

Abstract

Objective—The purpose of this study was to characterize the food choice and patterns of the long-distance backpacking community, and to evaluate the nutritional aspects of such choices. Special interest was paid to weight management and micronutrients of importance to extreme athletes.

Methods—An online anonymous survey composed of questions about the participants and a typical 24-hour dietary recall was used. Of the 251 responses collected, 174 were used for final data evaluation and analysis. Nutritional analysis was completed with Food Processor® SQL nutrient analysis software. Median and mean intakes and percent of daily requirements were calculated for total energy intake, carbohydrates, fat, protein, calcium, iron, potassium, sodium, vitamin A, vitamin B₁, and vitamin C.

Results—Multiple inadequacies were identified by dietary analysis of the participants. Total energy intake was found to be suboptimal for the needs of the community. The mean percent intake of potassium was 42.97%, while the mean percent intake of sodium was 187.77%. The potassium:sodium ratio was approximately 1:2. Ninety percent of participants failed to meet their recommended dietary allowance for vitamin A, with 50% falling at or below 9% of their RDA. Fifty-six percent of participants had a suboptimal intake of vitamin C, with 50% at or below 81.6% of their recommended dietary allowance for vitamin C.

Conclusions—The thru-hiking community was found to have many inadequacies. These inadequacies have the potential to be detrimental to the health and well-being of the backpacking community.