

Concurrent Session 1

Choosing breakfast: convenience, cost or quality?

J Woods, KZ Walker

Nutrition and Dietetics, Monash University, Vic, 3168

Background - Consumption of a nutritious cereal at breakfast is an important dietary pattern to establish, particularly in children. How to choose that nutritious cereal is problematic due to the large diversity of products, the emergence of new, convenience products and specific marketing to different consumer groups.

Objective - To survey breakfast cereals, bars and drinks available in a large supermarket in Melbourne.

Design - Standardised entry sheets were used to collect data from the labels of all breakfast cereals, bars and drinks presented for sale in a large Melbourne supermarket. Data was entered into a spreadsheet and analysed for nutrient content, cost, energy density, fortification and nutrition, health and related claims.

Results - One hundred and eighty two cereals, 27 bars and 10 drinks were identified. Eleven cereals, specifically targeted at children were lower in protein, fat and fibre and higher in sugars and sodium per serve than other cereals. Breakfast bars were higher in protein, fat and sugar and drinks provided more protein, carbohydrate, sugar and sodium than the cereals. In many products the stated energy content was less than calculated using Atwater factors from macronutrient contents detailed on the label. This was particularly prevalent (>80%) in the 11 children's cereals. In cereals, bars and drinks, energy density was negatively related to energy cost (\$A per 100 kJ), $r = -0.413$, $P < 0.001$; $r = -0.611$, $P < 0.001$; $r = -0.624$, $P < 0.05$, respectively. Many cereals were fortified and claims relating to nutrients were common. The most prevalent claims related to dietary fibre, carbohydrate or iron content. Of 1289 claims identified, 13% were not regulated by current codes.

Conclusion - The high availability of sweetened, low cost, high energy density cereals strongly marketed at children and the emergence of convenience breakfast foods (bars and drinks) has nutritional implications in relation to the growing epidemic of obesity in Australia.

Breakfast and obesity- a matter of sex

L Kent, A Worsley

Exercise and Nutrition Sciences, Deakin University, Vic 3125

Background - The prevalence of obesity and diabetes have been increasing at a rapid rate over the last 20 years. Furthermore, coronary heart disease is still the leading cause of death in Australia despite declines in mortality. The reasons for these changes still remain relatively unclear and to date there is limited information to help clarify this. Furthermore, longitudinal data on predictors of obesity change are scarce. The Sydney Adventist Hospital, situated in a high socioeconomic area in Northern Sydney has a unique 30 year data set on biomedical, lifestyle and dietary factors related to heart health. To our knowledge no other data set in Australia contains such extensive information in such a long time series that is relevant to non communicable disease.

Objective - To examine the relationship between food consumption and BMI. In particular, as breakfast has often been claimed to be of influence on biomedical indices, this paper aims to investigate its possible influence on obesity.

Design - Self-reported questionnaires detailing demographic, lifestyle and dietary habits were completed by about 1000 individuals per year from 1976. Of these, a randomly selected sample of at least 300 questionnaires was taken for every alternate year for this study. Analyses included simple descriptive statistics, reliability analysis and univariate analysis of variance.

Outcomes - To date results are available for BMI from 1976 and 1986. Breakfast was found to be very important in the maintenance of body weight for males ($P < 0.001$, 1976; $P = 0.001$, 1986) but not for females ($P = 0.869$, 1976; $P = 0.772$, 1986) for both years.

Conclusions- These results indicate that breakfast appear to be differentially related to BMI depending on sex. It remains to be seen if the relationship holds in later years.