Practical Solutions

Improvement of the Body Composition by Nutrition Support during the Summer Training Period utilizing the "Food Composition Chart" and "Dietary Record" in a University Women's Ski Team

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ABSTRACT

. (Aim)

One of the challenges during the summer training period in competitive ski racers is weight control. The coach of the team requested the dietitian to present the appropriate contents and amounts of food that the racers should take, to score their nutritional adequacy, and to report their progress periodically. Therefore, an attempt was made to improve the body composition of the racers and help them understand the contents and amounts of food that they should take. Their body composition was monitored and nutrition support was provided utilizing a "food composition chart," in which the minimum amount of food a racer should take each day was rated on a point system, and a "dietary record," in which the racers preserved records of the contents of their meals.

[Methods]

Nine members of the university women's competitive skiing team were divided into a weight loss group, a weight gain group, and a maintenance group, and were provided guidance according to the "food composition chart," and given instructions in the form of comments on their "dietary record." The support was provided from April to November 2013, the group training period at the university. Interviews were conducted once every three weeks to measure the body compositions of the racers and to discuss their physical condition during the nutrition support period. Participants were asked to check the contents of their meals and their ratings according to the "food composition chart" and to preserve records in their "dietary record." Meal surveys were performed with photographs three times during the study period to check whether the meals were correctly rated.

[Results]

The body compositions improved and came close to the target value in all the participants. Although the dietary intakes did not reach the target values, all the participants continued maintaining records of their meals in the "dietary record" and were able to grasp the recommended contents and amounts of their meals.

[Conclusion]

Our results suggest that providing nutrition support using the "food composition chart" and "dietary record" of this support, which enables easy and continuous recording of the dietary contents, could be effective in improving the body compositions of athletes.

Keywords: women's competitive skiing, food composition chart, dietary record, summer training period, body composition