BRIEF GUIDE

Genetic Haemochromatosis

A Guide to Vitamins During Treatment

Haemochromatosis • UK
Helping people live with iron overload
+Fe

The importance of vitamins during frequent venesections

It's possible to develop vitamin deficiency whilst undergoing venesection treatment for genetic haemochromatosis.

After a venesection, the body uses vitamin B12, folate, iron and protein to manufacture new red blood cells – during frequent venesections, vitamin B12 and folate supplements can be very helpful to boost the ability of the body to continually make new red blood cells.

Vitamin B12 (cyanocobalamin)

Vitamin B12 is a water-soluble vitamin which can be stored in the liver for many years. It is also known as cyanocobalamin. Adults (aged 19 to 64) need about 1.5 micrograms a day of vitamin B12.

Common dietary sources of vitamin B12 are animal products, including fish, meat, poultry, eggs, milk, and dairy products. Vitamin B12 is generally not present in plant foods, but there are fortified vegetarian foods such as some soy beverages, some vegetarian sausages and burgers, and some fortified breakfast cereals that can be a good source of vitamin B12 for vegetarians and vegans.

Vitamin B9 (Folate)

Folate is a water-soluble vitamin, which can't be stored by the body. It is also known as folic acid or sometimes as vitamin B9.

Folic acid is the most likely to become deficient during initial venesections and therefore some venesection centres will ask patients to take folic acid 5mg once daily during the initial phase of treatment.

Common dietary sources of folate are dark green leafy vegetables, citrus fruits and juices and beans and peas. Many foods now have added folate, including bread, cereal, flour, pasta and other grain products.

Further reading

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Vitamin C

Although vitamin C is a necessary part of a healthy diet, you may want to be aware of vitamin C-rich foods and eat them in moderation.

Vitamin C has been found to increase the absorption of iron, and therefore vitamin C supplementation should be avoided before initial venesection phase is complete due to the iron overload status.

Vitamin D

Vitamin D (cholecalciferol) helps regulate the amount of calcium and phosphate in the body. These nutrients are needed to keep bones, teeth and muscles healthy.

Under normal conditions, vitamin D absorbed from the diet or synthesized in the skin from the sun is transported to the liver where it gets metabolized to calcifediol (25-hydroxycholecalciferol) and ergocalciferol is converted to 25-hydroxycholecalciferol). These two vitamin D metabolites (called 25-hydroxyvitamin D or 25(OH)D) are measured in serum to determine a person's vitamin D status. Excess iron in the liver affects this process, lowering the serum vitamin D overall. Removal of excess body iron by venesection therapy produces a significant increase in the mean serum 25-OHD.

During the autumn and winter, you need to get vitamin D from your diet because the sun is not strong enough for the body to make vitamin D.

But since it's difficult for people to get enough vitamin D from food alone, everyone (including pregnant and breastfeeding women) should consider taking a daily supplement containing 10 micrograms of vitamin D during the autumn and winter.

Between late March/early April to the end of September, most people can make all the vitamin D they need through sunlight on their skin and from a balanced diet – you may choose not to take a vitamin D supplement during these months.

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Contact us

We work to support anyone
affected by genetic haemochromatosis.

Join us – *together we're stronger*

Become a member – signup on our website.

Haemochromatosis UK Advice & Help Line

Telephone (12-3pm weekdays): **03030 401 102**

Email (24/7): **helpline@huk.org.uk**

Website: **www.haemochromatosis.org.uk**

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We gratefully acknowledge the support of FB Coales No 4 (Family) Trust in publishing these materials.

Haemochromatosis UK is a charity registered in England and Wales (1001307) and in Scotland (SC041701) and a Company Limited by Guarantee (2541361).

Edition : VITS24 // Published : September 2024