## Investigation of young adults' health perceptions and the influence of the environment on choice

Project: 470

Tamara Bucher, The University of Newcastle, School of Health Sciences and PRC in Physical Activity and Nutrition, Faculty of Health and Medicine, Australia

Changes in eating patterns and the eating environment are blamed as major causes of the current obesity epidemic. To fight this epidemic, it is essential to investigate how consumers make food choices and understand how the environment influences consumer behaviour.

Several studies show that in recent decades the availability and the portions sizes of energy-dense, nutrient-poor foods and snacks have increased greatly. Young adults are characterized by frequent snack consumption and promoting more healthful snack choices to them is important for optimising nutrient intake and lowering the risk of chronic disease later in life. The ability to evaluate the healthiness of snacks is essential to making healthy choices. However, it is unclear how young adults define 'nutritiousness' or how they evaluate the nutritiousness of various foods. This knowledge is important for planning successful interventions and designing healthy snacks that will also appeal to population groups with a higher dietary risk.

Research has shown that besides conscious decisions, the food and eating environment itself can influence choice and strategic alterations in the eating environment may help to promote healthy behaviour. Nudging or 'choice architecture' refers to changes in the environment that are anticipated to alter people's behaviour in a predictable way, without forbidding any options or significantly changing their economic incentives. However, to date, the scientific evidence has not been systematically reviewed to enable practitioners and policymakers to implement, or argue for the implementation of, specific measures to support nudging strategies.

The aims of the present project were to 1) systematically review the effect of positional changes of food placement on food choice and to 2) investigate how young adults evaluate the healthiness of snacks currently available for consumption in their environment.

## Study 1 Nudging consumers towards healthier choices: a systematic review of positional influences on food choice

Seven scientific databases were searched using relevant keywords to identify interventions that manipulated food position (proximity or order) to generate a change in food selection, sales or consumption. From 2576 identified articles, fifteen articles comprising eighteen studies met the inclusion criteria. This review has identified that manipulation of food product order or proximity can influence food choice. Such approaches offer promise in terms of impacting on consumer behaviour. However, there is a need for high-quality studies that quantify the magnitude of positional effects on food choice in conjunction with measuring the impact on food intake, particularly in the longer term. Future studies should use outcome measures such as change in grams of food consumed or energy intake to quantify the impact on dietary intake and potential impacts on nutrition-related health. Research is also needed to evaluate potential compensatory behaviours secondary to such interventions.

## Study 2 Investigation of young adults snack product perceptions

The study used a mixed methods design with 115 young adults invited evaluate 32 commonly available snack foods and to define the word 'nutritious'.

Nutritious food was perceived as food that is 'healthy' or 'low in sugars, but high in vitamins and minerals' and 'provides your body with what it needs'. Predictors of perceived snack nutritiousness were sugar ( $\beta$ = -.45, P<.005), fat ( $\beta$ = -.43, P<.05), nut ( $\beta$ = .45, P<.05) and fruit/vegetable ( $\beta$ = .33, P<.05) content and the level of food processing ( $\beta$ = .79, P=<.05). Results of the current study provide first insight into how young adults interpret the term 'nutritious'. The findings can help in the design of more effective nutrition education materials and food product labels to guide healthy choices in this age group.