



Accurate Clinic

2401 Veterans Memorial Blvd. Suite16
Kenner, LA 70062 - 4799
Phone: 504.472.6130 Fax: 504.472.6128

www.AccurateClinic.com

Diet and Superfoods
for Migraines

Accurate Education

Complementary and Alternative Medicine (CAM)

Diet and Superfoods for Migraines

Migraine headaches affect millions of people and significantly impact daily life. Certain vitamins, minerals, nutraceuticals and dietary changes can help reduce how often migraines occur and how severe they are. They work by supporting brain energy production and reducing inflammation. The therapeutic doses of these nutrients for migraine prevention (100-600 mg daily) generally requires the use of supplements, as food sources usually cannot achieve these levels, often providing much less than 100 mg per serving. This list includes foods rich in the nutrients that can reduce migraine severity and frequency,

Specific superfoods rich in migraine-beneficial nutrients include seeds, nuts, fatty fish, leafy greens, and whole grains that provide high concentrations of riboflavin, magnesium, CoQ10, and omega-3 fatty acids. See companion handout "Nutraceuticals for migraines."

Nutrients With the Strongest Evidence for Benefits with Migraines

1. Riboflavin (Vitamin B2)

Benefits Riboflavin helps your brain cells produce energy more efficiently, which may prevent migraine attacks from starting.

Therapeutic Dose: 400 mg daily. Supplementation required, dietary sources provide only 1-2 mg daily.

Foods highest in riboflavin (vitamin B2) include **almonds** (0.3 mg per ounce), **spinach** (0.2 mg per cup cooked), **mushrooms** (0.2-0.4 mg per cup), **eggs** (0.2 mg per egg), **beef liver** (2.9 mg per 3 oz), **fortified cereals**, and **dairy products** like milk and yogurt.

2. Magnesium (Mg)

Benefits: Magnesium helps regulate nerve signals, blood vessel function, and brain chemicals involved in migraines. Many people with migraines have low magnesium levels.

Therapeutic Dose: 500-600 mg/day. Foods can help achieve the recommended 400-600 mg daily Mg intake for migraine prevention, though many patients still require supplementation

Foods highest in Magnesium: include **Pumpkin seeds** lead the list with 156 mg magnesium per ounce, followed by **chia seeds** (95 mg per ounce), **almonds** (80 mg per ounce), **spinach** (157 mg per cup cooked), **cashews** (74 mg per ounce), **black beans** (60 mg per half cup), **edamame** (50 mg per half cup), **dark chocolate** (64 mg per ounce), **avocado** (58 mg per medium fruit), and **quinoa** (118 mg per cup cooked). These foods can help achieve the recommended 400-600 mg daily magnesium intake for migraine prevention, though many patients still require supplementation to reach therapeutic levels.

3. Coenzyme Q10 (CoQ10)

Benefits: CoQ10 is an antioxidant that helps brain cells produce energy and protects them from damage.

Therapeutic Dose: 100-400 mg daily (most studies use 300 mg). Supplementation required, dietary sources provide only up to 10 mg /day

Foods highest in CoQ10: While CoQ10 is found in **organ meats** (beef heart and liver contain 3-4 mg per 3 oz), **fatty fish** (mackerel, sardines: 2-4 mg per 3 oz), **whole grains**, **spinach**, **broccoli**, and **cauliflower**, dietary sources provide only 3-6 mg daily. The therapeutic dose for migraine prevention (100-300 mg daily).

5. Omega-3 Fatty Acids (EPA and DHA)

Benefits: Reduce inflammation in the brain and nervous system. Effective especially in women.

Therapeutic Dose: 1,800 to 2,400 mg EPA + DHA daily (check the label for EPA + DHA content, not just "fish oil"). Multiple servings of fatty fish weekly would be required to achieve therapeutic doses. Plant sources alone would be an adequate.

Foods highest in EPA and DHA: include **Fatty fish** provide the highest concentrations of EPA and DHA: **salmon** (1.5-2.5 g per 3.5 oz), **mackerel** (2.5-3 g per 3.5 oz), **sardines** (1.5 g per 3.5 oz), **herring** (1.5-2 g per 3.5 oz), and **anchovies** (1.4 g per 3.5 oz).

Plant-based sources like **flaxseeds** (2.3 g ALA per tablespoon), **chia seeds** (2.5 g ALA per ounce), and **walnuts** (2.5 g ALA per ounce) provide alpha-linolenic acid (ALA), which converts to EPA/DHA at only 5-10% efficiency, making direct EPA/DHA sources preferable for migraine management. Clinical trials showing migraine benefit used 1.5-1.8 g EPA+DHA daily, achievable through multiple servings of fatty fish weekly or supplementation.

6. Superfoods Rich in Migraine-beneficial Nutrients

- **Chia seeds** (and flax seeds) exemplify nutrient density for migraine management, providing magnesium (95 mg/oz), omega-3 ALA (2.5 g/oz), and fiber (10 g/oz).

- **Dark Chocolate and Cocoa**

Benefits: Active components (theobromine and the polyphenols) of cocoa interact with trigeminal nerves to suppress CGRP secretion, similar to the very effective Gepant class of migraine medications (e.g. Nurtec, Ubrovelvy, Qulipta). Dark chocolate can improve negative emotional states often reported by migraine patients. Unsweetened cocoa powder can provide very high doses of the polyphenol antioxidants.

Therapeutic Dose: Dark chocolate containing ≥85% cocoa may function as a prebiotic to maintain healthy gut microbiome and improve negative emotional states often reported by migraine patients. Consumption of 30 g/day appears safe and potentially beneficial

7. Fiber and Recommended Diets for Migraines

Benefits: The anti-inflammatory diet (AID), which is fiber-rich through emphasis on fruits, vegetables, whole grains, and legumes, demonstrates lower migraine frequency and disability. The DASH (Dietary Approaches to Stop Hypertension) diet, another high-fiber pattern emphasizing fruits, vegetables, and whole grains, shows strong evidence for reducing migraine frequency.

The primary mechanism through which fiber may influence migraine is via the **gut-brain axis and microbiome** modulation. Dietary fiber serves as a prebiotic substrate for gut bacteria, which produce short-chain fatty acids (SCFAs) through fermentation. These SCFAs impact neuroinflammation, gut-brain signaling, and metabolic function - all factors implicated in migraines.

Therapeutic Dose: It is generally advised to consume **25-38 grams daily** (25g for women, 38g for men), though specific migraine trials have not established optimal doses.

Foods highest in Fiber: include **Whole Grains:** (Oats, quinoa, brown rice, whole wheat, barley) that provide 3-8g fiber per serving; **Legumes:** (Lentils, chickpeas, black beans, kidney beans) that provide 7-15g fiber per cup) **Vegetables:** (Spinach, broccoli, Brussels sprouts, carrots, beets, artichokes) that provide 2-7g fiber per serving; **Fruits:** (Berries, apples, pears, oranges, avocados) that provide 3-10g fiber per serving); **Nuts and Seeds:** (Almonds, chia seeds, flaxseeds, pumpkin seeds) that provide 3-10g fiber per ounce.

These foods align with both AID and DASH diets which provide additional migraine-beneficial nutrients including magnesium, B vitamins, and antioxidants.

- **Drink 8-10 glasses of water through the day.** Dehydration is a common migraine trigger.
- **Consider limiting common migraine trigger foods:** Alcohol (especially red wine) excessive Caffeine, Processed meats that contain nitrates, Aged cheeses (contain tyramine), Artificial Sweeteners (especially aspartame), MSG (monosodium glutamate).