Concurrent Session 9: Public Health Nutrition

**An index of diet and eating patterns for a healthy lifestyle**
SA McNaughton¹, K Ball¹, GD Mishra², D Crawford¹

¹Centre for Physical Activity and Nutrition, Deakin University, Melbourne, Australia
²Department of Epidemiology and Public Health, University College and Royal Free Medical School, London, UK

**Background** – Diet indices reflecting recommended or optimal eating patterns have been suggested as a method for describing dietary patterns however there is little published work on indices relevant to the Australian context.

**Objective** – The objective of this study was to develop and evaluate a food-based dietary index to reflect adherence to the Dietary Guidelines for Australian Adults and the Australian Guide to Healthy Eating for use in epidemiology.

**Design** – Analysis was conducted of data collected in the 1995 National Nutrition Survey on participants aged >19 years who completed a 108 item food frequency questionnaire (n=8332). The dietary index consisted of fifteen items reflecting the dietary guidelines including intake of vegetables and legumes, fruit, total cereals, meat and alternatives, total dairy, fluids, sodium, saturated fat, alcoholic beverages, sugars and “extra” foods (as defined by the Australian Guide to Healthy Eating). Diet quality was incorporated by inclusion of items relating to wholegrain cereals, lean meat, reduced/low fat dairy and dietary variety. Mean dietary index scores were calculated across socio-demographic factors and mean nutrient intakes from 24-hour recalls were calculated across quintiles of dietary index score.

**Outcomes** – Significant differences were found in mean dietary index scores according to sex, age, income and area-level index of relative socio-economic disadvantage with higher scores shown amongst women, older people, those with higher incomes and those living in the least socio-economically disadvantaged areas. Higher dietary index scores were associated with lower intakes of energy, total fat and saturated fat and higher intakes of fibre, β-carotene equivalents, vitamin C, folate, calcium and iron (p<0.05).

**Conclusion** – This dietary index based on the recommendations for healthy eating in Australia is able to discriminate across a variety of socio-economic factors and reflects intakes of key nutrients. Further work is required to determine whether this index is useful in predicting health outcomes.