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Losing weight carries many health benefits, but cutting calories may also lead to cutting nutrient intakes. Researchers have found an increased risk of nutrient deficiencies in females using certain popular diets.

WEIGHT-LOSS STRATEGIES CAN AFFECT RISK OF MICRONUTRIENT DEFICIENCIES

Cutting excess calories is a key component of all successful weight-loss strategies. However, consuming less food can lead to lower micronutrient intakes if individuals aren't careful.

Researchers from Stanford University recently conducted a study among 300 overweight or obese women who were randomly assigned to follow one of four popular weight-loss diets: Atkins, Zone, LEARN, or Ornish. Dietary surveys were administered at the start of the study and after two months of weight loss. From that data, intake levels of 17 vitamins and minerals were estimated.

Regardless of which diet was used, participants were able to reduce their calorie intake from an average of 2000 calories/day to 1500 calories/day. (One pound of weight loss requires a net reduction of 3500 calories.) Somewhat unsurprisingly, that reduction in calories led to a reduction in vitamin and mineral intake for many participants. Vitamin E was the worst nutrient affected, with more than 65% of women receiving inadequate levels while following their diet guidelines. Overall, 12 of the 17 nutrients measured saw differences in intake levels between the start and end of the study.

One way to compensate for potential micronutrient deficiencies is use of a quality multivitamin supplement. However, of the four diets examined in this study, only one recommended use of a supplement, and only 3 participants followed that recommendation. The researchers also found that in some individuals, risk of micronutrient deficiencies actually decreased when participants placed an emphasis on replacing calorie-dense, nutrient-poor foods with low-calorie, nutrient-rich foods.

This research emphasizes the importance of choosing a weight-loss strategy that focuses on more than just cutting calories. A proper weight-loss strategy must also focus on healthy dietary choices, including an emphasis on adequate vitamin and mineral intake.

Gardner CD, Kim S, Bersamin A, Dopler-Nelson M, Otten J, Oelrich B, Cherin R. Micronutrient quality of weight-loss diets that focus on macronutrients: results from the A TO Z study. 2010. AJCN 92(2): ePub ahead of print. Retrieved online 14 July 2010.