The Melbourne Infant Feeding, Activity and Nutrition Trial (InFANT) Program

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Rationale for the Program

Evidence of need for early childhood obesity prevention

- High and increasing prevalence of adiposity from early childhood (Hesketh et al 2003; Vaska & Volkmer 2004)
Rationale for the Program

Evidence of need for early childhood obesity prevention

• Obesity-promoting behaviours begin in infancy
  – Non-core foods provide 1/3 of energy intake of 16-24mo; inversely associated with core food intake (Webb et al 2005)

![Proportion >2hr daily television (Dennison et al 2002)](chart.png)
Rationale for the Program

Our previous research

- "Family food environment and dietary behaviors likely to promote fatness in 5–6 year-old children"
  - KJ Campbell, DA Crawford and K Bell

- "Maternal self-efficacy regarding children’s eating and sedentary behaviours in the early years: Associations with children’s food intake and sedentary behaviours"
  - KAREN CAMPBELL, KYLIE HESKETH, AMANDA SILVERI & GAVIN ABBOTT

- "Australian parents’ views on their 5–6-year-old children’s food choices"
  - KAREN J. CAMPBELL, DAVID A. CRAWFORD and KYLIE D. HESKETH

- "Healthy eating, activity and obesity prevention: a qualitative study of parent and child perceptions in Australia"
  - K. HESKETH, E. WATERS, J. GREEN, L. SALMON and J. WILLIAMS
Development of the Program

Informed by parents
• extensive qualitative research around what parents want to know in the early years
  – accessible & engaged
  – actively seeking support & advice on how to feed and play with their children

Informed by MCHNs
• qualitative research around what MCH nurses thought about opportunities for obesity prevention from the start of life
Development of the Program

Informed by best evidence

• systematic reviews of evidence on existing programs

Strategies which aim to positively impact on weight, physical activity, diet and sedentary behaviours in children from zero to five years. A systematic review of the literature

K. J. Campbell and K. D. Hesketh

Interventions to Prevent Obesity in 0–5 Year Olds: An Updated Systematic Review of the Literature

Kylie D. Hesketh and Karen J. Campbell
THE INFANT PROGRAM
Supporting parents to promote healthy eating and active play right from the start

NHMRC 2008-2010
Campbell
Hesketh
Crawford
Salmon
Ball
McCallum
McNaughton

NHMRC 2011-2013
Hesketh
Campbell
Crawford
Salmon
McNaughton
McCallum
Cameron
THE INFANT PROGRAM
Supporting parents to promote healthy eating and active play right from the start

- Cluster randomised-controlled trial
- 15 month program commencing when infants ~3 months
- 14 LGAs representing spread of SES
- 542 families from 62 first-time parent groups
- 87% of all approached participated
- 89% finished the program
- >80% completed follow-up components
Aims

- To improve parent’s confidence, skills, knowledge and support
- To improve infants obesity risk behaviours (diet, physical activity & sedentary behaviour)
- To improve parent obesity risk behaviours
- To have public health utility (existing services, low dose, low cost)
Program elements

- Starts early and continues through important developmental stages
- Using existing social groups (first-time parent groups)
- Encourages discussion between sessions
- Focus on enablers and barriers to uptake of messages
- Anticipatory guidance approach
Program delivery & data collection

**Baseline data collection includes:**
- Measured length & weight (zBMI)
- Maternal survey: secondary outcomes

**Intermediate data collection includes:**
- Measured length & weight (zBMI)
- Survey: child TV viewing & secondary outcomes
- 3 x 24hr child diet recalls

**Final data collection & follow-up includes:**
- Measured height & weight (zBMI)
- Survey: Child TV viewing, FFQ & secondary outcomes
- 3 x 24hr child diet recalls
- 8 days child accelerometer data

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Centre for Physical Activity and Nutrition Research

Deakin University Cricos Provider Code: 00113B
THE INFANT PROGRAM
Supporting parents to promote healthy eating and active play right from the start

• 6 x 2hr sessions delivered quarterly
• Group discussion
• Peer support
• DVD
• Written material
• Newsletters

BMC Public Health
Study protocol
The Infant Feeding Activity and Nutrition Trial (INFANT) an early intervention to prevent childhood obesity: Cluster-randomised controlled trial
Karen Campbell¹, Kylie Hesketh¹, David Crawford¹, Jo Salmon¹, Kylie Ball¹ and Zoë McCallum *²

C-PAN
Centre for Physical Activity and Nutrition Research
Outcomes for parents

• 70% attended 4+ of 6 scheduled sessions
• 85% reported high program usefulness/relevance
• Knowledge and self-efficacy increased
• Maternal diet improved
Outcomes for children

• Higher fruit, vegetable and water intake (trend)
• Lower savoury snack and non-core drink intake (trend)
• 14min/day less TV viewing
• 4g/day less sweet snack intake
Article

Influence of Peers on Breastfeeding Discontinuation Among New Parents: The Melbourne InFANT Program

Adrian James Cameron, MPH, PhD, Kylie David Crawford, PhD, Karen J. Campbell

Breastfeeding mothers consume more vegetables and a greater variety of fruit and vegetables than non-breastfeeding peers: The influence of socioeconomic position

Deborah A. LESLIE, Kylie D. HESKETH, Karen J. CAMPBELL
Parents’ dietary patterns are significantly correlated: findings from the Melbourne Infant Feeding Activity and Nutrition Trial Program

Sandrine Loret, Sarah A. McNaughton, David Crawford, Alison C. Spence, Kylie Hesketh and Karen J. Campbell
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Enhanced elements

• Use of technologies: all resources on web, facebook groups

• Enhancing aspects of program that appeared less effective e.g. PA

• Program extended to 36mths of age
  – Web-based videos
  – Newsletters
Implementing the Program – Healthy Together Victoria

• Relationships with MCHNs
• Providing training across LGAs
• To date have trained 33 professionals across 7 LGAs to implement the program
  (Whittlesea, Wyndham, Knox, Mallee, Sunraysia, LaTrobe and Dandenong)
Acknowledgements

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• WCRF
• Vic Dept Health

• ARC
• Heart Foundation

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• Staff
• Participants

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