Practical Solutions

Effects of Nutrition Education for Junior High School Swimmers Using Place Mats with Food Illustrations

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ABSTRACT

. [Aim]

Nutrition education was provided to junior high school swimmers using place mats with food illustrations, with the goals of enabling "eating a well-balanced diet" and "eating the amount necessary for oneself," and the beneficial effects of such intervention on the dietary habits of the swimmers were examined.

[Methods]

Four junior high school swimmers were selected to participate in the study. The study was conducted over the 5-month period between July and December 2011. The surveyed parameters were the height, weight, energy and nutrient intake, and intake by food group. Nutrition seminars were conducted and individual guidance was provided to the athletes and their parents. Using place mats with food illustrations, the athletes were instructed to consume six dishes at each meal: the staple food, a main dish, two side dishes, a fruit, and milk or dairy products. The subjects were instructed on self-monitoring using a meal check sheet created based on the place mats with illustrations.

[Results]

The total achievement rate of a six-dish-meal was about 70%. After the nutrition education, the energy, protein, fat, and carbohydrate intakes of all the three athletes increased. The intakes of calcium and iron also increased, however, the target intakes were not reached for some nutrients.

[Conclusion]

By using place mats with food illustrations for nutrition education, the goal of enabling "eating a well-balanced diet" could be nearly achieved, and this educational method could lead to improvement of the dietary habits. Energy and nutrient intake also increased, but the target amount of intake was not reached for all the nutrients, and the goal of "eating the required amount for oneself" was not achieved. It is necessary to continue to provide nutrition education while designing and improving the tools and methods of nutrition education.

Keywords: junior high school student, swimming, place mat with food illustrations