QUESTION: Discuss the factors that contribute to childhood obesity in Australia. You should use at least 5 academic sources to support your response.

The emergence of childhood obesity is a serious medical issue which has been widely documented as a global epidemic that has had a significant impact on the health of children and on healthcare systems internationally. This condition refers to children and adolescents who, according to the body mass index (BMI) calculation, exceed the average weight in proportion to age and height. Consequently, chronic physical health comorbidities, as well as psychological problems, can result (Mayo Clinic, 2017). Research indicates that approximately a quarter of the children in Australia are categorised as overweight or obese (McHugh, 2016). As a result of increasing concern, extensive research has been conducted in this area, and the contributing causes have been identified as genetic and environmental factors such as psychosocial, socioeconomic and lifestyle factors. All these causes include influences by external social factors which further intensify the impacts. This essay will examine the abovementioned factors and compare various views on the issue.

Genes play a role in body weight regulation, but research suggests that the extent of this role as a contributing factor to childhood obesity is comparably limited in light of the numerous physiological processes which sustain the balance between the consumption and outflow of energy. Ebbeling et al. (2002) point out that genetic factors may strongly impact on predisposition to obesity, but the influence of single gene defects is minimal. They propose that perinatal factors (usually beginning after the 20th week of gestation and ending up to 4 weeks after birth) may be stronger contributors to the issue. For example, prenatal over-nutrition transmission due to maternal obesity may permanently stimulate appetite and metabolic alteration. Moreover, they observed that bottle feeding may also be a contributor as it can correlate with physiological changes or parental control over psychological elements which influence nutrition intake later in childhood. These views are supported by Han et al. (2010) who compiled a table that summarises similar genetic determinants and also discuss the effect of leptin signalling. They describe leptin signalling as "... the key biological pathway controlling energy balance" (p. 1738) which can be affected by function-changing mutations that are associated with infant obesity. However, further research is required to strongly substantiate these theories. Sahoo et al. (2015) profess that more recent research indicates that genetic factors are significant determinants of the risk of childhood obesity. These determinants consist of a conglomeration of obesogenic drivers such as dietary over-consumption, lack of exercise, and increased sedentary activities that are regulated by gender, age, familial traits, parenting approaches, family lifestyles and school and demographic environmental...
factors. In other words, as Bray (2004, as cited in Swinburn et al., 2011, p. 810) expresses, "the genetic background loads the gun, but the environment pulls the trigger."

Alternative research suggests that psychosocial, cultural and socioeconomic determinants tend to carry stronger indications as contributors to childhood obesity. Russell et al. (2016) report a disparity of 6% in cases of overweight and obesity between socioeconomically underprivileged non-indigenous and indigenous Australian children (above 25%), and those from more privileged backgrounds (nineteen percent). Findings by Thurber et al. (2014) observe that between 2012 and 2013 approximately 33% of Aboriginal and Torres Strait Islander children between the ages of 2 and 14 were classified as overweight or obese. This percentage increased to approximately 66% after the children reached the age of 15. The rationale for the elevated risk of children from low socioeconomic backgrounds becoming obese is complex. Kalra et al. (2012) identify parenting and initial developmental lifestyles, familial relationships and familial culinary habits as the significant factors. Russell et al. (2016) believe that family environment may be the key contributor amongst others including diet, parental feeding behaviour, early infant feeding approaches (such as the choice of breastfeeding versus that of formula feeding and the duration before the introduction of solids), media parenting practices, and the extent of children’s sedentary behaviour. However, inconclusive results from research denote the need for extended investigation of the socioeconomic determinants (Aftosmes-Tobio et al., 2016; Pulgarón, 2013; Russell et al., 2016).

Behavioural patterns and daily occurrences are influenced by the familial and socio-emotional frameworks (Aftosmes-Tobio et al., 2016). Obese children may live in a familial environment which renders them more susceptible to psychosocial and cultural stressors and consequent health issues such as obesity (Gundersen et al., 2011). Pulgarón (2013) highlights the point that although it has not been fully substantiated, multiple studies have purported a relationship between obesity and ADHD, sleep deprivation, and elevated symptoms associated with internalisation and externalisation. The significant psychosocial factors of childhood obesity outlined by Nieman and LeBlanc (2012, p. 618) are "stressors that trigger emotional eating: being bullied, suffering neglect and physical/mental maltreatment, or a living situation where consistency (for example, living in foster care with frequent placement changes, or in circumstances of divorced parents), limit-setting and supervision are lacking". They propose that these triggers lead to excessive eating, characterised by a particular attraction to "comfort food". Moreover, stress can also lead to sleep deprivation and as a result, a disinclination towards involvement in physical activities. Karla et al. (2012) and Rahman and Harding (2013) reinforce this viewpoint, commenting that obese children tend to prematurely have large portions of food, elevated fat and sugar ingestion, lower fruit and vegetable intake and too much...
time spent in sedentary activities. They observe that parents of obese children often tend to offer food as a reward for desired behaviour. The children then often develop an underlying anxiety related to guilt regarding their weight and eating habits. All these factors can create a vicious cycle resulting in an emotional environment that induces depression. This, in turn, facilitates ongoing over-ingestion of unhealthy comfort foods, further weight gain, and vulnerability to discrimination, bullying and social ostracisation. These factors radically compound the situation Sahoo et al. (2015) acknowledge that depression is not only a contributor to obesity, but frequently also a notable symptom.

Amongst the environmental drivers of childhood obesity, lifestyle culture has been reported as being a highly significant contributor to its increase in Australia. The rapid development of technology, and its now facile availability and extensive integration into the contemporary lifestyle, has had a transformative impact on the directional approaches to the interests and the physical behaviours of children Russell et al. (2016) report that the sedentary practice of excessive hours watching television has been further problematised by its association with obesogenic behaviours such as the ingestion of high calorie foods. In the twenty-first century this has been intensified by the innovative development of available technology leading to the ever increasing popularity and use of smartphones, laptops, tablets, apps and computer games. This readily available technology tends to often dominate the time of children in place of more physical activities. Thus, energy intake exceeds expenditure over long periods of time, establishing the underpinnings of obesity.

As a developed nation, Australia has experienced notable changes in its food supply over the last five or six decades. Although many of these changes can be considered to have positively contributed to its cultural and nutritional development, others have had more negative impacts. Better Health Victoria (2014) cites the pervasive obtainability, popularity and promotion of food and beverages, which are high in sugar and fats but nutrient-reduced, as being detrimental to health and a factor in the escalation of childhood obesity. The Australian Bureau of Statistics (2015) reports that discretionary foods (foods that lack nutrient value) which contain high levels of saturated fats, sugars and salt provided more than a third of the total energy of Australians. Many of these foods are particularly attractive to children and compose a large segment of the products sold at the 25,141 fast food businesses registered across Australia in 2015. Moreover, the Australian fast food industry has experienced a dynamic growth across the last ten years as dining out is increasingly interwoven into the Australian lifestyle (Retail and Personal Services Training Council, 2015).
Advertising further propels the integration of nutrient-poor fast foods into contemporary lifestyles by highlighting the factors of convenience and low cost which are attractive options to time-poor working parents, especially those from the socioeconomically underprivileged sector of the population. Boyland and Halford (2013) note that studies conducted by both Lobstein and Dibb (2005) and Zimmerman and Bell (2010) concluded that a strong association exists between the advertising of foods high in sugars and saturated fats and adiposity (increase in body mass index), and that the impact of this advertising on children is more significant than the sedentary element of watching television. They further comment that research by Hamilton-Ekeke and Thomas (2007), St-Onge et al. (2003), Jaeger (2006), and Just and Payne (2009) indicates that food advertising and branding are principal influences on food selection outcomes, dietary health and risk of obesity in children who are targeted with enticing advertising strategies such as "appeals, promotional characters, celebrity endorsement and giveaways" (Committee on Communications, 2006, as cited in Boyland & Halford, 2013, p. 239).

In conclusion, the current situation regarding childhood obesity in Australia is driven by a variety of factors which are embedded within the genetic and environmental (psychosocial, socioeconomic, lifestyle culture) spheres. Notwithstanding the identification of the magnitude of this health issue and government health sector efforts to highlight awareness and educate the population, a sustained increase in childhood obesity has been observed. Evidence demonstrates that the related medical and psychological effects of the disorder tend to progress into adulthood with accompanying comorbidities. This subsequently has the potential capacity to overburden the health system. Therefore, it is vital that further advancements are made into understanding the intricate components that lead to this condition, and that effective pre-emptive and management platforms are developed.
References


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