18

duration for obese and non-obese primiparous Australian women; to investigate differences between weight categories in their antenatal confidence in attaining their own breastfeeding goals and comfort breastfeeding in several social contexts.

**Methods:** Primiparous women (n = 488) enrolled in the Feeding Queensland Babies Study self-completed questionnaires antenatally and at 2, 4, 6, 9 and 12 months of infant age. Breastfeeding duration was calculated by Kaplan Meier survival analysis and compared using the log rank test. We used binary logistic regression to compare women by weight groups on measures of breastfeeding confidence and comfort.

**Results:** Breastfeeding was initiated by 96% of participants. Obese women showed significantly shorter breastfeeding duration than non-obese women. The log-rank test statistic was 7.21; p = 0.007. Non-obese and obese women were equally likely to report confidence in meeting their own breastfeeding goals. A significant difference was identified for comfort in breastfeeding in the presence of close women friends (OR = 0.41; CI = 0.18-0.90) such that obese women were significantly more likely to feel uncomfortable than non-obese women.

**Conclusions:** Social, cultural, psychological and physiological mechanisms may be implicated in observed negative effects of perinatal obesity on breastfeeding duration. We confirmed the disparity in breastfeeding duration between categories of obese and non-obese women. Differences were identified between groups in women's feeling of comfort in some social breastfeeding contexts. Better understanding such concerns may facilitate improved breastfeeding duration and normalise breastfeeding for all new mothers.

Funding source(s): QHealth: Maternal and Infant Nutrition Unit.

## CONCURRENT SESSION 10: CHILDHOOD/ADOLESCENCE. FACTORS THAT INFLUENCE HEALTH RELATED QUALITY OF LIFE IN **OVER-WEIGHT AND OBESE ADOLESCENTS**

A.C. Shellard <sup>1</sup>, N. Naumovski <sup>1</sup>, R. Connaughton <sup>2</sup>, A.M. McMorrow <sup>2</sup>, A. Richardson<sup>1</sup>, H.M. Roche<sup>2</sup>, F.E. Lithander<sup>1,2</sup>. <sup>1</sup> Health Research Institute, University of Canberra, ACT, Australia; <sup>2</sup> University College Dublin, Ireland E-mail address: shellard.amy@gmx.com (A.C. Shellard)

Background/Aims: The prevalence of adolescent obesity is increasing globally and is associated with adverse physical and psychosocial consequences, including impaired health-related quality of life (HRQoL). This study aimed to investigate relationships between HRQoL and age, physical activity, degree of obesity, and gender in a cohort of overweight and obese adolescents.

Methods: HRQoL data was collected at baseline from overweight and obese adolescents participating in a dietary intervention study. HRQoL was measured using the self-reported Paediatric Quality of Life Inventory 4.0 (PedsQL), including assessment of physical, emotional, social, and school dimensions. Overweight and obesity were defined as BMI  $\geq$  91st and  $\geq$  98th percentiles on UK growth reference charts, respectively. Analysis consisted of difference between groups (ANOVA, Student's t-test, Mann-Whitney test), correlations (Pearson's correlation, Spearman's rank test) and multivariable prediction (linear regression).

Results: Twenty-seven males and forty-seven female overweight or obese adolescents participated (15.7  $\pm$  1.7 y, BMI z-score 2.66  $\pm$  0.75). There was no significant difference between genders in BMI z-scores (p > 0.05), although females reported a significantly poorer physical HRQoL (71.2  $\pm$ 11.6) than males (80.6  $\pm$  17.9; p < 0.005). Physical activity was positively correlated with physical dimension only (0.547, p < 0.05) while age was not correlated with any HRQoL dimension (p > 0.05). Physical dimension was negatively correlated with BMI z-score in females only (-0.253, p <0.05).

Conclusions: Females and less physically active individuals reported poorer HRQoL and minimal differences in HRQoL were observed by degree of obesity or by age. Further research is needed to investigate the extent of the effect of obesity on HRQoL in adolescent populations.

Funding source(s): National Children's Research Centre, Ireland.

PEACH<sup>TM</sup> QUEENSLAND PROGRAM IMPROVED CHILD EATING BEHAVIOURS AND REDUCED BMI Z-SCORE FOR OVERWEIGHT **CHILDREN (PILOT STUDY)** 

C.J. Moores<sup>1</sup>, J. Hartley<sup>1</sup>, R.A. Perry<sup>1</sup>, H. Vidgen<sup>2</sup>, L. Daniels<sup>2</sup>, A. Magarey <sup>1</sup>. <sup>1</sup> Nutrition and Dietetics, School of Health Sciences, Flinders University, SA, Australia; <sup>2</sup>School of Exercise and Nutrition Sciences. Queensland University of Technology, QLD, Australia

E-mail address: carly.moores@flinders.edu.au (C.J. Moores)

Background/Aims: Parenting, Eating and Activity for Child Health (PEACHTM) Queensland is a 6-month family-focussed child weight management program currently targeting 1400 Queensland children. This study aims to investigate changes in child BMI and eating behaviours during the pilot phase.

Methods: From 2013 - 2014, 251 overweight children (US-CDC BMI percentile  $\geq 85^{th}$ ) were enrolled in the pilot phase of PEACH<sup>TM</sup> Queensland, using pre-defined inclusion criteria which included having a child above a healthy weight for their age (5 - 11 years). Baseline and follow-up data were collected from parents by questionnaire and included child eating behaviours, measured by core food intake and Children's Dietary Questionnaire (CDQ). Children attending sessions were weighed and measured by a trained facilitator.

Results: Children attending sessions were 80% obese (IOTF cut-points), 60% female, with average age of 9.0  $\pm$  1.9 years. For the subset of children with complete anthropometry (n = 69), we observed significant decreases in US-CDC z-scores for weight and BMI,  $2.3 \pm 0.7$  to  $2.2 \pm 0.7$  (p < 0.001) and  $2.2 \pm 0.5$  to  $2.1 \pm 0.7$  (p < 0.0001), respectively. This reduction in BMI zscore was accompanied by increases in the proportion meeting recommendations for serves of fruit and vegetables, and significantly lower scores for sweetened beverages and discretionary food intake as measured

**Conclusions:** The PEACH<sup>TM</sup> Oueensland pilot reduced child weight and BMI z-scores, and improved eating behaviours (increased fruit and vegetable intake, decreased intake of discretionary foods and sweetened beverages) although there is need for further improvement.

Funding source(s): The Queensland Government.

## SCHOOL CANTEENS: PARENTS PERCEPTIONS ON TRANSITIONING TO **HEALTHY CANTEENS**

T. Lawlis, M. Knox, M. Jamieson. School of Public Health and Nutrition, University of Canberra, ACT, Australia

E-mail address: tanya.lawlis@canberra.edu.au (T. Lawlis)

Background/Aims: In the past 10-years school canteens have received bad publicity due to their continued sale of unhealthy foods. Concurrently, many school canteens have moved to improve the type and quality of food available to students. This study, using surveys, investigated stakeholder perceptions and use of school canteens in the Australian Capital Territory (ACT).

Methods: Following ethical approval, surveys were conducted in ACT Catholic and Independent schools during February-April 2015. School principals were invited to complete a survey on school canteen demographics; and parent's a survey on their perceptions of the school canteen and their child's use of the canteen.

**Results:** In total, 10 school principals and 86 parents participated in the study. Schools were committed to healthy eating, with menus reviewed 'regularly'. Ninety-four percent of parents reported their children purchased food from the school canteen, with lunch and snacks purchased on a monthly and fortnightly basis. Seventy-one percent of parents provided children with \$1-\$5 to spend at the canteen, with foods classified under the 'red' category such as meat-pies, bacon and egg rolls and full-fat flavoured milks (red-amber) commonly purchased. Parents (56%, total n =48) believed that it was their responsibility, not the schools, to encourage healthy eating. However, 53% (total n = 47) of parents stated they were not fully aware of canteen practices or the cost of food.

Conclusions: While schools are committed to providing healthy foods, more explicit promotion of school canteen practices and encouragement of healthy eating is required.

Funding source(s): Faculty of Health, University of Canberra.

## RISK KNOWLEDGE, MOTIVATIONS AND USE OF PROTEIN SUPPLEMENTS AMONG ADOLESCENT ATHLETES