

# Preventing obesity in young children

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Overweight and obesity is a common and serious problem across the lifespan, and currently about a quarter of children and over half of adults are affected. Sustained weight loss is difficult, as is modifying the behaviours that contribute to weight gain such as eating and physical activity. Strategies aimed at prevention of overweight are likely to be more effective in the long term. In terms of prevention of excess weight gain, there is an increasing body of evidence that particular life stages may provide important intervention points, including early life and young adulthood.

There is growing evidence that early introduction of solids, dietary composition, physical activity and electronic media use amongst infants and young children are associated with obesity in childhood [1]. Parents play a primary role in shaping these behaviours through parental modelling, feeding styles, and the food and physical activity environments provided [2]. Furthermore, there is evidence that children's weight status, food intakes and food preferences track from early childhood into later childhood and adulthood [3, 4]. These findings suggest that early childhood, particularly the first two years of life, are critical for establishing behaviours that will affect weight gain and health across the life course.

Children from disadvantaged families including those from low socio-economic backgrounds and indigenous families have significantly higher rates of obesity, making early intervention particularly important in these groups. In a large representative cohort of 4-5 year old children in Australia the most disadvantaged children were almost 50% more likely to be overweight or obese compared to the most advantaged children [5]. Similarly, a recent study of urban indigenous infants has shown that more than a third (36.9%) were overweight or obese at 2 years of age [6].

The reasons why disadvantaged and indigenous children have higher rates of obesity are multifactorial. Evidence suggests that predictors of children with obesity (high maternal pre-pregnancy BMI, increased gestational weight gain, smoking, reduced breastfeeding initiation, early introduction

of solids, poorer child diet and poorer nutrition knowledge, reduced child physical activity, and more child sedentary behaviours) are more prevalent in low SES and indigenous families [7, 8]. For instance, a recent longitudinal study amongst low SES families in the United States found that unhealthy infant feeding practices, including early introduction of solids (<4 months of age), feeding infants predominately formula for the first six months and putting infants to bed with a bottle, were important in mediating the relationship between SES and early childhood obesity [9]. This suggests that children of low SES and indigenous families have a higher exposure to obesity promoting environments and are in greater need of support [10] to establish healthy behaviours early in life.

Previous systematic reviews have highlighted the key role parents play in developing and maintaining healthy weight among children, mediated by behaviours that can be adopted by the whole family [11]. Other studies suggest that primary care practitioners can assist parents by providing information on healthy eating, behaviour modification, physical activity and parenting skills [12]. The COMPaRE research program targets families of young children and aims to provide a novel intervention for Primary Health Care practitioners to recommend to young families. The intervention aims to promote healthy eating and parenting behaviours that will encourage healthy weight gain in both the children and parents.

## References

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