

knowledge consumers have difficulty correctly estimating kJ difference between 'standard' and 'large' serving sizes. This suggests there needs to be continued commitment to public health strategies that raise awareness of appropriate portion sizes.

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

#### EHEALTH TECHNOLOGY USE IN HEALTH AND BEHAVIOURAL INTERVENTIONS FOR CHILDREN AND ADOLESCENTS: A SYSTEMATIC REVIEW

C.J. Moores<sup>1</sup>, R.A. Perry<sup>1</sup>, S.L. Williams<sup>2</sup>. <sup>1</sup>*Nutrition and Dietetics, School of Health Sciences, Flinders University, SA, Australia;* <sup>2</sup>*School of Medical & Applied Sciences, Central Queensland University, QLD, Australia*  
E-mail address: [carly.moores@flinders.edu.au](mailto:carly.moores@flinders.edu.au) (C.J. Moores)

**Background/Aims:** In parallel with continuing technological advances, eHealth and mHealth technologies are increasingly utilised in the delivery of health intervention programs and management of chronic conditions. The level of use and impact of these technologies in children and adolescent health interventions is yet to be reported. The aim of this study was to identify and evaluate eHealth technologies which have been employed in health interventions for children and adolescents.

**Methods:** A detailed search strategy was designed and performed in 5 databases; PubMed, CINAHL, PsycINFO, Embase and Web of Science. Abstracts and full text articles were screened and reviewed independently by two authors. Articles were excluded if they did not (a) report the use of eHealth technology to support delivery of an intervention, (b) include children or adolescents (6 – 18 years), (c) target a health issue/behaviour (for example overweight), or (d) report on outcomes of technology use on health issue/behaviour. Full text articles which met each of the inclusion criteria for the systematic review were then independently appraised using the Mixed Methods Appraisal Tool (MMAT).

**Results:** Study design, setting and population will be reported and eHealth technologies will be summarised by technology type and/or combination (where multimodal), as well as the health issue/behaviour which the intervention is intended to manage/treat. Common considerations for the use of eHealth technologies in child and adolescent interventions will be presented.

**Conclusions:** Findings from this systematic review will inform future eHealth interventions in children and adolescents, including management of child overweight and obesity.

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

#### CONSUMPTION WITH FORK OR SPOON? EFFECTS ON ACUTE FOOD INTAKE, EATING RATE AND PALATABILITY

D. Bolhuis, R. Keast, L.P. Newman. *Centre for Advanced Sensory Science of Exercise and Nutrition Sciences, Deakin University, VIC, Australia*  
E-mail address: [l.newman@deakin.edu.au](mailto:l.newman@deakin.edu.au) (L.P. Newman)

**Background/Aims:** Accumulating evidence show positive relationships between eating rate and body weight. Acute food intake is affected by eating rate, bite size, and palatability. The objective was to investigate whether habitual fork vs. spoon use influence eating rate and food intake in four meals that differ in palatability (salt) and in energy density (fat).

**Methods:** Forty healthy adults (18–54 y) were recruited. In a randomized 2 × 2 cross-over design, participants attended four lunch time sessions after a standardized breakfast. Meals were either 1) low-fat/low-salt, 2) low-fat/high-salt, 3) high-fat/low-salt, or 4) high-fat/high-salt.

**Results:** Nineteen participants (6 males) consistently used a fork and 21 (8 males) used a spoon (BMI fork: 22.5 ± 0.4 kg/m<sup>2</sup>; spoon: 25.8 ± 0.4 kg/m<sup>2</sup>,  $p = 0.006$ ). Overall, spoon users consumed ~17% more ( $p = 0.004$ ), and faster (fork: 51 ± 3.4 g/min; spoon: 63 ± 3.5 g/min,  $p < 0.001$ ). In both groups, the high-salt meals were more pleasant than the low-salt meals ( $p < 0.03$ ). In fork users, the high-salt meals led to greater food intake (g) ( $p = 0.019$ ), and tended to be consumed at higher eating rate ( $p = 0.08$ ), but these effects were not observed for spoon users ( $p > 0.5$ ). Fat did not affect

food intake (g) in both groups.

**Conclusions:** Fork users consumed slower and less, and adjust their amount of food intake to pleasantness. Consumption with smaller bites may be a strategy to reduce energy intake and increase the awareness of taste.

**Funding source(s):** NHMRC, Deakin University.

#### DIETARY SALT INTAKE AND DISCRETIONARY SALT USE IN AN AUSTRALIAN POPULATION SAMPLE: 2011 AND 2014

C.A. Nowson<sup>1</sup>, K. Lim<sup>1</sup>, C.A. Grimes<sup>1</sup>, S. O'Halloran<sup>1</sup>, M.A. Land<sup>2</sup>, J. Webster<sup>2</sup>, J. Shaw<sup>3</sup>, J. Chalmers<sup>2</sup>, W. Smith<sup>4</sup>, V. Flood<sup>5</sup>, M. Woodward<sup>5</sup>, B. Neal<sup>2</sup>. <sup>1</sup>*School of Exercise and Nutrition Sciences, Deakin University, VIC, Australia;* <sup>2</sup>*George Institute for Global Health, NSW, Australia;* <sup>3</sup>*Baker IDI Heart & Diabetes Institute, VIC, Australia;* <sup>4</sup>*New South Wales Health, NSW, Australia;* <sup>5</sup>*University of Sydney, NSW, Australia*  
E-mail address: [carley.grimes@deakin.edu.au](mailto:carley.grimes@deakin.edu.au) (C.A. Grimes)

**Background/Aims:** The impact on population salt intakes of initial Australian efforts to reduce the amount of salt in the food supply have not been evaluated. We sought to compare salt intake and discretionary salt use in Victoria between 2011 and 2014.

**Methods:** Adults aged 18 – 75 years provided 24-hour urine collections and reported discretionary salt use in 2011 and 2014. Analysis was adjusted for age, gender, metropolitan area, weekend collection and participation in both surveys.

**Results:** Estimates of salt intake based upon 24-hour collections in 598 participants in 2011 [53% female, mean (SD) age 57.1 (12.0) years] and 442 participants in 2014 [53% female, 61.2(10.7) years] indicated no change: mean (95%CI) 7.9 (7.6, 8.2) vs. 7.8 (7.5, 8.1) g/d ( $p = 0.589$ ). There was no difference in salt use over the same period with 35% versus 36% adding salt sometimes or often/always at the table ( $p = 0.76$ ), and 44% versus 47% adding salt sometimes or often/always during cooking ( $p = 0.29$ ). 24-hour urinary salt excretion was 0.7 (0.7, 0.8) g/d ( $p = 0.002$ ) higher in those sometimes or often/always adding salt at the table and when cooking compared to those infrequently using salt.

**Conclusions:** There is no indication over this 3-year period that national salt reduction initiatives have resulted in a reduction in salt intake in Victoria. More concerted efforts to reduce the salt content of manufactured foods, together with a consumer education campaign targeting the use of discretionary salt are required.

**Funding Source:** NHMRC, Australian Division World Action on Salt and Health, NSW Health, NSW Food Authority, Australian Food and Grocery Council.

#### IS FOOD ADDICTION A STABLE PHENOMENON?

K.M. Pursey, C.E. Collins, P. Stanwell, T.L. Burrows. *University of Newcastle, NSW, Australia*  
E-mail address: [kirilly.pursey@uon.edu.au](mailto:kirilly.pursey@uon.edu.au) (K.M. Pursey)

**Background/Aims:** The Yale Food Addiction Scale (YFAS) is a widely used tool to assess addictive-like eating behaviours. To date, no studies have determined whether these addictive-like eating behaviours are stable longitudinally, or are a transient phenomenon, in a non-clinical population. This study aimed to evaluate whether food addiction *Diagnosis* and *Symptom* scores, as assessed by the YFAS, are stable over 18-months in a non-clinical population.

**Methods:** Young adults (18–35 years) were recruited from the community to an online survey. The survey included demographics, anthropometrics, and YFAS. Participants who volunteered to be recontacted for future research were invited to complete the same survey 18-months later. The YFAS scoring outputs *Diagnosis* and *Symptom* scores were tested for agreement and reliability between the two time-points.

**Results:** Sixty-nine participants (94% female, 67% normal weight) completed both surveys. At baseline, thirteen participants met the YFAS predefined criteria for *Diagnosis*, while eleven participants met this criteria at 18-month follow-up. YFAS *Diagnosis* was found to have moderate agreement [ $Kappa = 0.50$ , 95%CI (0.23, 0.77)] between time-points while *Symptom* scores had good agreement [ $Kappa = 0.70$ , 95%CI (0.54,