

Childhood obesity: a growing pandemic

Childhood obesity rates have increased substantially over the past year in the UK, according to a new report from the UK Government's National Child Measurement Programme. This rise in prevalence is the largest single-year increase since the programme began 15 years ago and highlights the worldwide rising trend for obesity among children and adolescents. Once considered a problem mainly in high-income countries and societies, obesity in children is now also occurring, and at a rapid rate, in low-income and middle-income countries. In 2018, almost half the world's children younger than 5 years with overweight lived in Asia and a quarter in Africa, with the number in Africa rising by just under 45% between 2000 and 2018. For the past few decades, childhood obesity has been a cause for concern, but with the effects of the pandemic and national lockdowns seemingly adding to the issue, it is now an undeniable public health crisis.

Lockdown measures including school closures, restrictions on leaving the house, and limitations on meeting with people have led to children and adolescents leading a more sedentary lifestyle than they did before the outbreak of COVID-19. In addition, a US study reported an increase in recreational screen time of almost 4 h a day in children aged 12–13 years during the COVID-19 pandemic. The effects of these lifestyle changes can be seen in the CDC Morbidity and Mortality Weekly Report, which notes that the rate of BMI increase almost doubled in US children and adolescents aged 2–19 years during the pandemic compared to pre-pandemic. In turn, obesity and overweight are also risk factors for severe COVID-19 outcomes, at least in adults. Data published in *The Lancet Diabetes & Endocrinology* revealed a positive association between increasing BMI and admission to ICU due to COVID-19.

Children with overweight and obesity are more likely to become adults with obesity and to develop non-communicable diseases such as diabetes and cardiovascular disease at a younger age than children considered to have a healthy weight. There is also an increased risk of cancer, premature death, and disability later in life. A recent study, which found that mean BMI had increased in 18–25 year olds from 1976 to 2018, and the trebling of worldwide prevalence of obesity in adults demonstrate the long-lasting effects

of obesity. To prevent potential short-term and long-term physical and mental health complications, several pharmacological and behavioural interventions have been tried and tested with varying degrees of success. The NHS has launched a new pilot scheme in which 15 specialist clinics aim to provide individually tailored diet plans, mental health treatment, and coaching from a team of different professionals to tackle childhood obesity in a holistic way. However, it is crucial that the biological, commercial, and political determinants of obesity in young people are also analysed and addressed. Transnational ultraprocessed food and beverage companies that generate billions of dollars and contribute to unhealthy dietary lifestyles through aggressive and prolific marketing have only recently been partially regulated with policies, such as the soft drinks industry levy, now implemented in over 50 countries. Nevertheless, the importance of a home environment, with a regular mealtime structure and a healthy atmosphere should not be underestimated.

Government policies often ignore the important issue of socioeconomic disparities in people with obesity. Despite sugar taxes, bans on junk food advertising and numerous campaigns encouraging healthy eating, children in the UK's most deprived areas are now more than twice as likely to have obesity than those living in the least deprived areas. While various factors could be responsible, such as poorer areas usually having a larger number of fast food outlets than their counterparts, the root of some of the disparities can start as early as birth. Some evidence has suggested that breastfeeding reduces the risk of obesity in children later in life however data has shown that mothers from lower socioeconomic backgrounds are less likely to breastfeed than mothers from higher socioeconomic backgrounds. The COVID-19 pandemic has further exacerbated food insecurity, which, in turn, has resulted in the purchasing of cheaper packaged and processed food.

There is no quick fix for a problem as multi-faceted and widespread as obesity in children and adolescents. However, if we continue as we have been, a pandemic of lifelong health complications due to childhood overweight and obesity is imminent, if not already upon us. ■ *The Lancet Diabetes & Endocrinology*



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For more on the **UK National Child Measurement Programme** see <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2020-21-school-year/age>

For more on the **worldwide distribution of children with overweight and obesity** see <https://glopan.org/sites/default/files/ForesightReport.pdf>

For more on **screen time** see *JAMA Pediatr* 2021; published online Nov 1. DOI:10.1001/jamapediatrics.2021.4334

For more on the **CDC report on BMI rate in the USA** see <https://www.cdc.gov/mmwr/volumes/70/wr/mm7037a3.htm>

For more on **obesity and COVID-19 outcomes** see **Articles** *Lancet Diabetes Endocrinol* 2021; 9: 350–59

For more on **BMI levels in 18–24 year olds** see *JAMA* 2021; 326: 2073–74

For more on **adult obesity statistics** see <https://bit.ly/3o7f6pl>

For more on the **NHS pilot scheme** see <https://www.england.nhs.uk/2021/11/specialist-clinics/>

For more on **factors associated with breastfeeding** see *BMJ Open* 2013; 3: e002765