February 2023

OBESITY IN SCOTLAND

Prevalence, Causes and Impact

Obesity Action

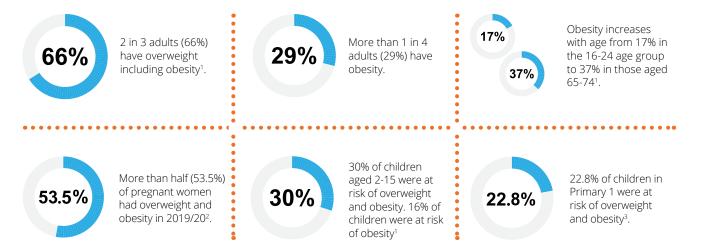
Scotland Healthy weight for all

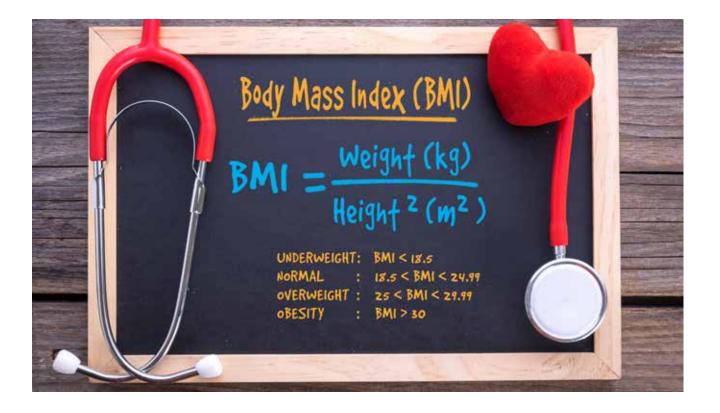
This factsheet reports on data from 2019/20. We have produced a further 2 factsheets, reporting on data from 2020/21 and 2021/22. We are currently presenting these as a suite of complementary documents in light of the impact of the pandemic on data collection methods.

OBESITY TRENDS

Obesity is a significant public health concern. In 2019, adult obesity prevalence was 29% and two-thirds (66%) of adults had overweight and obesity. 16% of children aged 2 – 15 were at risk of obesity, and 30% were at risk of overweight and obesity.

OBESITY PREVALENCE IN SCOTLAND

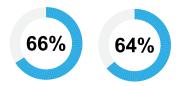




Obesity describes the accumulation of excess body fat. Body Mass Index (BMI) is used to define overweight and obesity at population level. BMI is a measure of whether a person is a healthy weight for their height. For most adults, overweight is defined as having a BMI of 25 – 29.9 kg/m² and obesity is defined as having a BMI of 30kg/m² and higher⁴.

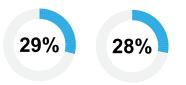
BMI is an effective population measure as it is relatively accurate, simple and cheap; however, there will always be exceptions to the rule for individuals, e.g. people who are very muscular or pregnant women may have a high BMI but not extra fat mass. In such individual circumstances other measures can be used to provide a more accurate assessment of healthy weight.

SCOTLAND VS THE WORLD





Obesity rates in Scotland are higher than the overall UK rates: 66% vs 64% are overweight or have obesity, and 29% vs 28% have obesity⁵.



Across the world, 39% of adults are classified as being overweight and 13% as having obesity, compared to 37% and 29% in Scotland, respectively⁶.



GENDER

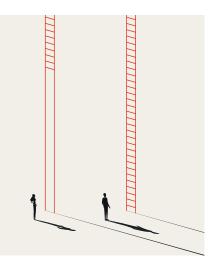
In 2019, males were more likely to have overweight and obesity than females. This is the case for both men and boys aged 2-15.



- 69% of men have overweight and obesity. 29% have obesity¹.
- 63% of women have overweight and obesity. 30% have obesity¹.
- For boys, 32% were at risk of overweight and obesity in 2019. 17% were at risk of obesity¹.
- For girls, 28% were at risk of overweight and obesity. 16% were at risk of obesity¹.

DEPRIVATION

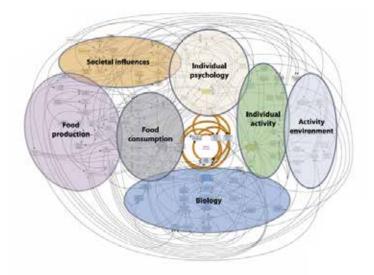
- Obesity rates are higher in areas of greater deprivation, particularly among women, children, older age groups, black and minority ethnic groups, and people with disabilities.
- The disparity in obesity rates is particularly evident for women at 40% in the most deprived areas of Scotland compared to 18% in the least deprived areas⁷.
- In the last 10 years, the percentage of children at risk of overweight and obesity has increased in the most deprived areas and decreased in the least deprived. In 2019/20 academic year 27.2% of Primary 1 children were at risk of overweight and obesity in the most deprived areas, compared to 17.2% in the least deprived areas³.



CAUSES OF OBESITY

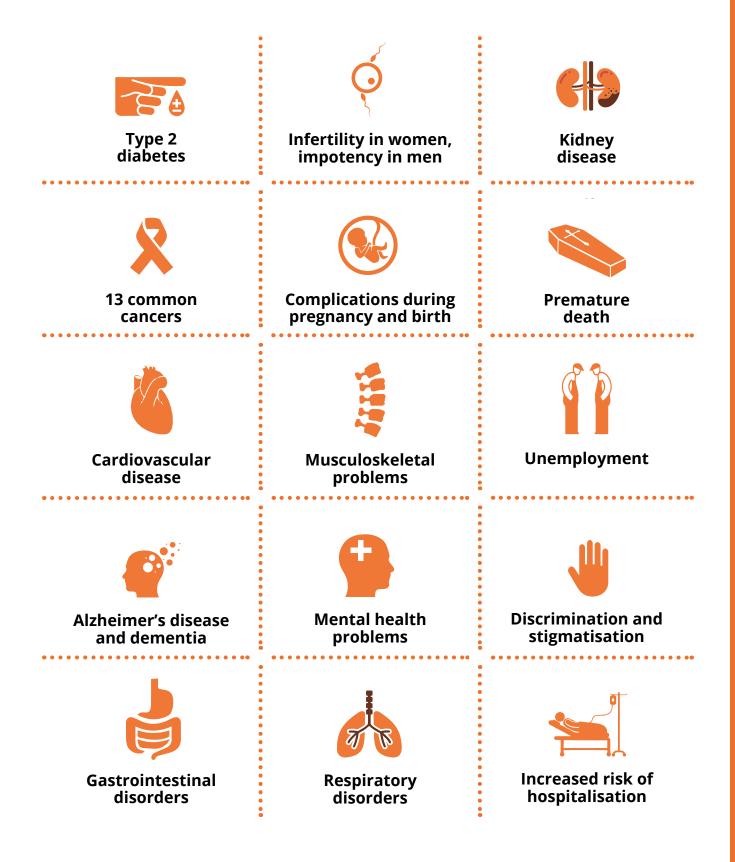
Obesity occurs when energy intake from food and drink is greater than the body's energy requirements over a prolonged period. An obesogenic environment is one where environmental factors play a role in diet and nutrition (as well as the amount of physical activity undertaken). These factors have a strong influence on the availability and consumption of food⁸. In obesogenic environments inactivity and overconsumption of energy dense foods is easy, affordable and widely accepted, making an unhealthy lifestyle the default option.

The Foresight report for the UK Government identified 7 clusters of factors / behaviours that are contributing to obesity (termed a 'system's map').



These clusters are interconnected, and this connectivity is important when designing/delivering interventions; it may help to explain unexpected impacts or losses of impact due to mitigating effects of different factors/behaviours.

IMPACT OF OBESITY Obesity increases the risk of



Type 2 diabetes⁹, 13 common cancers¹⁰, cardiovascular disease¹¹, Alzheimer's disease¹² and dementia, gastrointestinal disorders¹³, infertility in women, impotency in men¹⁴, complications during pregnancy and birth¹⁵, musculoskeletal problems¹⁴, mental health problems^{16,17}, respiratory disorders¹⁴, kidney disease¹⁸, premature death¹⁹, unemployment²⁰, discrimination and stigmatisation²¹, increased risk of hospitalisation²

ADDITIONAL RISKS FOR CHILDREN WITH OBESITY



There are a number of additional risks for children who have or who are at risk of obesity. These include:

- Emotional and behavioural impacts including stigmatisation and bullying, low selfesteem, and absence from school²⁰.
- Physical health impacts including breathing difficulties,

increased risk of bone fractures, hypertension, early markers of cardiovascular disease, insulin resistance, and physiological effects²⁰.

- >> Increased risk of having obesity in adulthood.
- Higher risk of morbidity, disability and pre-mature death in adulthood¹.

COST OF OBESITY IN SCOTLAND

The annual cost to the NHS in Scotland of obesity is estimated to be ± 600 million⁸. Average NHS costs for people with a body mass index of 40 kg/m² (severe obesity) are estimated to be twice those for people with a BMI of 20 kg/m² (within normal weight range).

A recently published report calculated the annual cost of adult obesity to the UK economy to be \pm 58bn, with obesity-related ill health costing the NHS an estimated \pm 40bn annually²¹.

The main costs associated with unhealthy diet and weight can be grouped into three broad categories – direct, indirect and intangible. Direct costs are generally those which relate to costs of health care services including prevention, diagnosis and treatment of conditions. Indirect costs refer to the loss of productivity on society and typically include absenteeism and premature mortality. Finally, intangible costs relate to the psychological burden on individuals and their friends and families from pain, suffering and bereavement experienced as a result of poor health from overweight and obesity²².

Evidence suggests that indirect costs are the most significant costs of obesity, accounting for almost two-thirds of total economic costs and impacts from overweight and obesity²³. Such costs are broad and far reaching and highlight the importance of actions and interventions to mitigate and address them. The McKinsey Institute estimates that the cost of obesity to the UK is equivalent to 3% of gross domestic product (\$70billion)²⁴, taking into account - loss of productivity attributable to loss of life or impaired life quality, direct health care costs, and investment to mitigate the impact of obesity.

Evidence shows that almost all obesity prevention interventions are highly cost-effective to society i.e. that savings on health care costs and improved productivity, through reduced absenteeism for example, could outweigh the costs of direct investment required to deliver the interventions, and could save the NHS \$1.2bn per



year²¹. A recently published report highlights significant net benefit to the UK economy of four obesity prevention policies which had either been recently implemented or are scheduled to be introduced by the UK government. These policies are the soft drinks industry levy (already implemented), in-store location promotion restrictions (implemented in October 2022) on products high in fat, salt and sugar (HFSS), restrictions on price promotions of HFSS products, and a 9pm watershed for advertising HFSS products on TV and a ban on paid-for online advertising. The report outlines that over a 25-year period, the combined net benefit of these policies is estimated to be over £76 billion²⁵, demonstrating the significant cost that obesity has to the economy and the huge economic benefits that can be achieved when such policies are implemented. They help to rebalance the food system and ensure that the healthy option is the cheapest and most accessible option for everyone.

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