Migraine Treatment: Supplements
What is Migraine?

✓ Recurrent headache disorder characterized by attacks lasting 4-72 hours in duration. Typical characteristics of the headache are one sided (i.e. left or right) in location, pulsating (heartbeat) quality, moderate or severe intensity, aggravation by routine physical activity (i.e. walking up stairs) and association with *nausea* and/or sensitivity to *light* and/or *sound*.

✓ Some individuals experience “*aura*” consisting of visual (i.e. spots), and/or sensory (i.e. tingling) and/or speech/language (i.e. word finding difficulties) that last approximately 5 minutes in duration and are completely *reversible*.

✓ When a person experiences headache more than 50% of the month for 3 months, with majority of the headaches being associated with the features of migraine they are diagnosed with *chronic migraine*.

✓ Medication Overuse Headache (MOH) is a phenomenon known as “*feeding the fire you are trying to extinguish*”. This includes using over the counter pain medications such as Tylenol, Advil, or Aspirin more than **10 to 15 days per month**, but can also include using too much prescribed “rescue” medications such as Sumatriptan or Cambia.

How Common is Migraine?

✓ Worldwide, among 310 diseases, chronic migraine is:
  - 3rd most common
  - 7th most disabling

✓ *Chronic Migraine*: 1% to 3% of population
✓ *Migraine*: 12% to 16% of population
✓ *Medication Overuse Headache*: 3% of adult population

Risk Factors Associated with Migraine

<table>
<thead>
<tr>
<th>Modifiable</th>
<th>Nonmodifiable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td>Frequent Headache</td>
</tr>
<tr>
<td>Acute medication overuse</td>
<td>Head Trauma</td>
</tr>
<tr>
<td>Caffeine overuse</td>
<td>Female Sex</td>
</tr>
<tr>
<td>Stressful life events</td>
<td>Genetic Disposition</td>
</tr>
<tr>
<td>Sleep disorders (i.e. sleep apnea)</td>
<td>Low socioeconomic status</td>
</tr>
<tr>
<td>Depression/Anxiety</td>
<td></td>
</tr>
</tbody>
</table>

1 in every 10 people suffers from migraine.

There are about 20 million migraine attacks happening every day.

The majority of migraine sufferers do not seek care for their pain.

Every 10 seconds, someone in the U.S. goes to the emergency room with a headache or migraine.

IS MIGRAINE INHERITED? If 1 parent has migraine: 50% chance of a child having it too. If both parents have migraine: 75% chance of a child having it too.

88% of women and 69% of men get tension headaches at some point in their lifetime.

HOW COMMON IS MIGRAINE?

1 billion worldwide
1 in 4 homes
1 in 5 women
1 in 16 men
1 in 11 children
Disclaimer:

We’re interested! Always tell your doctor and/or health care practitioners if you are using vitamins, minerals, or other alternative therapies! Even if they come from nature, many of these substances can have side effects or even interact with medications.

It is also important to discuss them so your doctor knows which substance improvements or side effects. Most of these treatments may take up to 3 months to have a benefit. They can work alone, but with a prescription medication may be synergistic to boost the medication’s effect.

Migraine and Supplements

Supplements that have been shown in the scientific literature to treat migraine include:

- Magnesium Citrate
- Vitamin B2 (Riboflavin)
- Coenzyme Q10

Others supplements include:

- Melatonin
- Butterbur
- Feverfew
VITAMIN B2 (RIBOFLAVIN)

Optimize your brain cells’ powerhouse → the mitochondria!

- This vitamin restores your mitochondria’s energy!
- Dosage: 400mg every morning
- Take it every morning and combine with exercise
- It may take 3 months before improvement is noticed
- If 400mg in the morning is not working, more benefit may be achieved with 200mg twice per day

Caution:

- This vitamin commonly turn the urine dark yellow
- Rarely increase peeing or loose bowel movements
- Likely safe in pregnancy
- Evidence shows this option is likely effective for migraine so this option is worth considering in adults in discussion with you doctor

$10.79 1-month supply
Can buy online at www.well.ca
COENZYME Q10

✓ This vitamin restores your mitochondria’s energy!

✓ Take it every morning and combine with exercise

✓ Dose: 300mg every morning

✓ If insufficient benefit, try taking it as 100mg three times per day

$24.99 (~1-month supply)
Can buy online at www.well.ca

Caution:

✓ It may take 3 months before improvement is noticed

✓ No significant side effects have been reported

✓ Likely safe in pregnancy but data is lacking

✓ Evidence has not shown consistent benefit, but it is felt to be very safe so this option can be tried in adults or children in discussion with you doctor
MAGNESIUM CITRATE

Optimize glutamate → your brain’s excitation chemical!

✓ Migraine it thought to be associated with low brain magnesium making the brain more excitable. A more excitable brain makes you more migraine prone!

✓ Magnesium may be especially helpful in aura

✓ Dose: 150mg at bedtime
✓ Can be increased up to 600mg at bedtime

✓ Stay low and go slow! Can cause tummy upset and diarrhea at higher doses if your body is not use to it.

✓ Many people find magnesium calming. Using it at bedtime may help with sleep

✓ Magnesium can also be used just around the time of your period for “menstrual migraine”. Talk to your doctor if you think this option may be helpful for you

Caution:

✓ It may take 3 months before improvement is noticed
✓ Discuss use of magnesium with your doctor first if you have kidney disease as it may accumulate and cause toxicity if you have significant kidney problems
✓ Can be used in pregnancy, but avoid high doses as could cause tummy upset in your baby! Aim for ≤300mg
✓ Certain medications should be taken at a different time of day then magnesium (e.g. thyroid medication mycophenolate, some antibiotics). Ask your pharmacist
✓ Evidence shows this option is likely effective for migraine so this option is worth considering in adults in discussion with you doctor

$17.99 for 100 tablets
Can buy online at www.well.ca
**BUTTERBUR**

- This supplement comes from *petasites hybridus*
- 75mg twice per day
- It is felt to have several mechanisms:
  - Antihistamine
  - Leukotriene antagonist: prevents these inflammatory modulators from being created
  - Block calcium channels: makes the brain less excitable which reduces migraine

**Caution:**

- This option is not recommended for children, pregnant women or people with history of liver disease
- Previous preparations were not well extracted in a German brand, and liver toxicity occurred. Ensure this supplemented is bought from a reputable source. Discuss having liver test check before +/- during use of this supplement

$37.49/1-month supply  
*Can buy online at www.well.ca*
MELATONIN

☑ This supplement can also help with your sleep!

☑ Your body makes melatonin in the pineal gland when it is dark out

☑ 3mg in the evening

☑ Can be increased up to 12mg for migraine

☑ Use doses of 10mg (up to 25mg) for cluster headache, paroxysmal hemicrania & hemicrania continua

☑ It is best to take Melatonin in the evening after dark to match your body’s natural physiology

Caution:

☑ Optimize the use of this option with good sleep hygiene and keeping your room dark after taking this medication to prevent undoing its effect

☑ Safety in pregnancy is unknown

☑ Evidence has not shown consistent benefit, but it is felt to be safe so this option can be tried in adults in discussion with you doctor

$11.49/1-month supply
Can buy online at www.well.ca
FEVERFEW

✓ This supplement is not currently recommended by this clinic as the evidence is inconsistent, and it may cause rebound headaches if stopped suddenly

✓ 100mg per day

✓ The rebound syndrome is most likely after have been taken daily for longer than 1 week

✓ There is some evidence to suggest sublingual (under the tongue) feverfew/ginger when needed as a rescue therapy, but be careful not to use this option in addition to any pain medications more than 10 days per month to prevent “Medication overuse headache”

✓ This supplement may also help with arthritis pain

Caution:

✓ The main side effects described are numbness of the mouth and occasional nausea. Mouth sores have also been described

✓ Feverfew can increase bleeding risk. Feverfew cannot be taken with blood thinners like coumadin/warfarin, aspirin, clopidogrel/plavix, apixaban, rivaroxaban, dabigatran, heparin.

✓ This option can also interact with anaesthetics used during surgery so stop it prior to any procedures

✓ If you have allergies to ragweed, chamomile, or yarrow, do not take feverfew as there is often cross-reactivity

✓ Children, pregnancy women, breastfeeding women, and people with liver disease should not use