

EFFECT OF KETOGENIC MEDITERRANEAN DIET WITH PHYTOEXTRACTS AND LOW CARBOHYDRATES/HIGH-PROTEIN MEALS ON WEIGHT, CARDIOVASCULAR RISK FACTORS, BODY COMPOSITION AND DIET COMPLIANCE IN ITALIAN COUNCIL EMPLOYEES

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Introduction

There has been increased interest in recent years in very low carbohydrate ketogenic diets (VLCKD) that, even though they are much discussed and often opposed, have undoubtedly been shown to be effective, at least in the short to medium term, as a tool to tackle obesity, hyperlipidemia and some cardiovascular risk factors. For this reason the ketogenic diet represents an interesting option but unfortunately suffers from a low compliance. The aim of this pilot study is to ascertain the safety and effects of a modified ketogenic diet that utilizes ingredients which are low in carbohydrates but are formulated to simulate its aspect and taste and also contain phytoextracts to add beneficial effects of important vegetable components.

Methods

The study group consisted of 106 Rome council employees with a body mass index of ≥ 25 , age between 18 and 65 years (19 male and 87 female; mean age 48.49 ± 10.3). We investigated the effects of a modified ketogenic diet based on green vegetables, olive oil, fish and meat plus dishes composed of high quality protein and virtually zero carbohydrate but which mimic their taste, with the addition of some herbal extracts (KEMEPHY ketogenic Mediterranean with phytoextracts). Calories in the diet were unlimited. Measurements were taken before and after 6 weeks of diet.

Results

There were no significant changes in BUN, ALT, AST, GGT and blood creatinine. We detected a significant ($p < 0.0001$) reduction in BMI (31.45 Kg/m² to 29.01 Kg/m²), body weight (86.15 kg to 79.43 Kg), percentage of fat mass (41.24 % to 34.99 %), waist circumference (106.56 cm to 97.10 cm), total cholesterol (204 mg/dl to 181 mg/dl), LDLc (150 mg/dl to 136 mg/dl), triglycerides (119 mg/dl to 93 mg/dl) and blood glucose (96 mg/dl to 91 mg/dl). There was a significant ($p < 0.0001$) increase in HDLc (46 mg/dl to 52 mg/dl).

Conclusions

The KEMEPHY diet led to weight reduction, improvements in cardiovascular risk markers, reduction in waist circumference and showed good compliance.