

Effects of two weight-loss diets on health-related quality of life.

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**PURPOSE:** To compare the effects of two diets on health-related quality of life (HRQOL).

**METHODS:** Overweight volunteers (n = 119) were randomized to follow a low-carbohydrate, ketogenic diet (LCKD) or a low-fat diet (LFD) for 24 weeks. HRQOL was measured every 4 weeks using the Short Form-36 and analyzed using linear mixed-effects models. **RESULTS:** The mean age was 45 years and mean baseline body mass index was 34 kg/m<sup>2</sup>; 76% were women. At 24 weeks, five subscales (Physical Functioning, Role-Physical, General Health, Vitality, Social Functioning) and the Physical Component Summary score improved similarly in both diet groups. Bodily Pain improved in the LFD group only, whereas the Role-Emotional and Mental Health subscales and the Mental Component Summary (MCS) score improved in the LCKD group only. In comparison with the LFD group, the LCKD group had a statistically significant greater improvement in MCS score (3.1; 95%CI 0.2-6.0; effect size = 0.44) and a borderline significant greater improvement in the Mental Health subscale (5.0; 95%CI -0.3-10.4; effect size = 0.37). **CONCLUSIONS:** Mental aspects of HRQOL improved more in participants following an LCKD than an LFD, possibly resulting from the LCKD's composition, lack of explicit energy restriction, higher levels of satiety or metabolic effects.