Social determinants of health and obesity

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In this article, part of Economist Impact's <u>Science of Obesity series</u>, we explore the concept of "social determinants of health" and explain the role that it plays in impacting obesity. There are widespread misconceptions that obesity is a consequence of individual choices. The reality is quite different. It is important to recognise that broader environmental factors, such as the social contexts that people are embedded in and the neighbourhoods that they reside in, play an important part in influencing obesity outcomes.

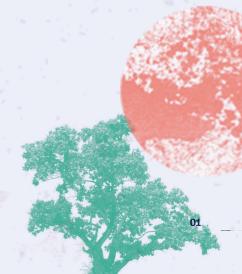
Obesity—ignore the wider environment at your peril

Shockingly, obesity rates have nearly tripled since 1975.¹ The common misconception is that individuals are to blame for developing the disease through choices they make. However, in reality, obesity is driven by a complex combination of genetic and biological factors and our broader socio-economic environment, all of which are largely out of individuals' control. The effect of genetic and biological influences on obesity is explored elsewhere in the <u>Science of Obesity series</u>.

In this article, we focus on the social determinants of health—those environmental and societal conditions that affect people's health, greatly restrict and reduce personal choice, and can increase the risk of obesity.²

"What is driving us to overeat, what is driving us to be physically inactive is really our broader social environment."

Dr Sara Bleich, Professor of Public Health Policy, Harvard University





How social determinants of health impact obesity

Social determinants of health are the environmental conditions of where we are born, live, work, play, worship and age that have an impact on our health and quality of life.² The impact of social determinants of health can be seen globally. It has been estimated that they impact 50% of the variation in health outcomes in the US.³ For instance, there is extensive evidence that social factors, such as education, employment status and income level, can have a considerable impact on how healthy an individual is. The lower an individual's socio-economic status, the greater their risk of obesity.⁴ The social determinants of health broadly fall into six categories that are fairly universal (Figure 1).⁵

Figure 1: Critical to tackling obesity: six domains of the social determinants of health (adapted from Jilani et al. 2021)⁶





Food—pervasive marketing of unhealthy products

Unhealthy food options are often a convenient choice, as they are available almost everywhere. Our food environment plays an important role in influencing access to healthy options, with a greater concentration of fast-food chains located in areas of greatest social disadvantage. Unhealthy food options are also designed to be tasty and contain high amounts of fat, sugar and salt, making them cheaper to produce and purchase. Pervasive marketing of junk food can also promote unhealthy dietary choices, which ultimately influences an individual's behaviour and attitudes to food.

Economic stability—how much money we have counts

An individual's income and economic stability can affect what they choose to eat and dictate how much time they have to prepare healthy meals and participate in physical activities. As income impacts where we live, choices can be limited, so there may be poor access to affordable healthy food and facilities where physical activity can be undertaken.⁸ The global cost of living crisis may therefore "create the perfect storm for driving global obesity prevalence further upwards."

Education—effects felt over a lifetime

Poor access to good-quality education has lifelong implications, affecting job opportunities (and thus income), housing and social mobility, all of which impact our food environment and chances of living with overweight and obesity. ¹⁰ Data from the US show that rates of childhood obesity drop as the head of the household's level of education increases. ¹¹

"Marketing is highly effective at driving purchasing behaviour among consumers"

Dr Sara Bleich, Professor of Public Health Policy, Harvard University

Built environment—does my neighbourhood support my health?

The built environment includes our immediate surroundings—including the presence of stable housing, with access to a kitchen and food storage facilities. Neighbourhoods also need the infrastructure to support active transport (such as walking or cycling) alongside public transportation. Lack of public parks, swimming pools and community leisure centres can reduce the opportunity for low-cost exercise. Recent data show that neighbourhood features such as walkability and proximity to parks and recreational facilities have been linked to greater levels of physical activity. ¹²

Social context—our communities shape behaviours

Our social networks (family, friends, co-workers and the community) have a large influence on our choices and behaviours. Social norms around food and peer pressure can lead to individuals adopting similar eating behaviours to those around them.¹³ Bullying, racism, stigma and discrimination can also contribute to poorer health outcomes, including an increased risk of obesity. The entertainment industry also reinforces negative stereotypes of people with obesity.¹⁴

Healthcare systems—access and quality a concern

Where we live affects our access to healthcare infrastructure in many ways. Lengthy journeys to health facilities—which are expensive in terms of time and money, especially if people are reliant on public transport—may result in delayed treatments. Also, many primary care systems are not yet identifying obesity as a condition in its own right. In Australia, 60 out of every 200 children who visit their GP are living with overweight or obesity, but of these only 1 in 200 is offered weight management support. Trust in healthcare professionals and healthcare systems also varies among different groups—such as ethnic minorities and refugees—for a variety of historical and current factors, making these communities less likely to seek treatment and have poorer health outcomes as a result. 15

"We need to find ways to not only make our sidewalks and parks safer and more amenable to physical activity, but also figure out ways to encourage people to use them."

Dr David Sarwer, Director for Obesity Research and Education, Temple University

We can tackle obesity by addressing social determinants of health

As we have seen throughout the <u>Science of Obesity series</u>, obesity is the result of a number of individual, socioeconomic and environmental factors. If we view obesity as a health problem and only address it via the healthcare system, we will not succeed in reversing rising obesity rates. Figure 2 shows how obesity requires a response across the whole of government, including upstream policy interventions (focused on macrolevel factors) and downstream policy interventions (focused on micro-level factors), to achieve population impact. If we continue to focus mainly on individual-level interventions that target individuals' behaviour, we will not see population-level impact.

Figure 2: Illustration of the actions needed to address obesity, including key actors and level of impact (adapted from Whitman et al) 2

| Impact | Actions | Actors |
|-------------------|---|---|
| Population impact | Health promotion and obesity prevention | Whole of government, cross sector, community-driven policy and action |
| | Upstream | |
| | | |
| | Downstream | |
| Individual impact | Healthcare management and treatment | Health system response |

Nobody is saying that obesity will be an easy issue to address. But Figure 3 shows that there are a large number of evidence-based interventions that address the key social determinants of health with the potential to impact on population health—both in terms of obesity and overall health status.

Figure 3: Interventions to address social determinants of health to tackle obesity^{2,8}

- Sugar-sweetened beverage tax
- Reformulation policies to reduce fat, salt and sugar content
- Subsidies and pricing policies to promote healthy diets
- Front of pack nutritional labelling





- Inclusive physical activity in schools
- High school completion programmes
- National public education campaigns on physical activity
- · Grants for higher education

- · Income support and tax credits
- · Provision of affordable housing
- · Employment schemes
- · Free nutritious school meals



Social determinants of health



- Breastfeeding promotion, protection and support
- · Healthy food in the workplace
- Addressing structural racism
- Regulations on food and beverage marketing

- Policies regulating sales of products high in fats, sugar and salt near
- Infrastructure such as pavements and bicycle lanes
- · Safe and affordable public transport
- Investment in parks and recreational facilities





- Recognition of obesity as a disease and not just a risk factor
- Including obesity prevention and management in universal health coverage
- Building capacity to deliver obesity management services
- Training healthcare workers in prevention and management of obesity

Focusing on a few key examples where policy interventions that address social determinants of health have positively impacted obesity and its risk factors, we see that:

- Evidence from the US suggests the provision of school meals can contribute to improvements in health and social outcomes, including obesity rates and student performance.¹⁶ Such universal policies can also play an important role in reducing stigma for children in poverty.
- Creating healthy food environments in childcare facilities, hospitals and worksites
 could help to change societal attitudes and behaviours. Many countries are already
 mandating nutritional labels on restaurant and fast-food menus. Additional proactive
 steps could include providing incentives for supermarkets to be located in underserved
 areas.²
- Prioritising resources to enable physical activity in areas and populations that lack
 access to parks or recreational spaces can also support behaviour change. Evidence
 shows that children with better access to public parks and recreational programmes are
 less likely to experience increases in body mass index (BMI) over time.¹⁷

"Innovation with cheap food has caught up with us, so there is massive pressure to overeat, in a way it's more odd that more people *don't* gain weight."

Dr Uku Vainik, Associate Professor, Institute of Genomics, University of Tartu



If we know what to do, why aren't we doing it?

It is possible to slow and reverse global obesity rates, but it will take many years of concerted effort, strong political will and a radical shift in attitudes across society and policymaking.¹⁸

Many **public health interventions** can take years or even a generation to achieve notable results, whereas elected officials may favour tangible, shorter-term outcomes that coincide with their time in office. Sustained and constructive dialogue between health officials and political leaders is needed to address the challenges at hand and ignite strong political will for action.¹⁹

There continues to be widespread misconceptions of obesity being a consequence of individual behaviours, despite evidence disproving this. Even among a study of over 3,000 people living with obesity, it was found that 82% believed it was completely their own responsibility. This disconnect between public perceptions and scientific evidence needs to be rectified to generate sufficient **political will—both from politicians and their electorate.**

Food industry changes are needed when it comes to formulation, labelling, pricing and advertising. ^{21, 22} However, policymakers cannot rely on industry to implement these changes. Rather, public policy interventions must mandate and incentivise such change. We can certainly learn from the experience of tobacco control to align commercial and public health interests to avoid the lobbying and bad advertising practices that sought to weaken the connection between tobacco use and lung cancer even amid the ongoing consequences of over 8m deaths per year (mostly in low- and middle-income countries). ^{23, 24}

"It is really important to insert community voices and expertise into both the development and implementation of effective policy approaches."

Dr Sara Bleich, Professor of Public Health Policy, Harvard University



A radical and collaborative approach is needed

Globally, obesity rates continue to climb thus necessitating urgent action and strong political will. A number of key approaches can be considered to reverse rising rates of obesity:

- Greater awareness and prioritisation of the various drivers influencing obesity is
 needed across all government departments. Health ministries, which are often tasked
 with the health of the nation, need to make tangible relationships with other government
 departments (finance, transport, trade, culture, agriculture and food industry) to explain the
 critical role that they can play in addressing social determinants of health. A coordinated
 approach involving multi-sectoral engagement and action will be necessary to halt
 rising rates of obesity globally.
- People power and buy-in. Changing embedded behaviours will be difficult. As such, it is necessary that local people are key actors in how their communities change the obesity landscape, from what is sold near schools, to what publicly funded physical exercise facilities are available. This will require buy-in and action from both the public and private sectors. Some countries, such as Australia, have developed comprehensive obesity action plans that include engaging people with obesity and communities at higher risk of obesity.⁷
- Prioritising a whole-of-government and whole-of-society response is needed to address
 rising obesity rates globally. Multilateral bodies like the World Health Organisation (WHO)
 have convening power, not only as technical experts but also through their ability to raise
 issues such as obesity globally—as the WHO did with smoking, ultimately leading to the
 WHO Framework Convention on Tobacco Control. The WHO is working hard to convince
 countries to implement a "whole-of-government, health-in-all-policies" approach.⁸ Such a
 multisectoral response is needed to address all domains of the social determinants of health
 that impact on obesity status.

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