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The MRC Integrative Epidemiology Unit (IEU) at the University of Bristol conducts some of the UK's most advanced population health science research. It uses population data, genetics and experimental interventions to improve our understanding of how social, environmental, and genetic factors act jointly to influence health.

This response covers two main themes:

1. the impacts of obesity on health, including on children and adolescent health outcomes, and the influence of pre- and post-natal nutrition on the risk of subsequent obesity,
2. The effectiveness of Government planning and policymaking processes in relation to food and drink policy and tackling obesity, including the impact of recent policy tools and legislative measures intended to prevent obesity.

This response describes the implications of obesity-related stigma for population health and for health inequalities, and the potential for anti-obesity measures to exacerbate stigma.

Summary

- *Despite being common, obesity is highly stigmatized.*
- *Stigma and discrimination towards people living with obesity contribute substantially to the negative consequences of obesity for population health.*
- *Obesity stigma disproportionately impacts already disadvantaged groups and is therefore likely to exacerbate health inequalities.*
- *Initiatives aiming to tackle obesity can inadvertently add to stigma, with counterproductive results.*
- *It is crucial to avoid obesity-stigmatizing messaging in interventions targeting children and adolescents, for whom psychological impacts may be especially long-lasting.*
- *Interventions which tackle the food environment and physical activity at a societal level, rather than targeting individuals, are likely to have fewer adverse effects.*

Obesity is highly stigmatized, and this stigmatization contributes to the negative consequences of obesity for population health.

Obesity-related stigma and discrimination are widespread across society. Negative stereotypes about people living with obesity are prominent in public discourse, which often present people living with obesity as lazy, undisciplined, unintelligent, and immoral^{1,2}. Consequently, obesity-related stigma and discrimination is observed in almost every area of life, including employment³, educational⁴, and medical settings⁵.

Obesity-related stigma and discrimination add to the implications of obesity for health, through:

- Healthcare avoidance. People living with obesity may delay or avoid seeking medical treatment for fear of stigmatizing interactions with doctors⁶.
- Reduced physical activity. People living with obesity may avoid exercising in public for fear of shaming and abuse^{7,8}.
- Consuming more high-calorie foods⁹ and weight gain over time¹⁰.
- Reduced efficacy of weight-control measures¹¹.
- Psychological effects, including higher levels of depression, even in children and adolescents¹².
- Internalized weight stigma. This is when people come to agree with negative obesity-related stereotypes and apply them to themselves, often leading to reduced self-worth¹³.

¹ Flint SW et al, [The portrayal of obesity in U.K. national newspapers](#) Stigma and Health, 2016

² Kite J et al, [Influence and effects of weight stigmatisation in media: A systematic review](#) EClinicalMedicine, 2022

³ Giel KE et al, [Stigmatization of obese individuals by human resource professionals: An experimental study](#) BMC Public Health, 2012

⁴ Dian M et al, [The weight of school grades: Evidence of biased teachers' evaluations against overweight students in Germany](#) PLoS One, 2021

⁵ Alberga AS et al, [Weight bias and health care utilization: a scoping review](#) Prim Health Care Res Dev, 2019

⁶ Alberga AS et al, [Weight bias and health care utilization: a scoping review](#) Prim Health Care Res Dev, 2019

⁷ Vartanian LR et al, [Effects of weight stigma on exercise motivation and behavior: A preliminary investigation among college-aged females](#) J Health Psychol, 2008

⁸ Meadows A et al, [Yes, We Can \(No, You Can't\): Weight Stigma, Exercise Self-Efficacy, and Active Fat Identity Development](#), Fat Studies. 2019

⁹ Schvey NA et al, [The impact of weight stigma on caloric consumption](#). Obesity. 2011

¹⁰ Jackson SE et al, [Perceived weight discrimination and changes in weight, waist circumference, and weight status](#). Obesity, 2014

¹¹ Carels RA et al, [Weight bias and weight loss treatment outcomes in treatment-seeking adults](#). Ann Behav Med. 2009

¹² Blundell E et al, [Longitudinal pathways between childhood BMI, body dissatisfaction, and adolescent depression: an observational study using the UK Millenium Cohort Study](#). Lancet Psychiatry. 2024

¹³ Pearl RL et al, [Measuring internalized weight attitudes across body weight categories: validation of the modified weight bias internalization scale](#). Body Image, 2014

Obesity-related stigma does not only harm people living with obesity. Internalized weight stigma can also affect individuals whose body weight is low (BMI <18.5kg/m²) or within the recommended range (BMI 18.5-24.9kg/m²)¹⁴, where it is linked with disordered eating and drive for thinness^{15,16} .

¹⁴ Hughes AM et al, [Demographic, socioeconomic and life-course risk factors for internalized weight stigma in adulthood: evidence from an English birth cohort study](#). The Lancet Regional Health – Europe, 2024.

¹⁵ Marshall RD et al, [Internalized Weight Bias and Disordered Eating: The Mediating Role of Body Image Avoidance and Drive for Thinness](#) Front Psychol, 2020

¹⁶ Schvey NA et al, [The internalization of weight bias is associated with severe eating pathology among lean individuals](#) Eat Behav, 2015

Obesity stigma disproportionately impacts already disadvantaged groups and is therefore likely to exacerbate health inequalities.

The UK has [stark inequalities in health](#) between socioeconomic groups, genders, and ethnicities. Obesity stigma is likely to worsen health inequalities in several ways:

- Obesity is more common among disadvantaged groups, including adults and children living in more [deprived areas](#), and some [minority ethnic](#) groups. Consequently, obesity stigma disproportionately impacts already marginalized populations.
- Even comparing people of the same weight, [our research](#) shows psychological impacts of weight stigma may be worse for several disadvantaged groups¹⁷. At a given weight, a person is more likely to 'internalize' weight stigma if they are:
 - a) female
 - b) have spent more time not in education, employment or training (NEET)
 - c) are not heterosexual
- Since [women](#), people who have been unemployed¹⁸ and sexual minorities¹⁹ are already at higher risk of mental illness, the psychological impacts of weight stigma are likely to compound these health inequalities.
- Stigmatization of obesity is closely intertwined with stigmatization of poverty, which is independently linked to poor health outcomes²⁰. For example, people with stigmatizing attitudes about obesity also tend to stigmatize people receiving state benefits²¹. This reflects a prominent narrative in media and politics which [links obesity and poverty](#) as similar kinds of moral failure, or as resulting from poor choices.

¹⁷ Hughes AM et al, [Demographic, socioeconomic and life-course risk factors for internalized weight stigma in adulthood: evidence from an English birth cohort study](#). The Lancet Regional Health – Europe, 2024.

¹⁸ Strandh M et al, [Unemployment and mental health scarring during the life course](#). Eur J Public Health, 2014

¹⁹ Kidd G et al, [Suicidal thoughts, suicide attempt and non-suicidal self-harm amongst lesbian, gay and bisexual adults compared with heterosexual adults: analysis of data from two nationally representative English household surveys](#). Soc Psychiatry Psychiatr Epidemiol, 2024

²⁰ Inglis G et al, [Poverty stigma, mental health, and well-being: A rapid review and synthesis of quantitative and qualitative research](#). J Community Appl Soc Psychol, 2023

²¹ Hughes AM et al, [Weight stigma, welfare stigma, and political values: Evidence from a representative British survey](#). Soc Sci Med, 2023

Initiatives aiming to tackle obesity can inadvertently add to stigma, with counterproductive results.

Some public health initiatives which aim to reduce obesity may contribute to weight stigma²². One example is using graphic warning labels with negative imagery of obesity to reduce purchases of sugar sweetened beverages. In experiments, such labels have been shown to increase feelings of disgust towards people living with obesity, and to reduce self-esteem among people living with obesity²³.

Such approaches are also likely to backfire: in experiments, exposure to weight stigmatizing content causes people to consume more high-calorie foods²⁴, and people who report more experiences of weight stigma in everyday life have been shown to gain more weight over time²⁵.

Particular care must be taken when designing measures aimed at children and adolescents: [evidence suggests](#) that stigmatizing messages about weight at age 13 can continue to impact psychological health almost two decades later²⁶.

Unintended consequences can be broad: a [quasi-experimental study](#) showed that sending 'weight report cards' to UK children aged 10-11 did not lead to weight loss, but did cause overweight children to skip breakfast. Impact on breakfast skipping was more pronounced in single-parent and low-income families, and among overweight children from deprived neighbourhoods, who were also more likely to feel tired and unhappy at school following the intervention.

In the context of a youth mental health crisis, where [1 in 5](#) children and young people have a probable mental disorder, and [1 in 5](#) women aged 17-19 have an eating disorder, it is paramount that measures taken to tackle obesity do not add to these problems.

Ways to avoid increasing weight stigma may include:

- Not using imagery which presents people with obesity in a dehumanising manner, such as headless, in unflattering positions, or with negative facial expressions²⁷
- Using respectful and person-centred language when discussing obesity and body weight more widely²⁸

²² Brewis A et al, [Obesity stigma as a globalizing health challenge](#). Global Health, 2018

²³ Hayward LE et al, [Potential unintended consequences of graphic warning labels on sugary drinks: do they promote obesity stigma?](#) Obes Sci Pract, 2019

²⁴ Schvey NA et al, [The impact of weight stigma on caloric consumption](#). Obesity, 2011

²⁵ Jackson SE et al, [Perceived weight discrimination and changes in weight, waist circumference, and weight status](#). Obesity. 2014;

²⁶ Hughes AM et al, [Demographic, socioeconomic and life-course risk factors for internalized weight stigma in adulthood: evidence from an English birth cohort study](#). The Lancet Regional Health – Europe, 2024.

²⁷ Puhl RM et al, [Headless, Hungry, and Unhealthy: A Video Content Analysis of Obese Persons Portrayed in Online News](#). J Health Commun, 2013

²⁸ Albury C et al [The importance of language in engagement between health-care professionals and people living with obesity: a joint consensus statement](#). Lancet Diabetes Endocrinol, 2020

- Recognition that weight is influenced by many factors beyond an individual's control, including structural and economic constraints as well as genetic influences. For example, nutrient-poor, calorie-dense foods are often chosen to stretch a restricted food budget²⁹, and cost can be a [barrier to physical activity](#) for individuals on a low income. Besides direct effects of income, [stress](#) associated with poverty and food insecurity can further impede ability to prepare food that is nutritionally balanced.
- Prioritisation of interventions that tackle the food environment and physical activity at a societal, rather than an individual, level. This includes taking action to improve the [availability of healthy food choices](#), and facilities for affordable physical activity, especially in deprived areas³⁰.

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²⁹ Drewnowski A et al, [Poverty and obesity: the role of energy density and energy costs](#) Am J Clin Nutr, 2004

³⁰ Eyre ELJ et al, [Barriers and Facilitators to Physical Activity and FMS in Children Living in Deprived Areas in the UK: Qualitative Study](#), International Journal of Environmental Research and Public Health, 2022