausea, Wolf suggests taking the supplement with food, at various times of the day, or starting with half of the recommended dose and gradually working up to the full amount. If these strategies don't help, she suggests trying iron polysaccharide supplements, which are more expensive but, because they've been chelated (bound together) with complex carbohydrates, they're easier to digest. Check with your pharmacist to ensure that you're not exceeding recommended doses when you add supplements to your multivitamin. ●



## How much iron is in your food?

Food	Iron (mg)
<b>HEME</b>	
Beef liver, pan-fried (75 g)	4.6
Beef sirloin steak, broiled (75 g)	2.3
Shrimp, pan-fried (75 g)	2.3
Dark chicken meat, roasted (75 g)	1.0
White chicken meat, roasted (75 g)	0.8
Pork chop, broiled (75 g)	0.7
Atlantic salmon, poached (75 g)	0.3

<b>NONHEME</b>	
Bran flake cereal (125 mL)	4.0
Spinach, boiled (125 mL)	3.4
Oatmeal, plain (175 mL)	3.1
Potato with skin, baked (1 medium)	2.8
Red kidney beans, canned (125 mL)	2.8
Spaghetti, cooked (125 mL)	1.0
Raisins (60 mL)	0.7

(While it appears that spinach has more iron than steak, remember that less of the iron from spinach is absorbed.)

## Dietary Allowances

### Recommended Dietary Allowances

AGE/STAGE	MALE (mg/day)	FEMALE (mg/day)
Infant 7–12 months	11	11
Children 1–3 years	7	7
Children 4–8 years	10	10
Children 9–13 years	8	8
Teen 14–18 years	11	15
Adult 19–50 years	8	18
Adult 51+ years	8	8
Pregnancy	N/A	27
Lactation	N/A	9

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