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modified to suit telephone health coaching sessions and used to score the therapeutic alliance developed within participant interviews (n = 18). Each phase of development was documented. Inter-rater reliability was measured between two raters to confirm reliability using Kappa coefficients. Discrepancies were discussed between raters.

**Results:** Kappa coefficients for each item ranged from 0.039 to 0.640 prior to rater discussions and 0.203 to 0.895 post rater discussions. Raters commented on the subjectivity of the WAI-O-S. The modified version was determined to be feasible.

**Conclusions:** The modified version of the WAI-O-S for telephone health coaching sessions for weight loss is a feasible tool for measuring the therapeutic alliance. More research may be necessary to determine further refinements.

Funding source(s): Illawarra Health and Medical Health Institute.

# USE OF HEALTHY LIFESTYLE PROGRAMS FOR WEIGHT MANAGEMENT/LOSS IN OVERWEIGHT AND OBESE ADULTS

J. Russell, L. Tapsell, A. Martin. University of Wollongong, NSW, Australia E-mail address: jrussell@uow.edu.au (J. Russell)

**Background/Aims:** The aim of this study was to determine the types of healthy lifestyle programs (HLPs) (diet and physical activity) used by overweight and obese adults to help them maintain or lose weight.

Methods: Men and women residing in the Illawarra region who expressed an interest in taking part in a 12 month healthy lifestyle trial were asked to complete an online screening survey asking about their health and wellbeing. The survey was completed by 620 participants and included questions on healthy lifestyle programs and self-reported height and weight. **Results:** Median BMI was 32.8 kg/m<sup>2</sup> (range 25.0-63.8 i.e. obese) with no significant difference between males and females (p = 0.103). About two thirds (66%) of participants reported using  $\geq 1$  HLPs in the previous two years whilst 12% reported using  $\geq$  3 HLPs. Of the overweight participants (BMI range 25-29.99), 42% did not use a HLP whereas 15% of participants with a BMI  $\geq$  40 reported using  $\geq$  3 HLPs in the previous two years. The most commonly used HLPs reported were private programs such as Weight Watchers (33% and mobile applications (33%). This compares to 7% of participants reported to use Government HLPs such as NSW Get Healthy. Conclusions: These preliminary findings are useful for understanding the frequency and types of healthy lifestyle programs being used by an overweight and obese population. Further research is necessary to determine whether these programs are effective and how they can be further developed and incorporated in weight loss programs.

Funding source(s): Illawarra Health & Medical Research Institute.

## DAIRY INTAKE ENHANCES BODY WEIGHT AND FAT MASS LOSS DURING ENERGY RESTRICTION IN 18–50 YEAR OLDS – A META-ANALYSIS

W. Stonehouse<sup>1</sup>, T. Wycherley<sup>2</sup>, N. Luscombe-Marsh<sup>1</sup>, P. Taylor<sup>1</sup>, G. Brinkworth<sup>1</sup>, M. Riley<sup>1</sup>, <sup>1</sup> Food and Nutrition Flagship, CSIRO, Adelaide, SA, Australia; <sup>2</sup> School of Health Sciences, University of South Australia, SA, Australia

*E-mail address:* welma.stonehouse@csiro.au (W. Stonehouse)

**Background/Aims:** Dairy contain components that promote fat loss. We conducted a meta-analysis of randomised controlled trials (RCT) in 18-50 year olds investigating effects of dairy during energy restriction on body weight and composition.

**Methods:** RCT  $\geq$  4 weeks in 18-50 year olds comparing dairy consumption (dairy food & dairy supplements) with control diets lower in dairy during energy restriction on body weight, fat and lean mass were identified by searching MEDLINE (Web of Science), EMBASE, PubMed, Cochrane Central and WHO ICTRP until June 2014. Multi-component interventions, including those with resistance training, were excluded. Reports were identified and critically appraised in duplicate. Data were pooled using random-effects meta-analysis. *I*<sup>2</sup>>50% indicated heterogeneity. Dose effect was assessed using meta-regression analysis. Quality of the body of evidence was rated using GRADE guidelines.

**Results:** Sixteen RCTs (n = 637) were included, all conducted in overweight/obese participants. Consumption of 2-4 standard servings/day of

dairy food compared to  $\leq$  1 serving/day, or 20-84 g/day of whey protein compared to placebo over median 16 week duration resulted in greater bodyweight loss [mean (95%CI): -1.21 (-1.74, -0.14) kg, p < 0.00001,  $l^2 =$ 15%) and fat mass loss [-1.41 (-2.04, -0.77) kg, p < 0.0001,  $l^2 =$  36%). Lean mass was not differentially affected. Dairy food and supplement studies did not differ. No dose-response effect was observed and studies were largely undertaken in women (84%). Quality of evidence was rated as moderate.

**Conclusions:** Increased dairy intake as part of an energy restricted diet moderately enhanced bodyweight and fat mass loss in 18-50 year olds. Further research is needed to confirm these effects in men. **Funding source(s):** Dairy Health and Nutrition Consortium.

#### TYPICAL PORTION SIZE OF CORE FOODS AMONG AUSTRALIAN ADULTS: THE 2011–12 NATIONAL NUTRITION AND PHYSICAL ACTIVITY SURVEY

M. Zheng<sup>1</sup>, J. Wu<sup>2</sup>, J.C.Y. Louie<sup>1</sup>, V.M. Flood<sup>3</sup>, T. Gill<sup>4</sup>, B. Thomas<sup>5</sup>, X. Cleanthous<sup>5</sup>, B. Neal<sup>2</sup>, A. Rangan<sup>1</sup>. <sup>1</sup> School of Molecular Bioscience, Uni. of Sydney, Australia; <sup>2</sup> The George Institute for Global Health, Sydney, Australia; <sup>3</sup> Faculty of Health Sciences, Uni. of Sydney, Australia; <sup>4</sup> Boden Institute of Obesity, Nutrition and Exercise, Uni. of Sydney, Australia; <sup>5</sup> National Heart Foundation of Australia, Australia

E-mail address: miaobing.zheng@sydney.edu.au (M. Zheng)

**Background/Aims:** Despite the important role of core foods in diet quality and energy intake, little is known about portion sizes of core foods. To examine the typical portion sizes of commonly consumed core foods in Australian adults, and to compare these data with the ADG standard serve.

**Methods:** Typical portion sizes are defined as the amounts of foods consumed at one eating occasion. Age- and sex-specific median portion sizes and interquartile range (grams) of adults aged 19 years and over (n = 9341) were analysed using 24hour recall data from the 2011-12 National Nutrition and Physical Activity Survey. Percentage differences between median portion sizes and the ADG standard serve were calculated.

**Results:** Ninety-seven core food categories were examined. Significant sex and age differences in median portion sizes were found in 57% of foods studied. Greatest variations in portion sizes were observed for amorphous foods such as cooked rice, oats, milk and water. Median portion sizes of breads and cereals, meat and chicken cuts, and starchy vegetables were consistently larger than their standard serves (difference between portion size and standard serve, 30% to 160%). In contrast, the portion sizes of dairy products, some fruits, and non-starchy vegetables were smaller than their standard serves (-30% to -90%).

**Conclusions:** Our analysis revealed significant age and sex differences in portion sizes of core foods, and discrepancies between core food portion sizes and the ADG standard serve among Australian adults. These findings are particularly relevant for development of guidance and policies regarding portion size.

Funding source(s): National Heart Foundation of Australia.

## CONCURRENT SESSION 14: FOOD & HEALTH.

# DISCRETIONARY FOOD CONSUMPTION IN THE VICTORIAN HEALTH MONITOR SURVEY

T.A. McCaffrey<sup>1</sup>, M.L. Blumfield<sup>1</sup>, K. Neville<sup>2</sup>, L.S. Piers<sup>2</sup>, L.M. Kelsall<sup>2</sup>, V. Graham<sup>2</sup>, M.P. Bonham<sup>1</sup>, C. Palermo<sup>1</sup>, K.Z. Walker<sup>1</sup>, H. Truby<sup>1</sup>. <sup>1</sup>Department of Nutrition and Dietetics, Monash University, VIC, Australia; <sup>2</sup>Department of Health and Human Services, Melbourne, VIC, Australia

E-mail address: tracy.mccaffrey@monash.edu (T.A. McCaffrey)

**Background/Aims:** The Australian Dietary Guidelines recommend limiting discretionary food (DF) choices i.e. 'foods containing saturated fat, added salt, added sugars and alcohol'. Increased consumption of DFs are associated with increased risk of obesity and chronic disease. Population dietary surveys provide information on actual consumption of DFs which inform public health policy decisions.

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