# Adolescent obesity in boys linked to increased health risks for future children



Research highlights concerning the intergenerational effects of obesity have emerged from a recent study that identifies a significant link between adolescent obesity in boys and health risks in their future children. This relationship, meticulously crafted by a collaboration between the University of Southampton and the University of Bergen in Norway, reveals that boys who gain excessive weight during their early teens may inadvertently condemn their offspring to higher probabilities of developing obesity and asthma.

Experts emphasise that while some weight gain during puberty is entirely normal, a substantial number of adolescents fall prey to unhealthy dietary habits, marked by increased consumption of sugary and salty snacks, combined with decreased physical activity. The study focused on 339 pairs of fathers and their offspring, analysing DNA samples and historical body silhouettes of the fathers from their teenage years. The findings uncovered alterations in 1,962 genes associated with fat cell formation and metabolism in the children of overweight teenage fathers. Particularly alarming is the noted greater impact on daughters than sons.

Dr Negusse Tadesse Kitaba, a co-author of the study, underscored the vulnerability of boys during puberty—a critical period when sperm development occurs—describing it as a "key window of vulnerability." This phase appears particularly sensitive to lifestyle influences that can trigger epigenetic changes, thereby affecting a child's health profile.

Further compounding the problem, current data from the NHS highlights a concerning statistic: approximately 32 per cent of children aged 11-12 in England are classified as overweight or obese. This figure sees a slight decrease to 25 per cent among those aged 13-15, yet the overall trend signals a troubling rise in adolescent obesity. Public health experts are now sounding alarms about a potential tipping point, where the drivers of ill-health among adolescents have shifted away from traditional factors like smoking and alcohol consumption towards issues related to weight gain and mental health issues.

In light of these findings, Professor Cecilie Svanes from the University of Bergen notes the urgent implications for public health policy, stating, "The new findings have significant implications for public health and may be a game-changer in public health intervention strategies." The broader ramifications could entrench health inequalities for generations if obesity is not effectively addressed in today's youth.

Complementary research expands on the familial dimensions of obesity; studies show that maternal weight status is often more impactful than paternal obesity on child health outcomes. Research published in various journals, such as Obesity and PLOS ONE, consistently indicates that children of overweight parents—particularly mothers—are at a higher risk of developing obesity themselves. This trend underscores the importance of addressing both maternal and paternal obesity to mitigate risks of metabolic syndrome and high BMI in children.

To combat these alarming trends, health officials advocate for a balanced approach that fosters healthy eating and physical activity among teenagers. Incremental changes that promote better dietary habits and fun, engaging physical activities are encouraged over drastic diets or extreme measures, which can often prove fruitless or harmful.

As the findings of this pivotal study unfold in the broader context of public health discourse, it becomes increasingly clear that the consequences of adolescent obesity extend far beyond individual health, having profound implications for future generations. The time for action is now, as the health trajectory of both current and future populations hangs in the balance.

## Reference Map:

* Paragraph 1 – [[1]](https://www.dailymail.co.uk/health/article-14753803/Obese-people-terrifying-health-risk-children.html?ns_mchannel=rss&ns_campaign=1490&ito=1490)
* Paragraph 2 – [[1]](https://www.dailymail.co.uk/health/article-14753803/Obese-people-terrifying-health-risk-children.html?ns_mchannel=rss&ns_campaign=1490&ito=1490), [[4]](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6512222/)
* Paragraph 3 – [[3]](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7745332/), [[6]](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7745332/)
* Paragraph 4 – [[2]](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3765070/), [[5]](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3765070/)

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.dailymail.co.uk/health/article-14753803/Obese-people-terrifying-health-risk-children.html?ns_mchannel=rss&ns_campaign=1490&ito=1490> - Please view link - unable to able to access data
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3765070/> - A study published in the journal Obesity examined the influence of maternal and paternal obesity on infant body mass index (BMI) growth. The research found that maternal obesity had a stronger impact on infant BMI than paternal obesity, with infants of obese mothers exhibiting higher mean BMI at birth and between 1.5 to 3.5 years compared to those of normal-weight mothers. The study suggests that maternal weight control during reproductive years may be particularly beneficial in preventing excess infant BMI.
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7745332/> - Research published in the journal Obesity Facts investigated the relationship between parental overweight and obesity and the prevalence of metabolic syndrome in their offspring. The study found that children with overweight or obese parents had a higher risk of developing metabolic syndrome compared to those with normal-weight parents. The risk was highest in children with both parents being overweight. Maternal overweight appeared to have a stronger correlation with offspring metabolic syndrome than paternal overweight.
4. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6512222/> - A study published in the journal PLOS ONE explored the association between parental weight status and early adolescence body weight, considering socioeconomic factors. The research revealed that children whose mothers were overweight or obese had a significantly higher likelihood of being overweight or obese themselves. Paternal obesity was also associated with an increased risk in children, particularly for boys. The study highlights the importance of maternal weight status in influencing children's weight outcomes during early adolescence.
5. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3765070/> - A study published in the journal Obesity examined the influence of maternal and paternal obesity on infant body mass index (BMI) growth. The research found that maternal obesity had a stronger impact on infant BMI than paternal obesity, with infants of obese mothers exhibiting higher mean BMI at birth and between 1.5 to 3.5 years compared to those of normal-weight mothers. The study suggests that maternal weight control during reproductive years may be particularly beneficial in preventing excess infant BMI.
6. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7745332/> - Research published in the journal Obesity Facts investigated the relationship between parental overweight and obesity and the prevalence of metabolic syndrome in their offspring. The study found that children with overweight or obese parents had a higher risk of developing metabolic syndrome compared to those with normal-weight parents. The risk was highest in children with both parents being overweight. Maternal overweight appeared to have a stronger correlation with offspring metabolic syndrome than paternal overweight.
7. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6512222/> - A study published in the journal PLOS ONE explored the association between parental weight status and early adolescence body weight, considering socioeconomic factors. The research revealed that children whose mothers were overweight or obese had a significantly higher likelihood of being overweight or obese themselves. Paternal obesity was also associated with an increased risk in children, particularly for boys. The study highlights the importance of maternal weight status in influencing children's weight outcomes during early adolescence.