SALSA Peer Leaders responsible for delivering the SALSA program to Year 8 students. The aim of this study is to assess Peer Leaders’ baseline indicators of eating habits, physical activity and recreational screen-time.

**Methods**: SALSA Peer Leaders from 10 high schools completed an online self-reported questionnaire at the commencement of the Peer Leader training workshop. The questionnaire was designed specifically to ensure the SALSA program objectives which included adolescent eating behaviours, physical activity and recreational screen-time in line with Australian recommendations.

**Results**: In total, 213 (93%) Peer Leaders completed the questionnaire (69% female). The majority of Peer Leaders (76%) ate breakfast on the questionnaire administration day, but only 54% reported eating breakfast daily in the previous week. Fifty-six percent and 8%, respectively, reported consuming at least the recommended 2 serves of fruit and 5 serves of vegetables daily. Only 10% of Peer Leaders met the recommendation for physical activity (>60 minutes each day). Forty-four percent and 39% met the recreational screen-time recommendation (<2 hours each day) on school days and weekends, respectively.

**Conclusions**: There is much scope to improve the eating and physical activity behaviours of SALSA Peer Leaders. Peer Leaders will be followed up after program completion later in 2014.

**Funding source(s)**: Commonwealth Department of Health.

**DETERMINING INDIVIDUAL TASTE PHENOTYPE: A COMPREHENSIVE SENSORY METHODS TOOLBOX**

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**Background/Aims**: Taste is a key driver of food choice and function as the body’s gatekeeper. The epidemic of obesity seems to be related to the overconsumption of energy dense foods rich in sugar and fats. An understanding of the relationships between taste perception, food preference and dietary intake in relation to environmental and genetic factors could provide further insights on the mechanisms that lead to the development of obesity, and the difficulty associated with weight loss.

**Methods**: A comprehensive set of tools to understand multiple aspects of sweet and fat taste was developed based upon literature review and trials. The criteria to consider were: (1) easy to conduct and understand by participants, (2) provide accurate and reproducible data, and (3) enable the establishment of relationships with other phenotypic measurements (taste gene expression).

**Results**: The kit developed was tested with a cohort of women between 18 and 50 years old (n = 39). The kit measured objectively each individual’s taste sensitivity, taste acuity, optimum taste intensity for both sweet and fat tastes and food preferences, frequency of food consumption. Phenotypic differences were observed between the participants.

**Conclusions**: A comprehensive toolbox of sensory methods was developed that measure taste performance and establish an individual taste phenotype. These methods can be applied to understand the role of taste perception in obesity, and can be readily applied in other studies where taste perception variance is of interest.

**Funding source(s)**: N/A.

**USE OF THE NCI METHOD IN RISK ASSESSMENTS FOR FOOD REGULATION**

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**Background/Aims**: The US National Cancer Institute (NCI) recently developed a sophisticated method for estimating usual intakes of nutrients and foods.

**Methods**: Food consumption data from national nutrition surveys are combined with food chemical concentrations using the NCI usual intake method. FSANZ has translated the method from SAS into R language, with comparable results. Usual intakes of nutrients were evaluated for use in food regulatory risk assessments, for example for nutrient fortification assessments. The NCI method was also evaluated as a risk assessment tool for other commonly consumed food chemicals (e.g. contaminants) where long term exposure estimates are required, which has not to date been investigated extensively internationally.

**Results**: Testing of the NCI method for food regulatory purposes has been undertaken. The NCI method produces distributions of nutrient intakes, intakes of other food chemicals and food consumption that are narrower than when using a single day of data or a two day average, with comparable population mean intakes. For usual intakes there is a lower proportion of respondents outside health based guidance values for excess and insufficient intakes. Limitations of the method will also be outlined.

**Conclusions**: The NCI method can effectively be used for estimating usual intakes of nutrients and foods for food regulatory risk assessments, and could be used for risk assessments for other types of food chemicals.

**Funding source(s)**: N/A.

**DEVELOPMENT OF THE NEW AUSTRALIAN SURVEY SPECIFIC DATABASE AUSNUT 2011–13**

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**Background/Aims**: Food Standards Australia New Zealand (FSANZ) maintains and updates Australian food composition databases. In May 2014 FSANZ published a survey specific database AUSNUT 2011–13, developed for estimating food, dietary supplement and nutrient intakes from the 2011–13 Australian Health Survey.

**Methods**: Several strategies were used to generate the best possible data for inclusions in AUSNUT 2011–13. The food nutrient database is based on an extensive set of current, high quality Australian derived analytical data, which represents major sources of nutrients in our diet and foods commonly used as ingredients in other foods. The database was supplemented as needed with data generated through recipe calculations, borrowed from overseas food composition tables or based on label information. Foods were classified according to two classification structures.

**Results**: AUSNUT 2011–13 nutrient database contains 51 nutrient values for each of the 5,644 foods consumed in the Australian Health Survey. It is the first time vitamins B6 and B12, selenium and total trans fatty acids have been included in an Australian survey specific database. For the first time foods have been classified as discretionary or non-discretionary.

**Conclusions**: Up to date data on the nutrient content of Australian foods are available for use by food regulation agencies, nutrition researchers, dietitians and the food industry.

**Funding source(s)**: Australian Bureau of Statistics.

**NHMRC NUTRITION (STANDING) COMMITTEE ARCHIVES (1974–1990)**

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The Nutrition (Standing) Committee of the National Health and Medical Research Council (NHMRC) commenced in 1938 as an advisory body to the NHMRC and Commonwealth and State Departments of Health. The Chief Nutritionist and Nutrition Section of the Commonwealth Department of Health were responsible for servicing the Committee and Ruth English was Secretary to it for the period 1979–1990. This archival collection was mainly assembled by Ingrid Coles-Rutishauser, Member of the Committee (1978–1991). Beverley Wood, also a Member of the Committee (1985–1990), contributed additional records.

These records have been catalogued using the bibliographic database EndNote. Folder entries include actual meeting titles and dates, agenda items and tabled papers. This provides a method for searching and identifying the sequence of events over time. Examples of key words include protein, school milk, fluoridation, food standards, alcohol, aged, nutrition education. In total, 2.8 shelf metres of Nutrition (Standing) Committee records (minutes, reports, agenda papers. tabled documents) are complete for the meetings (1974–1990 inclusive) and working parties (1979–1989 inclusive).

All of this material has been deposited with the National Archives of Australia (NAA), Melbourne office and belong to series B6706-B6708. Locate them (together with earlier records of the Committee), using the Record Search facility http://www.naa.gov.au/collection/search
These records provide a significant contribution to the history of food, nutrition and health of the Australian people. They reveal the historical background for current policy and strategies in the field, and will be an invaluable resource to historians, teachers, researchers and students in the years to come.

**Funding source(s):** N/A.

**LACTOFERRIN PROMOTES COGNITION IN POSTNATAL PIGLETS BY UPREGULATING BDNF SIGNALLING**

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**Background/Aims:** To test the hypothesis that lactoferrin (Lf) intervention may enhance neurodevelopment and cognition.

**Methods:** Thirty-three piglets were randomly allocated into Lf treatment group (n = 17) and control group (n = 16). The piglets were fed sow milk replacer supplemented with Lf at 155 mg/kg/d in treatment group and 16 mg/kg/day in the control group from 3–38 days. Learning and memory capacity were assessed using an eight-arm radial maze. Lf levels in hippocampus were measured using ELISA. Blood cortisol levels were monitored weekly. Differences in learning and memory were compared using the Kaplan-Meier survival analysis with Cox regression. Plasma cortisol and correlation analysis was determined using Student's t-test and Spearman's rank test.

**Results:** Lf increased the rate of learning in 40-min, 3 hr and 16 hr long-term memory, but not at 48 hr in 38-day-old postnatal piglets. There was no change in plasma cortisol levels. The Lf levels in hippocampus were positively correlated with total number of successes (r = 0.519, p < 0.01) and negative correlated with total number of mistakes (r = -0.450, p < 0.01) in the 8-arm radial maze assay.

**Conclusions:** Lf supplementation can improve cognitive performance in postnatal piglets. There was a positive correlation between Lf levels in the hippocampus and learning and memory. These findings provide further evidence that early nutrition offers a potential window of opportunity to optimize neurocognitive development.

**Funding source(s):** School of Medicine, Xiamen University and Nestle Research (NRC) Beijing.