

The use of Nutraceuticals (Herbal) Treatments in Migraine treatment

Information and advice for patients

Neurology

In recent years, there has been a growing interest and demand for what is seen as natural treatments such as vitamins and supplements in trying to control migraine headaches. A variety of natural supplements, vitamins and herbal preparations have been promoted as having being helpful for migraine prevention. Among the most commonly recommended vitamins and supplements are magnesium, riboflavin, and Coenzyme Q10 (CoQ10) while the most common herbal preparations are feverfew and butterbur.

Magnesium

Magnesium's efficacy depends on a high dose supplementation for a minimum of 3 to 4 months to achieve any benefit from preventative therapy.

Magnesium dose 600mgs per day

No adverse effects have been associated with taking magnesium as a naturally occurring substance in foods. However, adverse effects have been seen with excessive magnesium intake because of the use of various magnesium salts for pharmacological/medicinal purposes. The ingestion of magnesium from non-food sources can cause diarrhoea, which is reversible and thus stops when you stop taking the magnesium. Taking magnesium along with some antibiotics might decrease their effectiveness. To avoid this interaction these antibiotics should be taken at least 2 hours before, or 4 to 6 hours after magnesium supplements. Ensure your GP is aware of all the medications you are taking including herbal and supplement treatments. Equally discuss with your GP using magnesium if you take anti-hypertensive medications or muscle relaxants due to possible interactions.

Co-Enzyme Q10

Foods such as meat and fish, contain CoQ10 but the amounts in food are naturally less than can be obtained from supplements. Primary dietary sources of CoQ10 include oily fish (such as salmon and tuna), organ meats (such as liver), and whole grains. Most individuals obtain sufficient amounts of CoQ10 through a balanced diet, but supplementation may be useful for individuals with particular health conditions.

Co-enzyme Q10 dose 300-600MG per day

No toxicity has been reported with supplements up to 600 mg per day. Minor side effects that may occur with supplementation may include a burning sensation in the mouth, loss of appetite, nausea and diarrhoea. In large studies the incidence of gastrointestinal side-effects is less than 1%. Cholesterol lowering drugs such as lovastatin block the natural synthesis of CoQ10, so supplementation of 100 mg/day is recommended while taking these drugs.

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Riboflavin B2

Riboflavin, also known as vitamin B2, is found in small amounts in many foods. It is needed for converting food to energy, and like CoQ10 also works as an antioxidant by mopping up the damaging free radicals. Lean meats, eggs, legumes, nuts, green leafy vegetables, dairy products, and milk provide riboflavin in the diet. Breads and cereals are often fortified with riboflavin. Because riboflavin is destroyed by light, foods with riboflavin should not be stored in exposed glass containers. Riboflavin is stable when heated but will leach into cooking water, and the pasteurisation process causes milk to lose about 20% of its riboflavin content. Alkalis, such as baking soda, also destroy riboflavin.

Riboflavin 400mgs per day

No toxic symptoms have been reported at doses of up to 400 mg per day other than occasional minor side effects that were not clearly attributable to the compound. Because riboflavin is a water-soluble vitamin, excess amounts are excreted, and harmless yellow discoloration of urine occurs at high doses. While apparently non-toxic at any dose in adults, and while foetal toxicity is unproven, riboflavin supplementation in pregnancy is not always recommended so please check with your health visitor. Riboflavin is necessary for the activation of vitamin B6. Sulfa drugs, anti-malarial drugs, oestrogen and alcohol may interfere with riboflavin metabolism. High doses of riboflavin can reduce the effectiveness of t methotrexate, whilst some antibiotics and phenothiazine drugs may increase riboflavin excretion. Riboflavin must be activated in the liver which may be inhibited by major tranquilizers and some antidepressants.

Butterbur

Please note that Butterbur is no longer available in the UK. The Medicines and Healthcare Products Regulatory Agency (MHRA) announced in 2012¹⁴ that Butterbur products are linked with liver toxicity and should be removed from the market.

Feverfew

Feverfew (*Tanacetum parthenium*) is an herb that is available as an off-the-shelf remedy. Its yellow-green leaves and yellow flowers resemble those of chamomile (*Matricaria chamomilla*), with which it is sometimes confused.

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Feverfew 250 milligrams per day

Caution is advised if you have diabetes, alcohol dependence or liver disease. Liquid preparations of this product may contain sugar and/or alcohol, and feverfew is not recommended for use in children under 2 years of age. Because of the potential risk to the infant, breast-feeding while using this product is not recommended, and feverfew is contraindicated in pregnancy because the leaves possess emmenagogue activity (ejection of the placenta and foetal membranes) and may induce abortion. Most adverse effects of treatment with feverfew are mild, although some patients have experienced increased heart rate. A small percentage of people may experience mild stomach upset from feverfew, although this is rare. It is advised to avoid use of feverfew when taking anticoagulant drugs. Chewing fresh feverfew leaves may lead to minor mouth ulcerations occasionally, an effect not observed with capsule users. Handling fresh feverfew leaves may cause allergic contact dermatitis. Swelling of the lips, tongue, and oral mucosa, in addition to mouth ulceration, have been reported with feverfew use. GI effects, such as abdominal pain, nausea, vomiting, diarrhoea, indigestion, and flatulence, may also occur.

How to take herbal treatments

1. Ensure your GP is aware that you are considering using these to ensure there are no contra-indications with either your current medications or if you are considering pregnancy or are pregnant or breast feeding.
2. You will need to source your own treatments as your GP will not be able to prescribe these for you. Ensure you use a reliable provider; unfortunately, some drugs brought over the internet may not be genuine. Most herbal shops available on the high-street will be able to provide these treatment options.
3. Only use one treatment at a time, otherwise it will be unclear what is working or what is causing possible side effects.
4. Use each treatment at the recommended dose for at least 4 months. The goal as with any drug or treatment is to reduce your headaches by a 50% frequency. If this is working for you then continue for at least 6 months and then try to withdraw to see what impact this has on your headache. It can then be restarted if your headache deteriorates.
5. If the treatment does not reduce your headache frequency by 50% then move to the next treatment you wish to take.
6. Discuss any issues with your GP, Consultant Neurologist or Headache Nurse.

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Further Information

The migraine trust

<https://migrainetrust.org/>

(Website accessed & checked 21 July 2022)

For more information about our hospitals and services please see our websites

www.swbh.nhs.uk follow us on Twitter @SWBHnhs and like us on Facebook

www.facebook.com/SWBHnhs.

Sources used for the information in this leaflet

National institute for health and care excellence (NICE) (2012). Headaches in over 12s: diagnosis and management clinical guideline [CG150]. Available at: <https://www.nice.org.uk/guidance/cg150> (Accessed 21 July 2022).

British association for the study of headache (BASH) (2019) BASH guidelines 2019. Available at: <https://www.bash.org.uk/guidelines/> (Accessed 21 July 2022).

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ML5757

Issue Date: September 2022
Review Date: September 2025