Practical Solutions

Nutrition Support for Players of a High School Boys' Ice Hockey Team

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ABSTRACT

. [Aim]

Ice hockey is a contact sport that requires a strong body trunk to prevent it from becoming overwhelmed by body contact with players of the opposite team. The purpose of this study was to provide nutrition support for the players of a high school students' ice hockey team, in order to improve their physical strength and dietary habits, considering that these players are in the phase of muscular growth and development.

[Methods]

Twenty-seven members of a high school students' ice hockey team were enrolled in the study for a period of 6 months. The nutrition education consisted of five group counseling sessions and two online-type individual counseling sessions. Anthropometric measurements were performed before and after completion of the nutrition education program. Periodic anthropometric measurements were conducted to check the muscular development, and two questionnaire surveys on nutrition education were conducted after the group counseling sessions. The results were utilized to evaluate the effects of the nutrition support intervention.

[Results]

The body composition changed significantly immediately following the intervention, however, the difference was no longer found to be statistically significant in the final evaluation. The motivation to improve the dietary habits improved and the understanding of the necessity for nutrition management also improved as compared to that before the intervention. There was a significant decrease in the intakes of nutrients associated with body fat accumulation, such as energy, fat, cereals, and sweets, which had previously been consumed in excessive amounts. The intakes of vitamins and minerals, which had been insufficient, did not improve and individual differences were observed in the intakes of all nutrients. Some assignments in the nutrition education program did not result in behavioral changes in the participants, even though the participants generally understood the contents of the education.

[Conclusion]

Nutrition support for physical growth and development was effective in raising the athletes' food awareness and partially effective in changing their eating behaviors. However, there was no significant change in the body composition, and some of the contents of the nutrition education program were not put into action. Therefore, attempts need to be made to set appropriate nutrition reference values and devise ways to increase the effectiveness of the education in the future.

Keywords: ice field hockey, high school students, dietary survey, nutrition education, body composition