



The Haemochromatosis Society

Advice on Diet from the Haemochromatosis Society UK

Everyone with Haemochromatosis (HH) absorbs more iron than they need and as the body has no way of getting rid of the excess iron, it accumulates in various organs such as the liver. This raises the question as to whether it would be possible for someone with HH to slow down this process by taking more care over what they eat.

A normal person will only absorb a small fraction of the iron s/he eats: someone with HH will absorb a higher proportion but cannot absorb it all. The amount of iron absorbed depends on whether it is 'haem iron' or 'non-haem iron'. Most dietary iron is non-haem, and is found in a wide range of foods. Haem iron is the form of iron in our blood (haemoglobin in red cells) and muscles (myoglobin) and is found in meat, fish and poultry. It is relatively well absorbed compared with non-haem iron. The tables printed below give examples of foods containing high amounts of haem and non-haem iron.

The picture is further complicated by the fact that the amount absorbed depends on the other foods and drinks that you take at the same time. VITAMIN C can greatly increase the amount of non-haem iron absorbed so if you take Vitamin C in amounts of 25mg or more, it must be between meals not with food.

On the other hand there are some foods which reduce the amount of iron absorbed from a meal – these are tea, coffee, wholegrain cereals, bran, beans and pulses, oregano and nuts. Calcium also reduces iron absorption so milk and milk products (naturally low in iron) are recommended.

Some cereals have been fortified with iron and have the amount of iron declared on the side of the packet. It may be given as milligrams per 100 grams, per portion or % RDA where RDA is the recommended daily amount for labelling purposes (12 milligrams). A typical serving size is 30g. Organic cereals have no additives.

CEREAL	mg/portion
Weetabix (2 biscuits)	1.9
Cornflakes (30g)	2.4
Shreddies (30g)	2.3
Porrige, Organic Cereals	0
All Organic Cereals	0

It is not known how well iron is absorbed from fortified breakfast cereals so it's best to consume unfortified cereals (check the label) or make porridge.

In addition there are a few other things to be careful about.

DON'T take any Iron Supplements, including 'Vitamins with Iron' or tonics containing iron, or anything claiming that it contains 'reduced iron' (reduced iron is a form of iron and means that iron is added, not that it contains less iron) Also, as vitamin C aids iron absorption, avoid taking supplements containing vitamin C with meals.

MINIMISE alcohol intake, particularly with meals, as it may increase iron absorption and can also cause liver disease.

***Note: Haemochromatosis is referred to as GH in this guide**



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DON'T eat **raw** shellfish such as oysters. There is a marine vibrio (similar to a bacterium) called *Vulno Vulnifica* which is harmless to ordinary people but runs riot with someone with HH whose iron saturation is 100%, and can be fatal. It is wise to avoid raw shellfish and if you cut or graze yourself on a rock in the sea, clean the wound carefully.

Our conclusion from the above is that provided you

- avoid all offal and iron-fortified foods,
- avoid drinks containing vitamin C with meals,
- limit your intake of red meat and shellfish
- drink tea, coffee or milk with meals,
- avoid iron, multivitamins with iron, or high dose vitamin C supplements,
- minimise alcohol consumption,

then stay with a good balanced diet, including all fruit and vegetables, and don't worry too much about the iron content.

SOURCES OF IRON (mg per portion)

Foods containing HAEM IRON

(25-30% will be ABSORBED)

Two slices of fried black pudding	12.0
Two slices of braised pig's liver	11.9
Portion of cockles (25g)	8.5
One fried lamb's kidney	6.4
Portion of whitebait (80g)	4.1
Four thin slices of lean roast topside beef	3.1
Four slices of lean roast leg of lamb	3.2
One slice of toast with liver pate (40g)	2.4
Two thin slices of corned beef	2.2
Small portion of mixed seafood (40g)	2.2
One filleted grilled herring	1.2
Small tin of tuna in oil	1.1
Three slices of roast chicken breast	0.6

Foods containing NON-HAEM IRON (ONLY 0-15% will be ABSORBED)

Small bag of liquorice allsorts (56g)	4.1
Three tablespoons of boiled split lentils	2.2
Two slices of wholemeal bread	1.9
One level teaspoon of curry powder (3g)	1.7
Portion baked beans (3 tablespoons)	1.7
Small bag of cashew nuts (25g)	1.6
Portion (90g) of boiled spinach	1.4
Portion (90g) of spring greens	1.3
50g bar of plain chocolate	1.2
One dried apricot (25g) or fig (20g)	1.0
Two slices of white bread	0.8
One heaped teaspoon of cocoa powder	0.6
Portion (180g) portion of new potatoes	0.5

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