

## Migraine and dietary supplements

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The lifetime prevalence of headache is 96%. Globally approximately 11% of adults have migraine headache. So far, many mechanisms, including vascular, neurogenic, and trigeminovascular system activation have been proposed. Recent evidences hypnotized that a changes in mitochondrial function and consequent energy deficit is involved in migraine pathophysiology as an upstream disorder. Simultaneous existence of sensory-stimuli overload and energy-reserve limitation stimulate the trigeminovascular system.

Magnesium, Thiamin, Riboflavin, and Coenzyme Q10 are famous for their role in ATP synthesis and mitochondrial energy metabolism. On the other hand, evidences demonstrated their helpful role in controlling migraine headache symptoms. As an example studies reported that consumption of 400 milligram riboflavin/day for three months reduced the frequency of migraine headache attacks by more than 50% in more than half of the patients. More ever, some micro and macro nutrients are well-known natural immuno-modulator substances including Omega-3 and vitamin D. Recent studies supported their effect in migraine prophylaxis and treatment. For instance, every 22% decrease in migraine headache occurrence was observed by every 5 ng/ml increase in serum vitamin D level. The natural components possess minimal side effects, unless prescribed in non-therapeutic doses. Dietary intervention can decrease the burden of migraine disease with less cost.