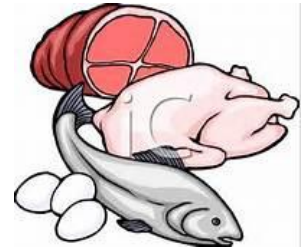


Kidney Disease: Dietary advice for Anaemia in Kidney Disease

'This dietary advice sheet provides general information to help you change your diet. If you want more detailed advice or are following other dietary restrictions and need guidance, please ask your doctor to refer you to a registered dietitian.'



What causes Anaemia in Kidney Disease?

Patients with kidney disease can develop anaemia (a low haemoglobin level) for several reasons. Healthy kidneys produce a hormone (called erythropoietin or EPO) that is needed to produce blood cells. If you have kidney disease you will make less of this hormone so you may need injections of an EPO-type substance to increase your red blood cell levels. Also, the way your body handles iron will be affected. Iron is a vital ingredient in producing red blood cells so as a result, you may need extra iron, either as a tablet or injection. The doctors and anaemia nurses will advise if you need these treatments. Some medicines, such as Ranitidine and Omeprazole, may also reduce your absorption of iron and other nutrients. Additionally, you may find that your appetite gets worse and you feel too unwell to eat properly so your diet may become unbalanced. In this case you may find the following advice helpful.

How to improve dietary iron intake:

- The type of iron found in meat and fish is absorbed better than the iron in vegetables and other foods. Try to include more of these in your diet: beef, lamb, pork, game, liver, kidney, tongue, sardines, pilchards, whitebait, anchovies, cockles, mussels, winkles, shrimps.
- Meat products like pate, black pudding, faggots, haggis, corned beef and liver sausage are also good sources.
- Nuts, eggs green leafy vegetables like spinach and broccoli and fortified bran cereals contain good amounts of iron but it is poorly absorbed.
- Other sources of iron include wholemeal bread, quinoa, peas, beans and lentils, dried fruit, cocoa, dark chocolate, molasses/treacle, curry powder, liquorice, ginger, fortified drinks and cereals (low fibre).

How to improve iron absorption:

- Vitamin C can improve the absorption of iron from vegetable and other sources, so include a glass of fruit juice or portion of fruit or vegetables/salad with your meal.
- Avoid drinking tea at meal times as this contains tannin which reduces iron absorption.
- Avoid wheat bran as this also reduces iron absorption.
- Calcium can reduce iron absorption so it is advisable to take any calcium and supplements at different times of the day.



Kidney Disease: Dietary advice for Anaemia in Kidney Disease continued

Other Causes of Anaemia:



Folate deficiency:

Folic acid, together with Vitamin B₁₂, is needed by the body to make red blood cells in addition to iron. Both vitamins together also help nerves to function properly. Deficiency of folic acid can cause a type of anaemia called 'macrocytic' (large cell) anaemia. If you are feeling unwell and your appetite and intake are poor you may have an inadequate folate intake. If you have also been following a potassium restriction your folate intake may be further reduced and you may be at increased risk of deficiency.

How to improve folate intake:

Folate is found naturally in a wide variety of foods and is also present in foods fortified with folic acid. These include Brussel sprouts, kale, spinach, spring greens, broccoli and parsnips, cauliflower, green beans, peas, oranges, orange juice, cabbage, eggs, (within your potassium restriction if appropriate).

Dietary Sources of Folate:

- Spinach, kale, Brussels sprouts, cabbage, broccoli
- Beans and legumes (e.g. peas, black-eye beans)
- Yeast and beef extracts
- Oranges and orange juice
- Wheat bran and other whole grain foods
- Poultry, pork, shellfish and liver
- Fortified foods (e.g. some brands of breakfast cereals – check the label).



Vitamin B₁₂ deficiency (Pernicious anaemia):

Vitamin B₁₂ deficiency may occur if your body loses the ability to absorb this vitamin, for example if part of your stomach has been removed or you have a lack of a substance needed for its absorption or if you are taking medicines that reduce stomach acid production e.g. Ranitidine. Occasionally vegans who eat no Vitamin B₁₂ containing foods may develop a deficiency of this vitamin. Three-monthly Vitamin B₁₂ injections may be needed to improve blood levels but you may want to improve your dietary intake first.

How to improve Vitamin B₁₂ intake:

Vitamin B₁₂ is found in meat, liver, fish, dairy products and some yeast extracts. Try to include these foods in your diet regularly.

