Brief Report

Effects of a nutrition education program for middle-school girls who play soccer and their guardians as evaluated using dietary balance charts

Aoi YOSHIDA, Kumiko INOUE

Department of Food and Nutrition, Faculty of Human Life, Jumonji University

ABSTRACT

[Aim]

This study examined how the Exchange Dietary Balance Charts Method (EDBCM), which promotes communication among team players, guardians, and educators by exchanging dietary balance charts, affected the dietary choices of middle-school girls who play soccer.

[Methods]

An intervention group (18 subjects) and a control group (15 subjects) were followed for 7 months. Photographic records of all meals for 2 days were obtained and used as the baseline data in the intervention group, answers to the Skills and Self-efficacy Questionnaire were obtained from both the players and their guardians in the intervention group, and the results of the Lunch Box Diet Work for players in both groups were recorded. After both groups received nutrition education, the 3-day dietary records of the players in the intervention group were obtained. For every photographic dietary assessment, EDBCM was performed (total of 4 times). After the intervention, the effect of EDBCM was evaluated.

[Results]

In the intervention group, the dietary choice skills of the players improved significantly (P=0.029), and the number of players able to consume adequate amounts of grain dishes (P=0.004) and dairy products at the dish level (P=0.004) increased significantly.

[Conclusion]

The use of EDBCM significantly improved the dietary choice skills of the players. Also, EDBCM was clearly effective for improving the diet-serving skills of the players' guardians, increasing the appropriate intakes of grain and dairy products by the players.

Keywords: middle school girls, soccer players, guardians, nutrition education, Dietary Balance Charts, Lunch Box Diet Work