Emerging Minds.

National
Workforce
Centre for Child
Mental Health

Childhood higher weight and mental health

AMAL ABIKAR, ANGELA MICHELETTO AND MICHELLE MACVEAN

Overview

This fact sheet provides basic information about the links between higher weight in children and mental health difficulties. It can be used as an accompaniment to the <u>Understanding child mental health and chronic physical conditions</u> e-learning course, which highlights the links between chronic illnesses/conditions in childhood and associated mental health difficulties.

This fact sheet covers general information about higher weight in children, prevalence in Australia and the implications of the illness, including mental health impacts. Some content also pertains to adults.

Key points include:

- Higher weight refers to a state where the energy that a child gets from consuming food and drinks is greater than the energy they use, causing this extra energy to be stored as excess fat.
- In Australia in 2017–18, higher weight affected 25% of children, with 17% being overweight and 8% obese.
- A child with higher weight has a greater likelihood of experiencing emotional and social problems, such as bullying, low self-esteem and depression, compared to their healthier peers.
- Support from family and health professionals can help children manage higher weight, enhance their quality of life, and improve their mental health and wellbeing.

A note on language

The language used when discussing weight can be highly stigmatising and may further impact children negatively. This is identified as a key practice issue when talking with families. It is critical that professionals use non-stigmatising, neutral language that focuses on health rather than weight.

However, weight is often categorised in both health practice and research using the categories of underweight, normal weight, overweight and obese. Overweight and obesity in children are often identified by measuring their Body Mass Index (BMI). Children with a BMI between the 85th – 95th percentile are considered overweight while children that have a BMI that is greater than the 95th percentile are considered obese.

In the context of this resource, when findings relate to both higher weight categories, we have used the neutral term 'higher weight'. We have only included the terms obese and overweight when research has specifically differentiated between weight categories and reported different findings for these categories. The term 'healthy weight' is used to refer to those in the 5th to less than 85th percentile BMI weight category.



What is higher weight?

Higher weight refers to a state where the energy that a child gets from consuming food and drinks is greater than the energy they use through physical activity, growing and other bodily processes, causing this extra energy to be stored as excess fat (Raising Children Network, 2021). Children that are overweight have a Body Mass Index (BMI) between the 85th and 95th percentile, while children that are obese have a BMI that is greater than the 95th percentile. Overweight and obesity in childhood is a complex condition that is emerging as a significant public health challenge.

There are a range of factors that influence a child's weight, including:

- gender
- neighbourhood landscape
- household income
- parental education
- physical activity
- sedentary activity
- quality of diet
- school-level academic performance
- screen time; and
- quality of sleep (Australian Institute of Health Welfare [AIHW], 2020a).

An obesogenic environment (one that promotes excessive weight gain) can greatly increase a child's risk of higher weight. Examples of these factors include:

- the availability of unhealthy eating options and calorie-dense foods
- increased use of technology, further encouraging sedentary behaviour
- urban design that reduces physical activity; and
- targeted advertising of calorie-dense and unhealthy food options at schools and through the media (Swinburn, 1999).

Higher weight in Australia

Those living in low socio-economic areas and rural and remote regions, as well as those with disability and from one-parent families, are more likely to be higher weight (AIHW, 2020a).

What is the prevalence of higher weight in Australia?

In Australia in 2017–18, higher weight affected 25% of children, with 17% being overweight and 8% obese (AIHW, 2020a). Higher weight is associated with poorer health and wellbeing outcomes for children.

The National Health Survey (Australian Bureau of Statistics [ABS], 2018) indicates that 38% of Aboriginal and Torres Strait Islander children and adolescents were higher weight in 2018–19 (AlHW, 2020a).

What are the implications of higher weight for the child?

Higher weight can have implications on all facets of a child's development, including physical, social, emotional and psychological wellbeing (Australian Institute of Health and Welfare [AIHW], 2020b; Sahoo, 2015). Children who are higher weight may be at a greater risk of developing comorbidities, particularly cardiovascular diseases. There is also an increased risk of developing type two diabetes, obstructive sleep apnoea, hip and joint problems, early atherosclerosis, hypertension, metabolic syndrome and fatty liver disease (Lobstein, Baur & Uauy, 2004; Weihrauch-Blüher & Wiegand, 2018).

Another factor associated with higher weight is stigmatisation. Obesity has been described as one of the most stigmatising and least socially acceptable conditions in childhood (Schwimmer, Burwinkle, & Varni, 2003). Weight-stigmatisation and teasing have been found to account for a variety of negative consequences in higher weight children (Harriger & Thompson, 2012). As a result of their weight, a child may face social marginalisation and negative stereotypes, leading to their exclusion from activities that are competitive in nature and require physical activity. This is due to the negative perceptions by peers and the associated negative stereotypes that impact on the child's ability to participate (Niehoff, 2009).

What are the mental health impacts of higher weight?

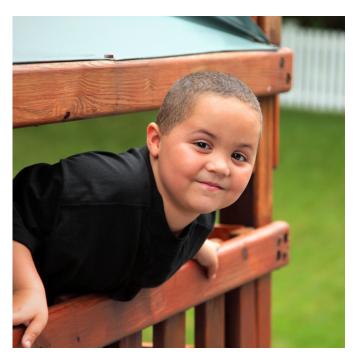
The interrelationships between childhood obesity and psychosocial wellbeing are complex and differ by age and severity (AIHW, 2020a). A meta-analysis demonstrated that higher weight can have significant mental health implications, depending on severity (Simmonds, Llewellyn, Owen & Woolacott, 2015). These psychosocial factors do not always have a unidirectional relationship with higher weight (Russell-Mayhew, McVey, Bardick, & Ireland, 2012; Sahoo et al., 2015), meaning that mental health problems may contribute to higher weight or vice versa. However, it is also important to note that not all children who are higher weight will experience psychosocial issues (Russell-Mayhew et al., 2012).

Research has found that children who are higher weight may be more likely than their normal-weight peers to experience emotional and social problems such as mood disorders and depression (Diao, 2020; Hargens, Kaleth, Edwards, & Butner, 2013; Sanders, Han, Baker & Cobley, 2015), low self-esteem (Hargens et al., 2013; Sanders et al., 2015), poorer health-related quality of life (Sanders et al., 2015), bullying and eating disorders (Hargens et al., 2013).

The negative attitudes inflicted by peers such as bullying, teasing and other manifestations of obesity stigma have also been found to be stressors associated with negative psychological outcomes in children (Rankin et al., 2016).

The mental health impacts of higher weight have a considerable impact on the child's overall health-related quality of life (HRQoL). The school and social performance of higher weight children is significantly less favourable compared to their peers with an average BMI (Latzer, 2013). Another study found that in the case of severely obese children, their HRQoL was found to be similar to those diagnosed as having cancer (Schwimmer et al., 2003). These children have been shown to be at increased risk of developing behavioural and emotional difficulties (Anderson, 2017).

The impacts of social stigma and their implications on a child's psychosocial wellbeing and health-related quality of life are multifaceted. Higher weight has been shown to lead to greater school absenteeism and overall psychosocial stress, less nutritious diet and physical activity, more behavioural problems, and less favourable neuropsychological functioning (Latzer, 2013).



What impact does higher weight have on families?

Parents may experience the emotions of self-blame, guilt and shame as a result of their child's diagnosis of higher weight. In some instances, parents may feel that criticism of their child's weight gain is a criticism of their parenting abilities (Weihrauch-Blüher & Wiegand, 2018). This can have significant implications on the parents' ability to address higher weight concerns, as there is now a sense of shame associated with it. Parental self-stigmatisation can make the child's weight a sensitive issue for the parent to discuss (Ziser et al., 2021).

A systematic review investigating the relationship between higher weight and family functioning found that within families where a child with higher weight has stressors such as maternal depression, maternal distress and child neglect have a negative psychosocial impact on family functioning (Halliday, Palmer, & Mellor, 2014). This review also found a significant association between higher weight in children and poor family communication and cohesion, challenges in parent responses to child behaviour, and high levels of family conflict (Halliday et al., 2014). Parents' rating of poor family functioning and high levels of family stress were consistently related to the child's obesity, and the review concluded that the relationship between higher weight and family functioning was bidirectional (Halliday, 2014). Bidirectional in this instance means that poor family functioning led to increased risk of higher weight, and that the presence of higher weight and its treatments also impacted family functioning.

Higher weight can also have an impact on the interactions that siblings have with each other. A child with obesity may feel like they can no longer participate in physical activity with siblings and peers due to the limitation of their weight. This can have great effects on the child with obesity, in terms of their self-esteem and social abilities (Freire, Pope, & Coyle, 2019).

Conclusion

Higher weight can have significant implications for children's overall development and wellbeing, including ongoing mental health concerns. Early identification of these concerns, and access to professional services including allied health practitioners, social workers and family-individual-school-based interventions, offers the potential to alleviate the challenges for children and their families. Further information about the impact of chronic conditions on mental health can be found in the <u>Understanding child mental health and chronic physical conditions</u> e-learning course.

Where can I go for further information on higher weight?

Dieticians Australia

Dieticians Australia is the peak body for dietetic and nutrition professionals in Australia. The website can be used to locate Accredited Practising Dieticians.

Life!

Life! is a free lifestyle medication program in Victoria. The Life! program website offers services such as group courses. Telephone health coaching on 13 RISK (13 74 75) is available from 9am till 12pm.

National Eating Disorders Collaboration (NEDC)

National Eating Disorders Collaboration is a government initiative that aims to implement a consistent, evidenced-based approach to the prevention and treatment of eating disorders. It provides information on eating disorders and support for people living in larger bodies. The website explains eating disorders, including prevention, early intervention, treatment and recovery. Support is available on 1800 334 673.

Obesity Evidence Hub

A free website with key evidence on obesity trends, impacts, prevention and treatment in Australia. The hub is run in partnership between the Cancer Council Victoria, the Bupa Health Foundation, and the Obesity Policy Coalition.

What are some other supports for children and families?

Beyond Blue

Beyond Blue provides information and support to help everyone in Australia to achieve their best possible mental health. The service supports those experiencing depression, anxiety or going through a difficult time. The phone service 1300 224 636 operates 24/7, while the website offers online chats, email support and online forums.

GP and psychologist

Families can consult with their local health professional to get access to specialised support.

Healthdirect Australia

Healthdirect is a national, government-owned, notfor-profit organisation supporting Australians in managing their own health and wellbeing through a range of virtual health services. Health advice is available on 1800 022 222.

Kids Helpline

Kids Helpline is a free, private and confidential 24/7 phone and online counselling service for children aged 5–12 years and young adults aged 18–25. Qualified counsellors are available via phone on 1800 551 800 or via WebChat or email.

Lifeline

Lifeline is a national charity providing all Australians experiencing emotional distress with access to 24-hour crisis support and suicide prevention services. Available via phone on 13 11 14.

Parentline

Parentline is a confidential telephone service providing professional counselling and support in Queensland and the Northern Territory. Available via phone on 1300 301 300.

Raising Children Network

Raising Children Network is a comprehensive and trusted online resource for parenting information. A website includes information on children's health and wellbeing across the ages. It includes videos, fact sheets and downloadable toolkits on child development, behavioural problems and health issues.

References

Anderson, Y., Wynter, L., Treves, K., Grant, C., Stewart, J., & Cave, T. (2017). Assessment of health-related quality of life and psychological wellbeing of children and adolescents with obesity enrolled in a New Zealand community-based intervention programme: An observational study. *British Medical Journal Open*, 7(8). Available here.

Australian Institute of Health and Welfare. (2020a). Australia's children (Cat. No. CWS 69). Canberra: AIHW. Available here.

Australian Institute of Health and Welfare (2020b). Overweight and obesity among Australian children and adolescents (Cat. No. PHE 274). Canberra: AlHW. Available here.

Diao, H., Wang, H., Yang, L., & Li, T. (2020). The impacts of multiple obesity-related interventions on quality of life in children and adolescents: A randomized controlled trial. *Health And Quality Of Life Outcomes*, 18(1). Available here.

Freire, K., Pope, R., & Coyle, J. (2019). What are the drivers of cross-generational physical activity. exploring the experiences of children and parents? *Journal of Public Health*, 27(5), 591–601. Available here.

Halliday, J., Palma, C., & Mellor, D. (2014). The relationship between family functioning and child and adolescent overweight and obesity: A systematic review. *International Journal of Obesity*, 38(4), 480–493. <u>Available here</u>.

Hargens, T., Kaleth, A. S., Edwards, E. S., & Butner, K. L. (2013). Association between sleep disorders, obesity, and exercise: A review. *Nature and Science of Sleep*, 27. Available here.

Harriger, J., & Thompson, J. (2012). Psychological consequences of obesity: Weight bias and body image in overweight and obese youth. *International Review of Psychiatry*, 24(3), 247–253. Available here.

Latzer, Y., & Stein, D. (2013). A review of the psychological and familial perspectives of childhood obesity. *Journal Of Eating Disorders*, 1(1). Available here.

Lobstein, T., Baur, L., & Uauy, R. (2004). Obesity in children and young people: A crisis in public health. *Obesity Reviews*, 5(s1), 4-85. <u>Available here</u>.

Niehoff, V. (2009). Childhood obesity: A call to action. Bariatric Nursing and Surgical Patient Care, 4(1), 17–23. Available here.

Rankin, J., Matthews, L., Cobley, S., Han, A., Sanders, R., Wiltshire, H., & Baker, J. (2016). Psychological consequences of childhood obesity: Psychiatric comorbidity and prevention. *Adolescent Health, Medicine and Therapeutics*, 7, 125–146. Available here.

Raising Children Network. (2021). Childhood obesity. Canberra: Department of Social Services. Available here.

Russell-Mayhew, S., McVey, G., Bardick, A., & Ireland, A. (2012). Mental health, wellness, and childhood overweight/obesity. *Journal of Obesity*, 2012. <u>Available here</u>.

Sanders, R., Han, A., Baker, J., & Cobley, S. (2015). Childhood obesity and its physical and psychological co-morbidities: A systematic review of Australian children and adolescents. *European Journal of Pediatrics*, 174(6), 715–746. Available here.

Sahoo, K., Sahoo, B., Bhadoria, A., Choudhury, A., Sufi, N., & Kumar, R. (2015). Childhood obesity: Causes and consequences. *Journal Of Family Medicine and Primary Care*, 4(2), 187. Available here.

Schwimmer, J., Burwinkle, T. M., & Varni, J. W. (2003). Health-related quality of life of severely obese children and adolescents. *Journal of the American Medical Association*, 289(14), 1813. Available here.

Simmonds, M., Llewellyn, A., Owen, C., & Woolacott, N. (2015). Predicting adult obesity from childhood obesity: A systematic review and meta-analysis. *Obesity Reviews*, *17*(2), 95–107. Available here.

Swinburn, B., Egger, G., & Raza, F. (1999). Dissecting obesogenic environments: The development and application of a framework for identifying and prioritizing environmental interventions for obesity. *Preventive Medicine*, 29(6), 563–570. Available here.

Weihrauch-Blüher, S., & Wiegand, S. (2018). Risk factors and implications of childhood obesity. *Current Obesity Reports*, 7(4), 254–259. <u>Available here</u>.

Ziser, K., Decker, S., Stuber, F., Herschbach, A., Giel, K., Zipfel, S. ... Junne, F. (2021). Barriers to behavior change in parents with overweight or obese children: A qualitative interview study. *Frontiers In Psychology*, 12. Available here.

