

Food Literacy of Adolescents as a Predictor of Their Healthy Eating and Dietary Quality

Louisa Ming Yan Chung*

Department of Health and Physical Education, The Education University of Hong Kong, Hong Kong

*Corresponding author: Louisa Ming Yan Chung, Department of Health and Physical Education, The Education University of Hong Kong, Hong Kong, Tel: 852-29488584; E-mail: chungmy@eduhk.hk

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Abstract

Food literacy has newly emerged to connect food-related knowledge and skills to healthy diets. The promotion of it is important to protect adolescents as they eat too many low-nutrient, high-energy foods. Although the components of food literacy have been derived from studies on young people, a reliable and valid measurement tool to assess food literacy and promotion strategies with all components of food literacy has yet to be developed.

Keywords: Health literacy; Nutrition; Psychometric characteristics

Introduction

Health literacy is important in health education and promotion. It is defined as the extent to which people are capable of acquiring, interpreting and understanding the basic health information, analysing the available choices provided and making the best health decisions for their own benefits [1]. This concept has been widely advocated in recent years because it is a better predictor of one's health than other demographic characteristics such as age, occupational status, educational attainment, race, and income [2]. More and more evidences show that patients with poor health literacy have difficulty in receiving and interpreting health related communication and information. This further impedes their accessibility to appropriate health services, detection of preventable diseases, and optimization of disease management [3]. To make the situation worse, nutritional information is usually written in professional jargon and is often beyond the general public to comprehend and digest. Therefore, it is necessary for practitioners to assess the readability of nutrition-related materials to users and strengthen health services to deliver nutrition education according to the needs and level of the target groups [4]. No wonder some previous studies investigated nutrition literacy as a specific health literacy domain. They appraised the relationships between nutrition and disease prevention, the importance of nutrients, numeracy related to label reading, and skill in food-related tasks [4]. So far, a few instruments have been developed to measure nutrition literacy, namely the Nutritional Literacy Scale (NLS) [5], Newest Vital Sign (NVS) [4], and Cardiovascular Dietary Education System [6]. NLS has moderate psychometric characteristics and includes key consumer-related items in nutrition. Previous findings showed that patients with chronic conditions did have lower NLS scores than those without these conditions [6]. Since the NLS is designed for adults, assessment on children using NLS is regarded as not suitable. Together with the deficiency of the NLS, a recent systematic review found that no current tools can capture the full spectrum of the food literacy domains [7] and a new custom-made tool is needed.

Implications of food literacy on children and adolescents

The readability of health information is of public concern. Studies in some countries found that more than 90 million adults have limited ability to use print materials to accomplish their tasks, and many health education materials are written at a level higher than these adults can comprehend. The same disparity also exists in nutrition promotion and education. This poor readability of health and nutrition information for the general public may be one of the causes of an increasing number of cases in diet-related chronic diseases, and so there is an urgent need to improve food literacy to promote healthy eating in the community. Recent studies have brought forth the importance of developing food-related skills and knowledge in food literacy because evidently adolescents prefer unhealthy fast food and pre-packaged foods more. Studies in Australia revealed that food-related skills enabled the participants to follow recipes to cook more at home. By increasing food literacy, the findings showed that the participants were more likely to take actions to improve their dietary quality and intake of essential nutrients.

In recent years, topics of chronic diseases, healthy food choices, nutrition knowledge, and food preparation skills have ignited a new interest in tackling instead of simply acknowledging the causal linkage of obesity and food choices [7]. This new interest is based on controlling the ever-increasing calories young people consumed in every ten years [8] and young people's dieting habits of going for convenience foods such as processed foods and pre-packaged snacks [9]. Pendergast et al. [10] stated that the poor food choices and lower dietary quality are related to the lack of knowing what foods are made of, why and how food labelling information is read, and how and why healthy food is prepared and cooked safely to avoid food poisoning. So the term "food literacy" was coined to address the synthesis of functional, interactive, and critical dimensions of the aforementioned knowledge, skills, transformation, and empowerment in food experience people encounter in today's economy and environment [10]. Since food literacy affects an individual's ability to assess information on food choices, comprehend food labels, perform food safety precautions, use healthy cooking methods, and apply dietary recommendations, it is important for educators to assess and enhance the food literacy skills of young people. Stakeholders including the government, food manufacturers, health providers, educators, and businesses should also play their roles so as to achieve a bigger reach and impact in the community.

Recommendations for Future Studies

To bridge the gap between desired healthy eating and public education, current research should focus on food literacy to make healthy eating easier. Food literacy emerges to represent the complexity

of knowledge, skills, and behaviours that not a single element in “nutrition knowledge”, “cooking skills”, and “eating competence” can encapsulate [11-13]. Indeed, educators are working innovatively to teach our children to eat according to the nutrition guidelines. However, the knowledge related to food should not be stopped with them and should be continued to adolescents and youths at higher levels. Without a full understanding of food, nutrition, and health, the adolescents and youths cannot gear up to improve their eating habits and dietary quality for the benefits of good health.

Although food literacy has been found in some studies, it is not until recently that a research which examined a group of food experts and a group of youths (ages 16-25 years) on food literacy that a core definition of it is derived [14]. This conceptualisation of food literacy comprised eleven components in a 2-round Delphi study. They described food literacy as the ability of an individual to prioritise money and time for food; plan food intake in accordance with changes in source, circumstances, or environment; make food decisions based on needs and available resources; assess foods with the knowing of their advantages and disadvantages; determine what the ingredients of a food are and how to store it and use it; make judgement about food quality; use proper equipment to prepare food efficiently with good taste; apply food hygiene and safe food handling; understand the impact of food in our body; demonstrate self-awareness in portion size for good health; and enjoy food in a social way [14].

Nowadays, the world is facing an epidemic of obesity and adolescents are consuming more calories from less-nutrient foods. One possible reason is their poor food literacy; however, concrete community research has yet to be done using a measuring tool based on a theoretical framework to profile the food literacy of adolescents. Hopefully, this will shed light on the current food literacy status of adolescents. Besides, only limited food literacy education is found in school curriculums incorporating the eleven core components of food-related knowledge and skills, as well as hands-on practice. In future, further research on food literacy will help evaluate the intervention effectiveness of food literacy education. Another aspect of research could be on how adolescents’ levels of food literacy predict their self-awareness on choosing healthy foods [10].

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