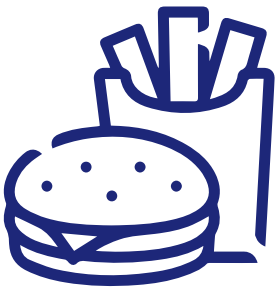
Junk food marketing and childhood obesity: the evidence



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Over one in four children in NSW are overweight or obese which puts them at risk of preventable health conditions in the future[1].

Children with obesity are over five times more likely to have obesity as adults[2]. Obesity increases the risk of chronic disease, including 13 different cancers[3]; making obesity prevention a priority area for Cancer Council NSW (CCNSW).

Restricting children's exposure to junk food marketing has been identified as an international policy priority to reduce childhood obesity[4,5]. It has been highlighted as one of the most cost-effective population-based strategies to reduce the prevalence of childhood obesity, resulting in children's health gains and health service savings[6,7].

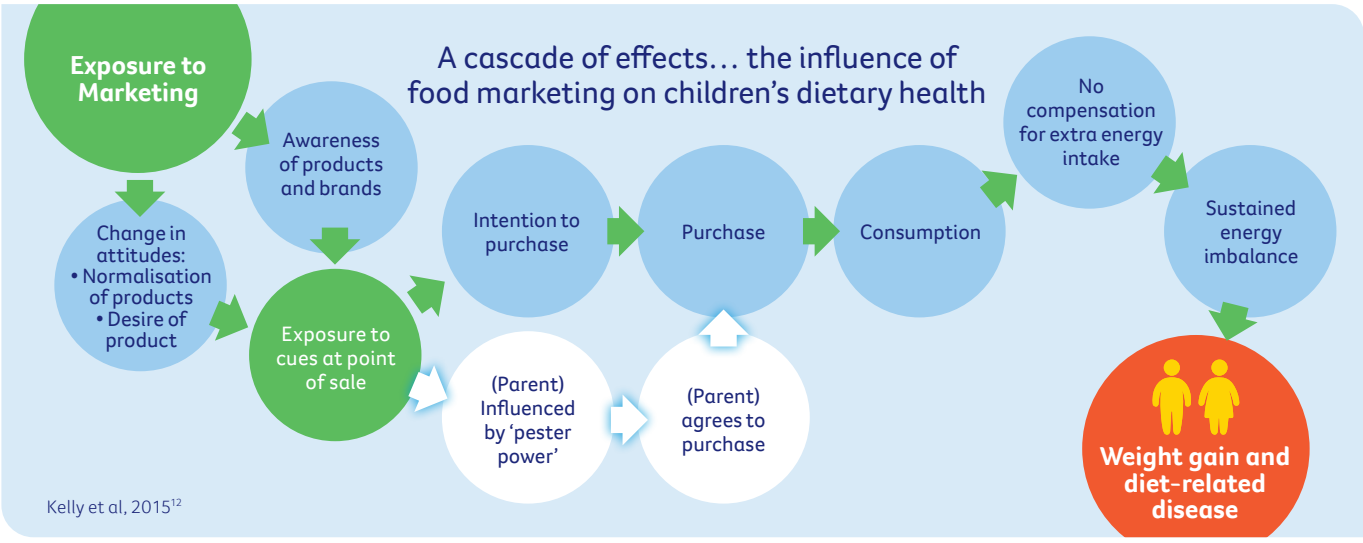
However, currently in Australia there is limited government regulation addressing junk food advertising to children and this is mostly addressed in industry-led codes. These codes do not cover the range of media and marketing techniques used and are ineffective in protecting children from the impact of food marketing exposures[8-10].

The 2018 report from the Senate Select Committee into the obesity epidemic in Australia stated that the current Australian regulatory framework is inadequate and that restrictions should apply to all forms of marketing and all media[11].

This document sets out a summary of the key evidence to date, including research recently conducted by the University of Wollongong and CCNSW, and discusses the extent to which the evidence supports a causal link between junk food marketing exposure and children's unhealthy weight gain.

HOW DOES JUNK FOOD MARKETING AFFECT CHILDREN'S DIETARY HEALTH?

The pathway linking exposure to junk food marketing and children's unhealthy weight gain is complex, but is likely to involve a number of impacts that are consolidated and accumulated over time, as depicted in the diagram below from Kelly et al, 2015[12].



WHAT IS THE EVIDENCE THAT JUNK FOOD MARKETING IS A PROBLEM FOR CHILDREN?

There is an extensive body of evidence to demonstrate that junk food marketing negatively affects children's eating behaviours and dietary health. Research has shown that, in children, junk food marketing is associated with:

- Positive attitudes towards brands and desire for advertised products[13-16]
- The 'normalisation' of junk food consumption[17]
- Awareness (recall and recognition) of brands[13]
- Greater taste preferences towards advertised products [18-20] and an increased preference for junk food [21,22]
- Greater pestering of parents to buy junk food[23,24]
- Immediate snack food consumption[25-27]
- Greater intake of junk food and lower intake of healthy food overall[28]
- Increased kilojoule intake that is not compensated for by eating less at later eating occasions and of an amount that could lead to the development of overweight in children[29,30]
- Heavier weight status[31].

DOES JUNK FOOD MARKETING CONTRIBUTE TO CHILDHOOD OBESITY?

Demonstrating a direct link between marketing exposure and obesity is challenging because obesity is driven by a number of factors and weight gain typically occurs gradually. Given the prolific and integrated exposure to food marketing in children's everyday lives, isolating its effect in an experimental setting is challenging and, in the longer-term, expensive and methodologically difficult.

However, a recent Australian randomised crossover trial, where 160 children aged 7-12 years attended a 6-day holiday camp, showed that children ate 194 kilojoules (~50 calories) more at camp on the days they saw food advertising compared with days they didn't see food advertising[29].

Children with overweight or obesity left camp on the days they'd seen food advertising having eaten 398 kilojoules more than they had eaten on the days they hadn't seen food advertising[29]. This energy imbalance is of a magnitude that over time could lead to unhealthy weight gain in children[32,33]. Food advertising was seen to be so powerful and persuasive that even children who had better capacity to self-regulate their food intake were overcome by the commercial messages and ate more after watching the food advertisements[30].

These results show that:

1. children's exposure to unhealthy food marketing likely makes a significant contribution to the energy imbalance that is driving childhood overweight in Australia; and
2. approaches to teach children to be more aware and critical of marketing will not be effective given the power of this marketing over children.

Additionally, there is another way of determining whether there is a cause and effect relationship. The internationally-recognised and widely-used standard for determining causality is the Bradford Hill framework[34]. Norman and colleagues (2016) categorised evidence from meta-analyses, reviews and empirical studies that investigated the relationship between food marketing and children's food behaviours (including food preferences and choices, short term food consumption and usual dietary intake), across a range of different media, against Bradford Hill's criteria[35]. This review concluded that the current evidence satisfies all the key criteria for a cause and effect relationship.

CONCLUSION

Taking the body of evidence in this field as a whole, there is now sufficient evidence to confirm a cause and effect relationship between junk food marketing exposure and childhood obesity.

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