

Calorie count and low fat energy restricted diet

D. N. Shanta

Obesity Solution Centre, India

Obesity results from an excess of energy intake over energy expenditure. If the obese individual wants to lose weight, then the solution is extremely simple: energy expenditure must exceed energy intake for a suitable length of time. For the obese, the benefits of weight loss are overwhelming. The co morbidities of obesity improve or are resolved completely, the quality of life improves and there are major benefits. It has been suggested that low-fat diets promote fat loss, but some researchers concluded that fat consumption within the range of 18 to 40 percent energy appears to have little if any effect on body fatness. Thus, it may be those diets high in fat do not appear to be the primary cause of obesity, and reduction only in fat will not be the solution. Similarly some recent studies concluded that fat-restricted diets are no better than calorie restricted diets in achieving long-term weight loss in overweight or obese people.

Only dietary fat restriction does not prove to be superior to calorie restriction, thus strengthening the message that calories do count. Physiological studies have provided insight into the mechanisms by which the macronutrients differ in their effect on energy balance: (1) energy from fat is less satiating than energy from carbohydrate, and a high fat/carbohydrate ratio in the diet promotes passive overconsumption, a positive energy balance and weight gain in susceptible individuals; (2) fat is more readily absorbed from the intestine and fecal energy loss is much lower with a high dietary fat/carbohydrate ratio; (3) carbohydrate is more thermogenic than fat and energy expenditure is lower during positive energy balance produced by a diet with a high fat/carbohydrate ratio than during positive energy balance produced by a diet with a low fat/carbohydrate ratio. Randomized intervention studies comparing low fat diets to normal fat diets show that low fat diets prevent weight gain in normal weight subjects and produce weight loss in overweight individuals. Newer studies have shown that replacing some carbohydrate with protein may enhance weight loss. Reduction in percentage energy as fat is positively associated with weight loss. Thus the non fat macronutrient composition of the diet is important to facilitate weight loss and calorie control.

Biography

D.N. Shanta has completed her Masters in Nutrition and Dietetics from Osmania University. She has been working as a nutritionist at obesity solution centre under Dr. Vishwas Naik who is an eminent bariatric surgeon. She has worked with several multi specialty hospitals and has profound knowledge in the field of clinical nutrition. She has also published papers in international journals. She is a life member of the Indian Dietetic Association.

dnshantaa@gmail.com