



## THE OMEGA-3 AND NANO-CURCUMIN EFFECTS ON VASCULAR CELL ADHESION MOLECULE (VCAM) IN EPISODIC MIGRAINE PATIENTS: A RANDOMIZED CLINICAL TRIAL

Abdollahi, M ; Karimi, E ; Sarraf, P. et al.  
BMC research notes. 2021;14(1):283

The exact causes of migraine are still unknown, yet it is thought that inflammation in the brain and the blood vessels may be part of the problem. Medications are commonly prescribed to reduce the inflammation, yet come with side effects. Curcumin, a compound found in turmeric spice, and omega-3 have been shown to have anti-inflammatory properties with minimal side effects and may therefore be of benefit to migraines.

This randomised control trial of 285 individuals with migraine aimed to determine the effect of supplementing omega-3 and curcumin alone and in combination on measures of inflammation in individuals with migraine.

The results showed that combining curcumin and omega-3 was of benefit to measures of inflammation in individuals with migraine. There were no serious side effects following the combination treatment. This study could be used by healthcare professionals to recommend the use of omega-3 and curcumin in individuals who suffer from migraine and who have suffered serious side effects with standard drug treatments.



## THE EFFECTS OF VITAMIN D SUPPLEMENTATION ON INTERICTAL SERUM LEVELS OF CALCITONIN GENE-RELATED PEPTIDE (CGRP) IN EPISODIC MIGRAINE PATIENTS: POST HOC ANALYSIS OF A RANDOMIZED DOUBLE-BLIND PLACEBO-CONTROLLED TRIAL

Ghorbani, Z. et al. The journal of headache and pain. 2020;21(1):22

The exact causes of migraine are still unknown, but it has been shown that chemical messengers in the brain are released during migraines, which causes the blood vessels to increase in size resulting in inflammation. Vitamin D has been shown in previous trials to be of benefit to individuals with migraines, yet it is not fully understood how it does this. Therefore, this 16-week randomised control trial aimed to determine the effect of vitamin D supplementation on one of the chemical messengers thought to cause inflammation in the brain and on disability associated with migraine episodes. The results showed that vitamin D supplementation improved disability associated with migraine and that this may have been due to an improvement in one of the chemical messengers in the brain that is associated with inflammation. It was concluded that vitamin D supplementation may improve migraines, but further studies are warranted. This study could be used by healthcare professionals to understand how vitamin D may be of benefit to those who suffer from migraines.



## EFFECTS OF DIFFERENT THERAPEUTIC EXERCISE MODALITIES ON MIGRAINE OR TENSION-TYPE HEADACHE: A SYSTEMATIC REVIEW AND META-ANALYSIS WITH A REPLICABILITY ANALYSIS

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For individuals who suffer from headaches and migraines, the first treatment option is usually drug based, which has been associated with side effects, dependency, and abuse of medications. Exercise may be of benefit to individuals with headache and migraine, as it can stimulate the release of chemicals in the brain, which are beneficial to coping with pain. The aim of this systematic review and meta-analysis was to determine the effect of exercise in comparison to non-active treatment for pain, frequency of headache episodes, headache duration, quality of life and medication use in individuals with migraine or tension headache. The results showed that both aerobic and strength training were of benefit to the intensity of pain, which resulted in a decrease in medication use. This study could be used by healthcare professionals to understand that there may be some benefit of exercise for the management of pain in individuals who have migraines and headaches.



## BODY COMPOSITION STATUS AND THE RISK OF MIGRAINE: A META-ANALYSIS.

Gelaye, B ; Sacco, S ; Brown, WJ ; Nitchie, HL ; Ornello, R ; Peterlin, BL  
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Both migraine and obesity are conditions associated with substantial personal and societal burdens. The aim of this study was to evaluate the pooled risk of migraine by body composition status as characterized by the WHO physical status categories and the influence of age and sex on this relationship.

This study is a meta-analysis of twelve studies with data from 288,981 unique participants. The age of the participants ranged between 18 and 98 years.

Results indicate that obesity and underweight status are associated with an increased risk of migraine, and that age and sex are important covariates for the increased risk.

Authors conclude that further research to better understand the mechanisms underlying the association between body composition and migraine, has the potential to advance the understanding of migraine and lead to the development of targeted therapeutic strategies based on obesity status.

