

Vegan or Low Calorie Diet for Weight Loss in Polycystic Ovary Syndrome Females: A Randomised Controlled Trial

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ABSTRACT The major aim of this randomized study is to find the effect of a diet based intervention (vegan diet and low-calorie diet) among women suffering from polycystic ovary syndrome (PCOS). Overweight and obese (BMI- 33.7 ± 4.8 kg/m²) "females with PCOS" (n = 21; age, 33.1 ± 4.4 years) were assessed to participate in a 90 days random weight loss trial delivered and guided through diet and nutrition counseling (personalized and group). Body weight, BMI and waist circumference and dietary intake was assessed three times at 0, 45 and 90 days. It was hypothesized that weight loss would be more observed in the vegan group. All data were statistically analyzed and presented as median (inter quartile range). Vegan group participants reported significant weight loss at Day 90, "1.8% ("5.0%, "0.9%) vegan, 0.0% ("1.2%, 0.3%) low-cal; $P = .04$). Vegan group participants showed a greater decrease in energy ("265 ("469, 0)) kcal/d and fat intake "8.2% ("9.8%, 0%) energy) at Day 90 compared with low-cal group participants (0 (0, 173)) kcal/d, $P = .02$; 0 (0, 3.7%) energy, $P = .02$). The results depict that following a vegan diet can be more effective for achieving weight loss in addition to better nutrient intake profile in women with PCOS; however, a bigger sample size is required to validate these results.