



## The economic case for obesity prevention in the early years: Scaling up the evidenced-based INFANT program

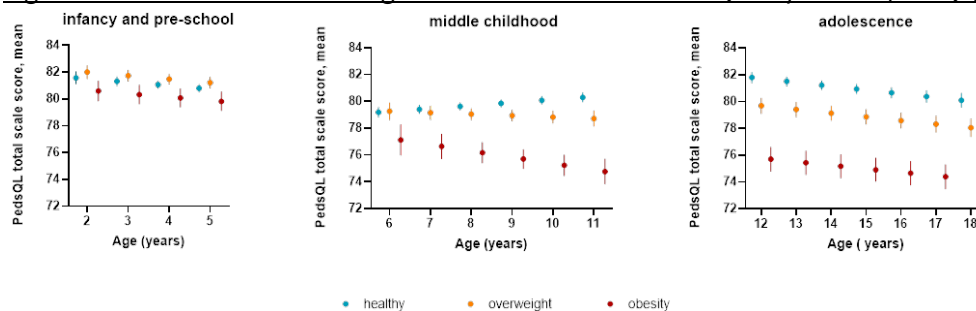
### Early years obesity prevention:

- First 2,000 Days are a critical time for establishing healthy eating and physical activity behaviours that can have lifelong health, economic and social benefits.
- Reduces short and long-term health care costs, including hospitalisations
- Improves health and wellbeing outcomes of children and youth, reducing the health gap

### *Health and economic costs of early childhood obesity*

1. Investing in early years obesity prevention can result in significant short and long-term cost savings related to health, education and productivity outcomes.
  - The direct healthcare costs of young children with obesity (aged 2 – 4 years) are more than 60% higher than children with a healthy weight. This includes costs associated with hospital, non-hospital (e.g. GP visits), emergency care and medicines<sup>i</sup>.
  - Based on these findings and obesity prevalence, the estimated annual direct costs to the Australian healthcare system of obesity in Victorian children aged 2-4 years is high at \$9.7M (AUD2020).
  - The annual excess cost per child with obesity compared to healthy weight is \$426 (95% CI \$62-\$1,235, AUD2020)<sup>1</sup>. Based on these findings, reducing the prevalence of obesity among 2-4 year olds in Victoria by 5% would save \$5.3M in annual direct healthcare costs.
2. Children and adolescents with overweight or obesity have lower quality of life (measured using PedsQL), compared to children with a healthy weight.
  - Infancy and childhood are critical, formative years of growth and development that influence health and mental wellbeing.
  - Preventing early childhood obesity can allay the decline in Quality of Life (QoL)<sup>2</sup> in later childhood. As children grow into middle childhood and adolescence, the disparity in QoL increases between children with a healthy weight, overweight or obesity<sup>ii</sup>.

Figure 1: Effect of children's weight status on health-related Quality of Life (PedQL)<sup>3</sup>



<sup>1</sup> calculations modified for Victoria, based on the methodology used in: <https://onlinelibrary.wiley.com/doi/full/10.1111/1753-6405.12628>

<sup>2</sup> PedsQL Version 4.0 Generic Core Scales (PedsQL) is a validated scale for 2–18 year olds, measuring children's health-related Quality of Life.

<sup>3</sup> Data sourced from the Longitudinal Study of Australian Children (LSAC), involving more than 10,000 children across Australia. [growingupinaustralia.gov.au](http://growingupinaustralia.gov.au)



### 3. Investment in early prevention in the First 2,000 days is highly likely to be one of the most cost-effective approaches to obesity prevention.

- Proven interventions such as INFANT can help families to establish healthy lifestyle behaviours that lay the foundation for a healthy weight.<sup>iii</sup>
- Children with a healthy weight in early childhood are very likely to remain a healthy weight in later childhood and teens.<sup>iv</sup>

### 4. Effective parenting support can help to establish healthy behaviours in early childhood.

- **INFANT** (Infant Feeding, Active play and Nutrition) is a low cost, universal intervention that enhances existing child and family services.<sup>v</sup> The cost of INFANT is approximately \$42 per person, per session.<sup>vi</sup>
- INFANT is based on 15 years of research and demonstrated positive effects on the health behaviours of parents and children at age two.<sup>vii</sup> These benefits on health behaviours were sustained at five years of age.<sup>viii</sup>
- INFANT has *sustained, positive effects* on the health behaviours of parents and children including fruit, vegetable and water intake, reduced sugar-sweetened beverage intake and less television watching.<sup>ix</sup> More evidence and history of INFANT [infantprogram.org](http://infantprogram.org)

## Overview of INFANT

### Low cost, universal intervention that enhances existing early years services:

- Provides parents with evidence-based approaches to feeding, nutrition and active play
- Supports early years practitioners with workforce development and integrates into existing child and family services at low cost
- Engages priority groups and suitable for metro, regional and rural areas
- Utilises low-cost digital technologies including facilitated online training for practitioners and the evidence-based My Baby Now app for parents

INFANT's focus on developing healthy behaviours early in life and connecting parents with expert-led, evidence-based resources offers an effective and cost-effective approach to maternal and child health and wellbeing in the First 2,000 Days.

#### References:

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- <sup>vi</sup> Institute for Physical Activity and Nutrition (IPAN) (2020). Examples of approximate costs of the INFANT program: Based on Maternal and Child Health Services in Victoria running INFANT. Melbourne: Deakin University. [www.infantprogram.org/wp-content/uploads/sites/18/2020/07/INFANT-Cost-Estimates.pdf](http://www.infantprogram.org/wp-content/uploads/sites/18/2020/07/INFANT-Cost-Estimates.pdf)
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- <sup>viii</sup> Hesketh K., Salmon J. & McNaughton S. et al. (2020) Long-term outcomes (2 and 3.5 years post-intervention) of the INFANT early childhood intervention to improve health behaviors and reduce obesity: cluster randomised controlled trial follow-up. *International Journal of Behavioral Nutrition and Physical Activity*, 17(1):95. [doi.org/10.1186/s12966-020-00994-9](https://doi.org/10.1186/s12966-020-00994-9)
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