

Concurrent Session 9: Epidemiology

Development of the new Australian food composition tables

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Background – Up-to-date food composition data are required by food regulation agencies, nutrition researchers, dietitians and the food industry to estimate population nutrient intakes or to generate nutrition information panels for food labels (when specific analyses of food are not undertaken). Food Standards Australia New Zealand (FSANZ) maintains and updates Australian food composition tables. In 2007 FSANZ released updated tables (NUTTAB 2006) incorporating expanded food composition information and in 2008 will release the survey database (AUSNUT 2007) that was used in the 2007 National Children's Nutrition & Physical Activity Survey (*Kids Eat Kids Play*).

Objectives – To describe the analytical and data selection strategies and other decisions used by FSANZ to generate AUSNUT 2007.

Design – Several strategies were used to generate the best possible data for inclusion in AUSNUT 2007. A major analytical program, the Australian Key Foods Program, identified the foods that contribute most to intake of each nutrient, assessed from previous consumption surveys, and collected samples nationwide in 2006-07. Additional foods were analysed where there have been changes in fortification or other practices that might alter their composition. The 22nd Australian Total Diet Study also analysed levels of iodine in multiple samples of major foods. Sodium values were updated wherever possible to reflect current industry practices. Data were only borrowed from overseas tables where appropriate and where suitable Australian data could not be identified. Various data review steps were used.

Outcome – AUSNUT 2007, containing 37 nutrient values for each of over 4100 foods, beverages and dietary supplements, was used to determine nutrient intakes of respondents participating in *Kids Eat Kids Play*.

Conclusion – Nutrition survey researchers have an updated food composition database to use in their work. The timing of when these data will be incorporated into the FSANZ Nutrition Panel Calculator is still undecided.

Changes in anthropometric characteristics of an Australian population: 15 years follow-up study

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Background – Most studies of obesity trends in Australia are based on cross-sectional data.

Objective – To prospectively examine changes in anthropometric measures in an ageing Queensland population from 1992 to 2007.

Design – Participants were residents of Nambour (Queensland) who took part in a community-based skin cancer study. Height, weight, and waist circumference (WC) were measured in March 1992 and March 2007. Overweight and obesity were defined based on BMI (kg/m^2) (BMI 25.0-29.9 and BMI ≥ 30) and WC (abdominal overweight: WC ≥ 94 cm in men, WC ≥ 80 cm in women, abdominal obesity: WC ≥ 102 cm in men, WC ≥ 88 cm in women).

Outcomes – Anthropometric data were available for 625 participants (43% men, 57% women). Mean (\pm SD) age at baseline in 1992 was 47 yrs (± 12). Mean (\pm SD) weight increased during follow-up from 73 kg (± 14) to 78 kg (± 16), BMI from 26 (± 4) to 28 (± 5), and WC from 88 (± 12) to 91 (± 13). Based on BMI, the proportion of individuals who were either overweight or obese increased from 53% in 1992 to 74% in 2007. Stratification by age indicated that mean weight, BMI, and WC increased by 5.6 kg, 2.4 kg/m^2 , and 3.9 cm, respectively in participants aged < 65 years. In contrast, in participants aged ≥ 65 years, mean weight and WC decreased by 2.2 kg and 1.2 cm, respectively. BMI increased by 0.5 units on average, which is due to a decrease in height in this age group. Factors associated with prospective weight change will be presented.

Conclusion – In this Queensland community, obesity has increased by 20% in the past 15 years. The pattern and magnitude of weight change in older individuals was different from their younger counterparts.