New approach in nutrition education: Electronic dietary recording and self-monitoring

Louisa Ming Yan Chung
The Hong Kong Institute of Education, China

Technological applications are on an upward trend in health education and promotion. With regard to dietary assessment, web-based and mobile devices are bringing additional innovative features that conventional instruments cannot offer. Nutrition education provides the personal knowledge necessary to facilitate behavioural change. A study was conducted to compare the effect size of obese adults using electronic dietary recording system with those using paper recording and no recording in enhancing nutrition knowledge, eating attitudes and habitual physical activity level. Validated questionnaires were self-administered by the participants before and after 12 weeks dietary self-monitoring. Pre-post differences indicated participants using electronic recording acquired more knowledge in dietary recommendations (-1.3±2.0, p<0.05) than paper recording (-0.80±1.7, p<0.05) and no recording (-0.20±2.2, p>0.05). Post-intervention comparison showed that the participants using electronic recording obtained the highest difference in knowledge of choosing everyday foods (η=0.124, p<0.05). Food preferences and exercise choices are highly individual in nature and evaluating healthy eating and exercise can thus be complex, as it entails finding a balance between a healthy lifestyle and personal interest. To find that balance, individuals need to acquire the skills of matching energy input and output by consuming calories sufficient for body growth, maintenance, and workout and modulating food groups to obtain all necessary nutrients. Equipping individuals with the aforementioned skills cannot be achieved through one-way education. The main goal of the self-monitoring and dietary assessment process is to supplement education by providing two-way evaluative feedback that assists individuals in making informed food and exercise decisions.

Biography

Louisa Ming Yan Chung has completed her Doctorate degree in 2009 and is currently a full-time Assistant Professor at the Hong Kong Institute of Education. She is a registered nutritionist and has published 16 papers in reputed journals. She has been highly involved in weight management and physical fitness projects in recent 10 years. Her research interest includes eating habits, diet modification, tele-dietetics and nutrition education.

chungmy@ied.edu.hk