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DISSECTING HEALTH

Scarlett McNally: Preventing obesity is different from curing it—and even more urgent

Scarlett McNally *professor*

The body positivity movement rightly states that every person should live without judgment, shame, or stigma based on their physical appearance. It's liberating not to be constrained by outdated expectations of how our bodies should look, and weight based discrimination can contribute to poor health and more weight gain.¹

But recent reports have highlighted the health and economic damage caused by obesity.^{2–4} The Tony Blair Institute⁵ calculates that obesity and overweight cost the UK economy £98bn a year, including £19.2bn in costs to the NHS from related illnesses. People with obesity are seven times as likely to get type 2 diabetes, with the attendant complications of infections, amputations, and eye and kidney problems.⁶

Fat isn't inert in the body.⁷ Sedentary behaviour leads to a pro-inflammatory state.^{8–9} Obesity is causally linked to heart disease and cancer, but the biggest underacknowledged problem is when several obesity related conditions coexist,^{10–11} including chronic pain.¹² A person under 50 with obesity is more than 10 times as likely to have complex multimorbidity as someone with a healthy weight.¹¹

As orthopaedic surgeons, we operate to reduce a person's pain or help their functioning. People with obesity tend to need hip or knee replacements several years earlier than those with a healthy body mass index,¹³ as well as having longer operative times,¹⁴ a 50% greater risk of infections,¹⁵ and a higher chance of needing postoperative intensive care.¹⁶

Obesogenic environments

The key to reducing obesity is recognising two pairs of seemingly contradictory concepts. First, no person should be judged for their size, even while we want to reduce obesity in the general population. Second, what works in treating obesity is different from what works in preventing it.

Several treatment interventions can successfully reverse both obesity and type 2 diabetes, including bariatric surgery (such as stomach bypass), low carbohydrate diets,¹⁷ intermittent fasting and ultra-low calorie diets,¹⁸ and the controversial new practice of regular injections to suppress appetite.¹⁹ Prevention of obesity is different. Obesity is caused by the type and availability of food and a lack of physical activity. When I led the Academy of Medical Royal Colleges' report *Exercise: The Miracle Cure* back in 2015,²⁰ we emphasised that exercise alone doesn't reverse obesity. But exercise can help prevent it.

I've written before about the physiology of nutrition, such as waiting 20 minutes to feel full, and about

carbohydrate metabolism meaning that they're all converted to sugar, inducing hunger and fat deposition.²¹ Sadly, education for—and action by—individuals doesn't produce enough change. I saw this as a young surgeon when I had to pick glass out of the faces of people who didn't think the country needed the nanny-statism of seatbelt legislation.

Obesity is a product of our environments. People in the most deprived areas have the fewest food and exercise options and are twice as likely to have obesity (36.8%) as those in the least deprived areas (19.2%).²² Chris van Tulleken's recent book *Ultra-Processed People*²³ describes our obesogenic environment and how the food industry's processes make most foods addictive—hacking into our body's hormonal feedback loops of reward, satiety, hunger, and satisfaction.

We need to go back to basics: affordable fruit and vegetables, unprocessed foods, less snacking, smaller portions, and less alcohol. Multiple organisations, including the Obesity Health Alliance,⁴ suggest a raft of regulation and fiscal measures to tackle obesity, along with children's play parks, limits on junk food advertising, and PE in schools. To encourage activity we need safe cycle lanes, green spaces, and 20 mph limits in built-up areas. Swim England highlights water activities as excellent exercise²⁴—although, sadly, many affordable swimming pools are closing.

It's appalling that regulations to limit junk food advertising and “buy one, get one free” offers on unhealthy food have been delayed—and that this delay was allegedly influenced by food industry lobbying.²⁵ UK legislation to ban smoking didn't start until costly cancer treatments became available and required state funding, giving the government an economic incentive. The financial costs to the government from obesity are already high, so ministers should be more serious about regulating the food industry.

The obesity epidemic is not about appearance but about how it links to multiple health conditions, unaffordable care requirements, and reduced tax income from increasing disability in the workforce. We can't afford the human and financial costs that are inevitable without action to curb obesity.

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