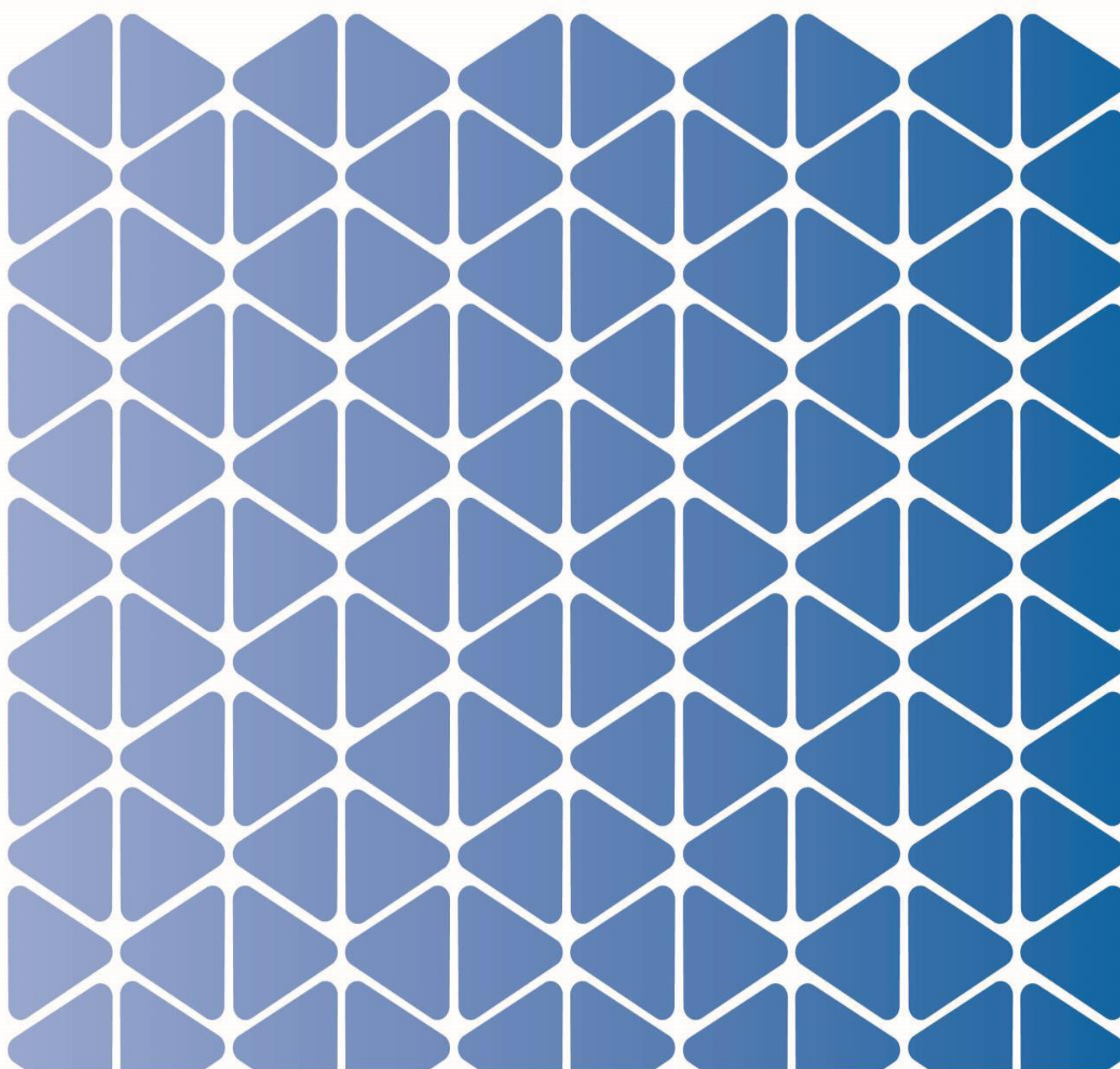


PATIENT INFORMATION

HOW TO IMPROVE THE IRON CONTENT OF YOUR DIET



Why do you need iron?

Iron is a mineral and a key ingredient needed for making healthy red blood cells that carry oxygen around the entire body, and is essential for the production of energy.

When you have low red blood cell count, this means that less oxygen is being carried around your body and can result in iron deficiency anaemia. A few symptoms of this include feeling tired, lacking energy, being a little dizzy and a lack of appetite.

Who is at risk of Iron-Deficiency Anaemia?

- People who don't eat a balanced diet
- Elderly people, especially those living alone
- Women who are pregnant or breastfeeding
- Menstruating women
- Teenage girls

What can I do about it?

Nutrition is very important, and increasing the amount of iron in your diet will play a big role in curing or preventing the development of anaemia.

Your GP may have prescribed iron tablets. Make sure you take the tablets regularly and for as long as they are prescribed. This gives you the best chances of improving your red blood cell levels and feeling better.

NOTE: Iron supplements should not be taken unless prescribed by your Doctor.

Which foods are rich in iron?

Iron is found in a wide variety of foods both from animal and vegetable sources. Iron from animal sources is more easily absorbed by the body.

Excellent sources of iron:-

Foods richest in iron are from animal sources. Offal is an excellent source. Try to eat one portion of these at least once a week.

- **Liver**
- **Liver pâté**
- **Kidney**
- **Black pudding**
- **Heart faggots**

If you are not keen on offal, try chicken liver pâté in a sandwich or on toast. It has a mild flavour and is readily available in many supermarkets.

Very good sources of iron:-

Iron is found in all meat, fish and poultry. The following are particularly good sources. Aim for 2 portions of these every day, if you don't eat offal.

- **Fish** - Sardines, mackerel, pilchards, whitebait, cockles, mussels and shrimp
- **Red Meat** - Beef, lamb, pork and ham
- **Tongue**
- **Corned beef**

Good non-meat sources of iron:-

These are absorbed better when eaten with foods rich in vitamin C (see page 5 for further information).

Aim for 4 servings of the following foods daily.

>Vegetarians should aim to have 5 servings daily.

- **Bread:** especially wholemeal and granary.
- **Pulses, Vegetables:** e.g. peas, beans, lentils, chickpeas and baked beans in tomato sauce.
- **Eggs:** there is no limit on the number of eggs you can consume as part of a healthy diet.
- **Green Vegetables:** e.g. spinach, watercress, curly kale, broccoli, spring greens, runner beans and broad beans.
- **Fortified Breakfast cereals:** e.g. Sultana bran, Branflakes, Weetabix, Readybrek, Cheerios, Shreddies, Special K, (check the label and choose one with at least 8mg iron per 100g).
- **Dried Fruit:** e.g. apricots, figs, prunes, raisins, sultanas, currants and dates.
- **Nuts and seeds:** e.g. all nuts, seeds and peanut butter. Do not give whole nuts to babies or children under 5 years of age due to the risk of choking.
- **Vegetable Protein:** e.g. tofu, bean curd and soya beans.

· **Miscellaneous sources:** e.g. yeast extract (e.g. Marmite), Bovril, Oxo, Curry powder, liquorice, plain chocolate, Horlicks and Ovaltine.

How can I make the iron work better?

The iron in non-meat foods is not absorbed as well compared to the iron in meat foods. To boost the effect of iron in these foods, eat them with foods rich in vitamin C as this enhances the absorption. Rich sources of vitamin C are:-

- Fruits e.g. oranges, grapefruit, strawberries, raspberries, blackcurrants and kiwi.
- Juices e.g. fruit juice, tomato juice and vegetable juice.
- Potatoes - cooked any way e.g. mashed, boiled, roasted, baked, sautéed or fried.
- Vegetables e.g. sprouts, spinach, broccoli and peppers.
- Cordial e.g. vitamin C enriched squash or diluted fruit juice (Ribena is a good source).

*** Aim for 5 portions of fruit and vegetables daily.**

Drinks that hinder iron absorption

Hot drinks like tea, coffee, and cocoa contain substances that reduce the absorption of iron from your food. Only drink these about an hour after eating, and between meals.

What if I'm pregnant?

Being pregnant increases your body's need for iron. Eat iron-rich foods as often as you can. However, **DO NOT EAT LIVER OR LIVER PRODUCTS** because they contain very high levels of Vitamin A, which may harm your baby.

Can you get too much iron?

You can safely increase the iron in your diet, but do not exceed the dose of iron tablets recommended. Iron supplements can be dangerous if taken in doses higher than recommended.

So what should I eat?

Eat as many foods rich in iron and vitamin C as you can. Here are some ideas.

Breakfast ideas

- Fortified breakfast cereal and milk with a glass of fruit juice.
- Baked Beans on wholemeal or granary toast.
- Wholemeal toast with marmalade or jam, and dried fruit.
- Boiled egg with wholemeal bread fingers and half a grapefruit.

Light meal ideas

- Lentil soup and granary bread with a piece of fruit.
- Sardines / pilchards / liver pâté / egg on toast with tomatoes.

- Baked potato with chilli beef or vegetarian chilli.
- Corned beef or egg sandwich with salad.
- Beef and tomato sandwich.
- Broccoli quiche with salad and wholemeal bread with a glass of fruit juice.

Main meal ideas

- Liver, onion and tomato casserole with mashed potatoes and broccoli.
- Vegetable and bean curry.
- Roast lamb, beef or nut roast with green leafy vegetables and potatoes.
- Corned beef hash with potatoes and peas.
- Ham, tomato and cheese omelette.
- Beef and vegetable stir fry with rice.
- Chickpea and spinach bake with a tomato sauce, diced potatoes and green beans.
- Gammon with baked potato, roasted peppers and courgettes.
- Beef fajitas with peppers.

Desserts ideas:-

- Fruit based pudding, e.g. fruit crumble.
- Milk pudding with dried fruit.
- Fresh fruit and yoghurt.

Snacks:-

- Fruit (fresh or dried).
- Fruit cake or malt loaf.

Cereal bars with fruit and nuts

Iron Requirements

The Reference Nutrient Intake (RNI) is the amount of iron that should be adequate for most people of that age.

AGE	RNI for Iron (mg)	
7-12 months		7.8
1-3 years		6.9
4-6 years		6.1
7-10 years		8.7
11-14 years		
	Male	11.3
	Female	14.8
15 -18 years	Male	11.3
	Female	14.8
19-50 years		
	Male	8.7
	Female	14.8
50 + years		8.7

Using the following list it is possible to calculate the amount of iron taken in a day and see if it meets the RNI

Meat Sources:-

Food Source	Serving	Iron (mg)
Liver pâté	40g (average on slice of bread)	4.7
Liver (chicken)	70g (average portion)	8
Liver (pig)	70g (average portion)	12
Steak & Kidney pie	15g kidney on average	1.7
Kidney (lamb)	Whole (35g)	4
Kidney (pig)	Whole (140g)	9
Corned beef	1 slice (thick)	1.2
Beef burger	Average portion (78g)	2.2
Beef, steak	Medium (144g)	3.8
Minced beef	Medium portion (140g)	3.8
Chicken Breast	Medium portion (130g)	0.65
Chicken Leg	Medium portion (100g)	0.8
Turkey (dark meat)	Medium portion (100g)	1.0
Turkey (white meat)	Medium portion (100g)	0.3
Duck (roasted)	Medium portion (185g)	4.9
Ham	Average slice (23g)	0.16
Pork loin chop	Medium portion (120g)	0.84
Sausage (pork)	Large (40g)	0.5

Fish Sources:-

Tuna, canned	Small can (100g)	1.0
Sardines, canned	Average can (100g)	2.3
Mackerel	Average portion (160g)	1.3
Pilchards	1 can (55g)	1.37
Salmon	Medium portion (100g)	0.5
Cod fillet	Medium portion (120g)	0.12

Non-Meat / Fish Sources:-

Eggs	1 average	1.0
Tofu, cooked	12 tablespoons (150g)	2.4-8.0
Almonds, raw	10-12	0.7
Cashew Nuts	25g	1.55
Sesame seeds	1 tablespoon (15g)	1.4
Apricots, dried	10	1.7
Raisins	1 tablespoon (30g)	1.14
Raisins & nuts	40g	1.25
Kidney (red) beans, canned	1 heaped tablespoon (35g)	0.7
Soya beans	1 heaped tablespoon (35g)	3.4
Baked beans, canned	½ can (200g)	2.8
Blackeye beans	1 heaped tablespoon (35g)	2.6

Lentils	Medium portion (120g)	13.2
Molasses, blackstrap	1 tablespoon	2.3
Kale	80g	1.6
Broccoli	Medium portion (80g)	1.4
Peas, frozen	100g	2.8
Spinach, cooked	100g	2.1
Bagel	1 whole	1.5
Bread, white	2 slices	1.4
Bread, wholemeal	2 slices	1.7
Bread, granary	2 slices	1.4
Spaghetti, cooked	Medium portion (220g)	3.5
Rice, white, cooked	Medium portion (180g)	3.25
All bran	Medium portion (40g)	3.5
Bran flakes	Medium portion (40g)	9.7
Readybrek	Medium portion (100g)	11.9
Weetabix	2 biscuits	4.7
Special K	Medium portion (40g)	9.3
Cheerios	Medium portion (40g)	4.8
Shreddies	Medium portion (40g)	3.1

Given out by:

Name:

Registered Dietitian

Alexandra Hospital, Redditch ☐
(01527 512043)

Kidderminster Hospital ☐
(01562 512305)

Worcestershire Royal Hospital ☐
(01905 733953)

Patient Experience

If you have any concerns about your treatment or condition please speak to a member of staff. If you are not happy with their response, you can ask to speak to someone in charge such as the Service Manager or Ward Manager. If this does not resolve your concerns the Trust has a **Patient Experience Patient Advice and Liaison Service (PALS)** who can liaise with staff on your behalf and provide information on how to make a formal complaint if you wish to do so.

Contact details: 0300 123 1732 or wah-tr.PALS@nhs.net

If you would like this leaflet in another language, in audio or Braille, please inform the dietitian.

The Nutrition & Dietetic Department
Worcestershire Acute Hospitals NHS Trust

Date of Review 10/11/2028

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.