



EFFECTS OF A KETOGENIC DIET ON BODY COMPOSITION IN HEALTHY, YOUNG, NORMAL-WEIGHT WOMEN: A RANDOMIZED CONTROLLED FEEDING TRIAL.



Burén, J ; Svensson, M ; Liv, P ; Sjödin, A
Nutrients. 2024;16(13)
With expert review from Chloe Steele

The ketogenic diet has been extensively studied amongst individuals with chronic diseases, however, dietary studies of the effects of the ketogenic diet on young, healthy, normal weight women are lacking.

This study aimed to determine the effects of a 4-week non-energy-restricted ketogenic, low carbohydrate and high fat diet (LCHF) on body composition in this group of individuals. This was an unblinded randomised control cross-over trial of 17 women comparing ketogenic diet with control. Ketogenic diets consisted of 19% daily energy intake from protein, 4% carbohydrates, and 77% fat (33% saturated fat).

Compared to control, LCHF, ketogenic diet decreased total fat mass, total lean mass, and appendicular lean mass. It was concluded that LCHF, ketogenic diet is effective for weight loss in healthy, young women. However, there is a disproportionate loss of lean muscle mass to fat mass.



THE EFFECT OF A KETOGENIC DIET VERSUS MEDITERRANEAN DIET ON CLINICAL AND BIOCHEMICAL MARKERS OF INFLAMMATION IN PATIENTS WITH OBESITY AND PSORIATIC ARTHRITIS: A RANDOMIZED CROSSOVER TRIAL.

Lambadiari, V ; Katsimbri, P ; Kountouri, A ; et al.
International journal of molecular sciences. 2024;25(5)

Psoriatic arthritis is an autoimmune disorder marked by persistent inflammation. Recent studies suggest a connection between obesity and psoriasis, as visceral fat contributes to systemic inflammation through the release of inflammatory cytokines and adipocytokines. Dietary approaches like the Mediterranean diet (MD) and Ketogenic diet (KD) can potentially aid in weight loss and inflammation reduction. This randomised crossover study examined the effectiveness of a classic Mediterranean diet and an isocaloric Ketogenic diet over twenty-two weeks in patients with psoriatic arthritis, obesity, and pre-existing psoriasis. The findings demonstrated significant improvements in weight, body mass index, waist circumference, total fat mass, and visceral fat with both the Mediterranean and Ketogenic diets. However, the Ketogenic diet showed a statistically significant improvement in psoriasis and psoriatic arthritis, as well as in the levels of inflammatory biomarkers, compared to the Mediterranean diet. Healthcare professionals can leverage the findings of this study to understand the beneficial effects of the Mediterranean and Ketogenic diets on metabolic markers, inflammatory markers, and psoriasis. However, additional robust studies are needed to confirm these results, as the existing research on this topic is limited.

VERY-LOW-CALORIE KETOGENIC DIET VS HYPOCALORIC BALANCED DIET IN THE PREVENTION OF HIGH-FREQUENCY EPISODIC MIGRAINE: THE EMIKETO RANDOMIZED, CONTROLLED TRIAL.

Caprio, M ; Moriconi, E ; Camajani, E ; et al.
Journal of translational medicine. 2023;21(1):692
With Expert Review from Karin Elgar

Migraine is the second most common cause of disability worldwide and is linked with obesity, especially in women of reproductive age. The aim of this randomised controlled trial was to evaluate the effect of a calorie-restricted ketogenic diet (KD) on migraine frequency. The trial included 57 patients with high-frequency episodic migraine (HFEM) and overweight. Patients randomised to the KD followed a very low-calorie KD (VLCKD) for 8 weeks, followed by a low-calorie diet (LCD) for 4 weeks and a hypocaloric balanced diet (HBD) for another 12 weeks. The control group followed the HBD for 24 weeks. 4 of the 29 patients in the KD group withdrew from the study and 14 of 28 in the HBD group.

Migraine frequency reduced in both groups but significantly more so in the KD group. There was no effect on migraine severity in either group. The KD was also more effective than the HBD with regards to weight loss, blood pressure and inflammatory markers. The authors conclude that the VLCKD is an effective therapy for patients with HFEM and overweight or obesity.



EFFECTS OF KETOGENIC DIET ON COGNITIVE FUNCTION OF PATIENTS WITH ALZHEIMER'S DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS.

Rong, L ; Peng, Y ; Shen, Q ; Chen, K ; Fang, B ; Li, W
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With Expert Review from Karin Elgar

Alzheimer's disease (AD) is a progressive neurodegenerative disorder characterised by cognitive decline and memory loss. Recent interest has focused on dietary interventions, such as the ketogenic diet (KD), which may offer neuroprotective benefits by altering brain metabolism and reducing inflammation. The primary aim of this study was to evaluate the effects of the ketogenic diet on cognitive function in patients with AD. This study was a systematic review and meta-analysis of ten clinical trials. Results showed significant improvements in cognitive function in patients following a ketogenic diet, as measured by various cognitive assessment scales.

Furthermore, patients on the ketogenic diet reported better quality of life scores compared to those on standard diets. Authors concluded that the ketogenic diet may have a positive impact on cognitive function and quality of life in patients with AD. These results support further research to confirm the potential therapeutic benefits of the ketogenic diet for AD patients.

