**1:** J Am Diet Assoc. 2001 Apr;101(4):411-20. ELSEVIER FULL-TEXT ARTICLE Links

# Popular diets: correlation to health, nutrition, and obesity.


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OBJECTIVE: To examine the association between a range of health and nutrition indicators and popular diets. DESIGN: The Continuing Survey of Food Intake by Individuals (CSFII) 1994-1996 data were used to examine the relationship between prototype popular diets and diet quality as measured by the healthy eating index (HEI), consumption patterns, and body mass index (BMI). The prototype diets included vegetarian (no meat, poultry, or fish on day of survey) and non-vegetarian. The nonvegetarian group was further subdivided into low carbohydrate (less than 30% of energy from carbohydrate), medium (30% to 55%), and high (greater than 55% of energy). Within the high carbohydrate group, participants were classified as having Pyramid or non-Pyramid eating patterns. The Pyramid group was defined as 30% or less of energy from fat and at least one serving from the five major food groups in the USDA Food Guide Pyramid. Finally, the non-Pyramid group was further subdivided into low fat (less than 15% of energy from fat) and moderate fat (15% to 30% of energy from fat). In addition, a review of the published scientific literature was conducted; all studies identified were included in the review. SUBJECTS: 10,014 adults, aged 19 years and older, from the 1994-1996 CSFII were included in the analyses of extant data. More than 200 individual studies were included in the review of the literature. RESULTS: Analyses of the CSFII indicate that diet quality as measured by HEI was highest for the high carbohydrate Pyramid group (82.9) and lowest for the low carbohydrate group (44.6). Energy intakes were low for the vegetarians (1,606 kcals) and high carbohydrate/low fat group (1360 kcals). BMIs were lowest for women in the vegetarian group (24.6) and the high carbohydrate/low fat group (24.4); for men, the lowest BMIs were observed for vegetarians (25.2) and the high carbohydrate Pyramid group (25.2). Review of the literature suggests that weight loss is independent of diet composition. Energy restriction is the key variable associated with weight reduction in the short term. CONCLUSIONS: Diets that are high in carbohydrate and low to moderate in fat tend to be lower in energy. The lowest energy intakes were observed for those on a vegetarian diet. The diet quality as measured by HEI was highest for the high carbohydrate groups and lowest for the low carbohydrate groups. The BMIs were significantly lower for men and women on the high carbohydrate diet; the highest BMIs were noted for those on a low carbohydrate diet.