

Oral Track 6- Nutrition and Food Safety

OT6-01

Should Nutrient Profile Models Promoting Healthy Diets Be 'Category-Specific' or 'Across-the-Board'?

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Background: There is little agreement whether nutrient profile models should treat all foods equally (across-the-board) or as separate food categories with different algorithms (category-specific). We explored the appropriateness of across-the-board and category-specific nutrient profile models as tools for promoting healthier diets.

Methods: Respondents to the UK National Diet and Nutrition Survey were split into four diet-groups based on a dietary quality index. Proportions of foods consumed by each diet-group within each of the food groups (defined according to the UK food guide of Balance of Good Health) were assessed. Average scores of the foods consumed by each diet-group within each of the food groups were also assessed using an across-the-board nutrient profile model.

Results: Compared to the 'least healthy' diet-group, diet of the 'healthiest' diet-group consisted of a significantly greater proportion of fruit and vegetables (12%versus6%), and bread, cereals and potatoes (34%versus26%), and significantly less fatty and sugary foods (16%versus30%). Compared to the 'least healthy' diet-group, the average food scores for both milk and dairy products (1.6versus5.2) and meat, fish and alternatives (4.0versus7.0) were substantially lower (i.e. healthier) in the 'healthiest' diet-group. For other food groups, the differential was much smaller.

Conclusion: 'Healthy diets' of UK adults are characterised by greater consumption of healthy food groups and healthier versions of dairy foods and meat, fish and alternatives. Nutrient profile models designed to promote this diet should be category-specific but with a limited number of categories focused on dairy foods and meat, fish and alternatives.

OT6-02

Differential Determinants of Chronic Malnutrition among Preschool Children: A Cross Sectional Study in Dhaka City

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A cross-sectional study was conducted in two-wards (Ward 62 and 45) of Dhaka City to see the prevalence of chronic malnutrition (stunting) and to identify the factors affecting height for age (HAZ) among pre-school children. It was a two stage random sampling where the

survey was done from Mid-February to Mid-March of 2008 on 380 samples. The analysis revealed that the overall prevalence of stunting in Dhaka city was 39.5% in which children were severely stunted 25% and moderately stunted was 14% ($P<.001$). Bivariate analysis revealed that socio-economic and demographic factors are most significantly associated with stunting. While parents are post graduate, mothers have job & high knowledge of nutrition, mother's height is above 148 cm, familial education is high; child's birth weight is above normal but current weight is above 15kg, then the children are well nourished. From multivariate linear regression model mother's height, mother's knowledge of nutrition, Birth weight and current weight of the children were found most significant factors negatively and independently affecting the stunting of the children.

OT6-03

Assessing Perceptions of A Healthy Diet

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Good nutrition has been linked to reductions in heart disease, cancer, diabetes and all cause mortality. A healthy diet is a complex set of nutritional intake that includes adequate fruit and vegetable consumption, adequate fiber, moderate fat consumption and limited sweets, processed foods, saturated fat and sweetened beverages. The media and popular cultural has portrayed numerous versions of what constitutes a healthy diet. In this study, we asked respondents how often they ate a healthy diet and assessed the relationship with fruit and vegetable consumption, fiber and fat intake, sweetened beverage consumption and eating at fast food restaurants. A random digit dial telephone survey of Hawai'i residents was completed by 3,607 respondents in 2007. Of these, 24.8% reported always eating a health diet, 40.5% often eating a healthy diet, 28.2% sometimes eating a healthy diet, and 6.3% never or rarely eating a healthy diet. Significant linear trends were seen for fat and fiber consumption, eating breakfast, soda consumption and fast food consumption (all $p< .05$ for linear trend) with the frequency of eating a healthy diet. However, the "always" group was significantly higher than all other groups for both daily servings of fruits ($M=3.6$ servings vs. 2.9) and vegetables ($M=3.8$ vs. 3.1). No trend was seen for fruits and vegetables between the never, rarely, sometimes and often groups. A one-item diet screener is linearly related to a variety of nutrition indicators. However, only people who report always eating a healthy diet have high levels of fruit and vegetable consumption.