Developmental Differences in Knowledge of Nutrition, Food, and Cooking and Associated Factors: A Comparison of Junior High School, Senior High School, and University Students

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Abstract

We investigated the current level of knowledge of food among Japanese students to identify issues on dietary education, and to explore improvements in home economics education. The subjects were 436 students from junior high schools, senior high schools and a university in Yamagata prefecture. They answered a questionnaire which contained questions about nutritional knowledge, information sources for diets, and the frequency of family conversation about food. We analyzed the developmental differences of knowledge of food and the factors associated with their knowledge.

The students used knowledge which they acquired in home economics class the most, compared to other sources, such as TV and the Internet. This result suggests that home economics education has a significant role for Japanese students' dietary education. Questionnaire results of knowledge significantly improved as the educational stage proceeded from junior high school to university. However, the students' knowledge of minerals was poorer compared to other nutrients, even at university level, and "mineral" was a difficult term for them to understand. Also, the rate of correct answers was low in questions about the amount of water necessary to cook rice, and the precise volume of the measuring cup. There was significant association between the frequency of family conversation about food and the students' knowledge of cooking. It was suggested that family conversation about food could have an association with cooking knowledge, especially among boys in the long term.

Key words: knowledge of food, dietary education, junior high school students, senior high school students, university students