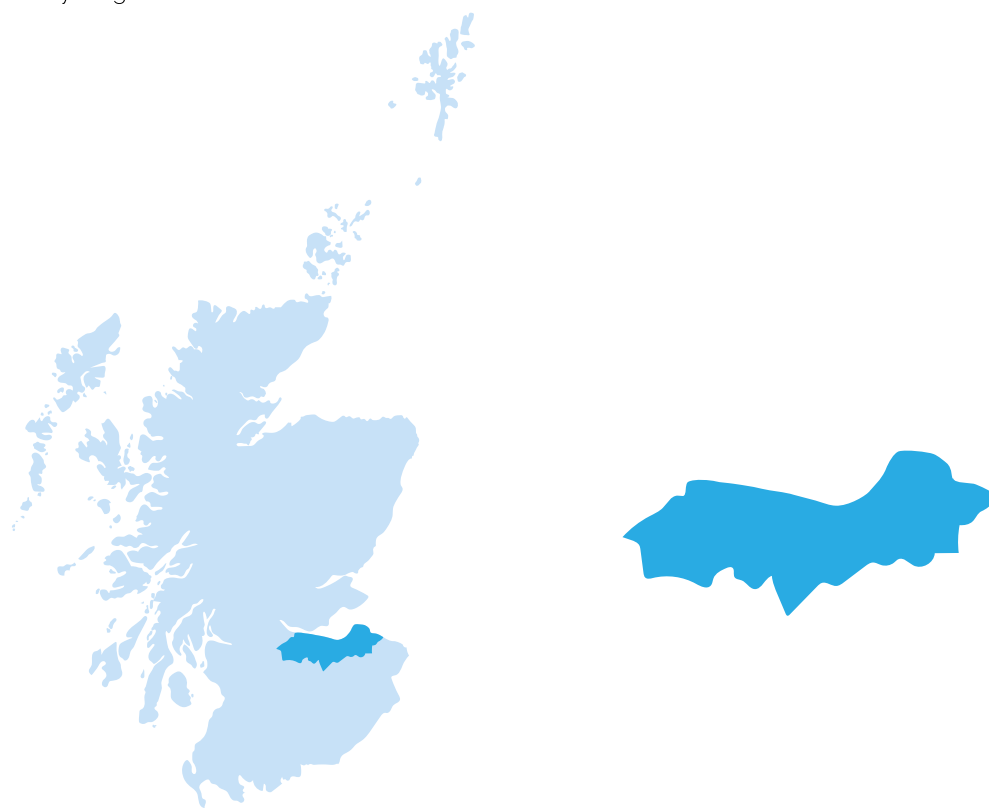




## Obesity Action Scotland

Healthy weight for all



# OBESITY PREVALENCE

## Lothian Health Board area

*This factsheet reports data on obesity prevalence (adults, children and maternal), levels of fruit and vegetable consumption, food insecurity, type 2 diabetes prevalence, and rates of physical activity for the NHS Lothian Health Board area.*

## HEADLINE STATISTICS FOR LOTHIAN

- » Population – 916,310 people (2021)<sup>1</sup>.
- » 58% of the adult population have overweight and obesity (national figure - 67%); 24% have obesity (national figure – 29%)<sup>2</sup>.
- » 9.2% of children in the area were at risk of developing obesity in the academic year 2022/23 compared to a national rate of 10.5%<sup>3</sup>.
- » Average adult daily portions of fruit and vegetables – 3.7 portions<sup>2</sup> (national average – 3.4 portions).
- » Proportion of the adult population who meets recommended daily intake of 5 portions of fruit and vegetables – 29%<sup>2</sup> (national figure 22%).
- » Proportion of the adult population who meets recommended physical activity levels – 72%<sup>2</sup> (national figure 65%).





## Note on the data sources used in this factsheet

The adult data presented for the health board area in relation to regional obesity trends and fruit and vegetable consumption is an average of the data collected between 2016 and 2019 in the Scottish Health Survey (SHeS). More up to date data is not yet available by health board area. No data is available by health board area for 2022. As a result the data in the factsheet has not been updated and remains the same as the previous version. There was also no data on children reported by health board area.

The adult data presented for the health board area in relation to food insecurity and physical activity is an average of the data collected between 2017 and 2021 in the SHeS.

Data presented for national figures in relation to obesity trends, fruit and vegetable consumption, food insecurity

and physical activity were obtained from the SHeS 2022. All data obtained from the SHeS is the most recent data available at the time.

**Primary 1 BMI data:** is used as there is no data for children reported by health board level in the 2022 SHeS. The latest available data from 2022/23 academic year is used. In 2022/23, coverage was 89.3%, down slightly from 94%.

**Scottish Diabetes Survey:** Data reporting in the survey changes each year. As a result, the data included in this factsheet was not reported in the 2022 version of the survey. Therefore, the data from the 2021 survey is included.

## DEFINITION OF OBESITY

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/m<sup>2</sup> and obesity is defined as having a BMI of 30kg/m<sup>2</sup> and higher. Severe obesity is defined as having a BMI of 40kg/m<sup>2</sup> or higher<sup>4</sup>.

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.

## OBESITY TRENDS – ADULTS<sup>2</sup>

- » 58% of the adult population have overweight (including obesity); 24% have obesity and 3% have severe obesity. The national figures for the same period are 67%, 29% and 4% respectively.
- » Obesity trends in males – 62% of men living in the health board area have overweight (including obesity), 23% have obesity and 2% have severe obesity.
- » Obesity trends in females - 54% of women living in the health board area have overweight (including obesity), 25% have obesity and 3% have severe obesity.
- » 39% of the adult population situated within the health board area are of a healthy weight (nationally, 32% of the population is a healthy weight). For males, the figure is 35% and for females, 43% (nationally, the figures are 28% and 36% respectively).
- » Underweight is not recorded as a separate data category in the statistics at health board level.



## OBESITY TRENDS – CHILDREN<sup>3</sup>



The data presented here for children is the Primary 1 Body Mass Index (BMI) measurement data.

- » In the academic year 2022/23, 10.9% of children in the health board were at risk of becoming overweight, and a further 9.2% were at risk of obesity.
- » Table 1 (below) provides a comparison of the last 3 academic years where data is available, with the national figures included in brackets. The table shows that the proportion of children at risk of overweight and obesity decreased over the last 3 academic years.

**Table 1**  
Primary 1 Body Mass Index (BMI) statistics for academic years 2019/20, 2020/21 & 2021/22

	2019/20 <sup>5</sup>	2020/21 <sup>6</sup>	2021/22 <sup>3</sup>
<b>Healthy</b>	77.9% (76.3%)	71.1% (69.7%)	75.9% (74.4%)
<b>Risk of overweight</b>	11.3% (12.3%)	13.5% (14%)	11.8% (12.4%)
<b>Risk of obesity</b>	9.8% (10.4%)	14.6% (15.5%)	11.3% (11.7%)
<b>Risk of overweight &amp; obesity</b>	21.1% (22.7%)	28.1% (29.5%)	23.1% (24.1%)

## MATERNAL OBESITY<sup>7</sup>

- » In the year ending 31st March 2023, 28.7% of expectant mothers living in the health board area were overweight and 23.3% had obesity. Nationally, 28.6% of expectant mothers were overweight and 27.9% had obesity.
- » This means that 52% of expectant mothers in the health board area were recorded as having overweight and obesity, which is below the national rate (of 56.5%).
- » 45% were of a healthy weight, and the remaining 3% were recorded as being underweight.
- » Nationally, 56.5% of expectant mothers are overweight or have obesity, 40.8% were a healthy weight and 2.7% were underweight.



## FRUIT AND VEGETABLE CONSUMPTION<sup>2</sup>

- » Just under 3 in 10 adults (29%) in the health board area meet the recommended guidelines for 5 or more portions of fruit and vegetables per day. 63% reported eating fewer than 5 portions per day and 8% reported eating no fruit and vegetables.
- » There are slight variations by gender:
  - » For females, 33% meet the guidelines of 5 or more portions of fruit and vegetables per day. 60% consume fewer than 5 portions per day and 8% do not consume any fruit and vegetables.
  - » For males, 25% meet the guidelines of 5 or more portions of fruit and vegetables per day. 66% consume fewer than 5 portions per day and 9% do not consume any fruit and vegetables.
- » The mean number of daily portions of fruit and vegetables consumed in the health board area is 3.7 portions. This is above the national average of 3.4 portions. For males, the figure is 3.5 portions and for females 3.9 portions.
- » This information is not available for children.

## FOOD INSECURITY<sup>2</sup>

- » Across the region, 7% of adults report being food insecure i.e., worried that they would run out of food. The national figure is 9% in 2022.
- » For males, the figure is 7% and for females 8%. Nationally, the figure for both males and females is 9%.





## TYPE 2 DIABETES PREVALENCE<sup>8</sup>

- » Data from 2021 concluded that 39,969 individuals in the health board area had type 2 diabetes. This accounts for 85.9% of all cases recorded in this area.
- » Out of the 14 regional health boards, Lothian had the 12th highest recorded prevalence for type 2 diabetes.
- » This data excludes children, as data by diabetes type is not recorded for children (aged 16 and under).

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## PHYSICAL ACTIVITY<sup>2</sup>

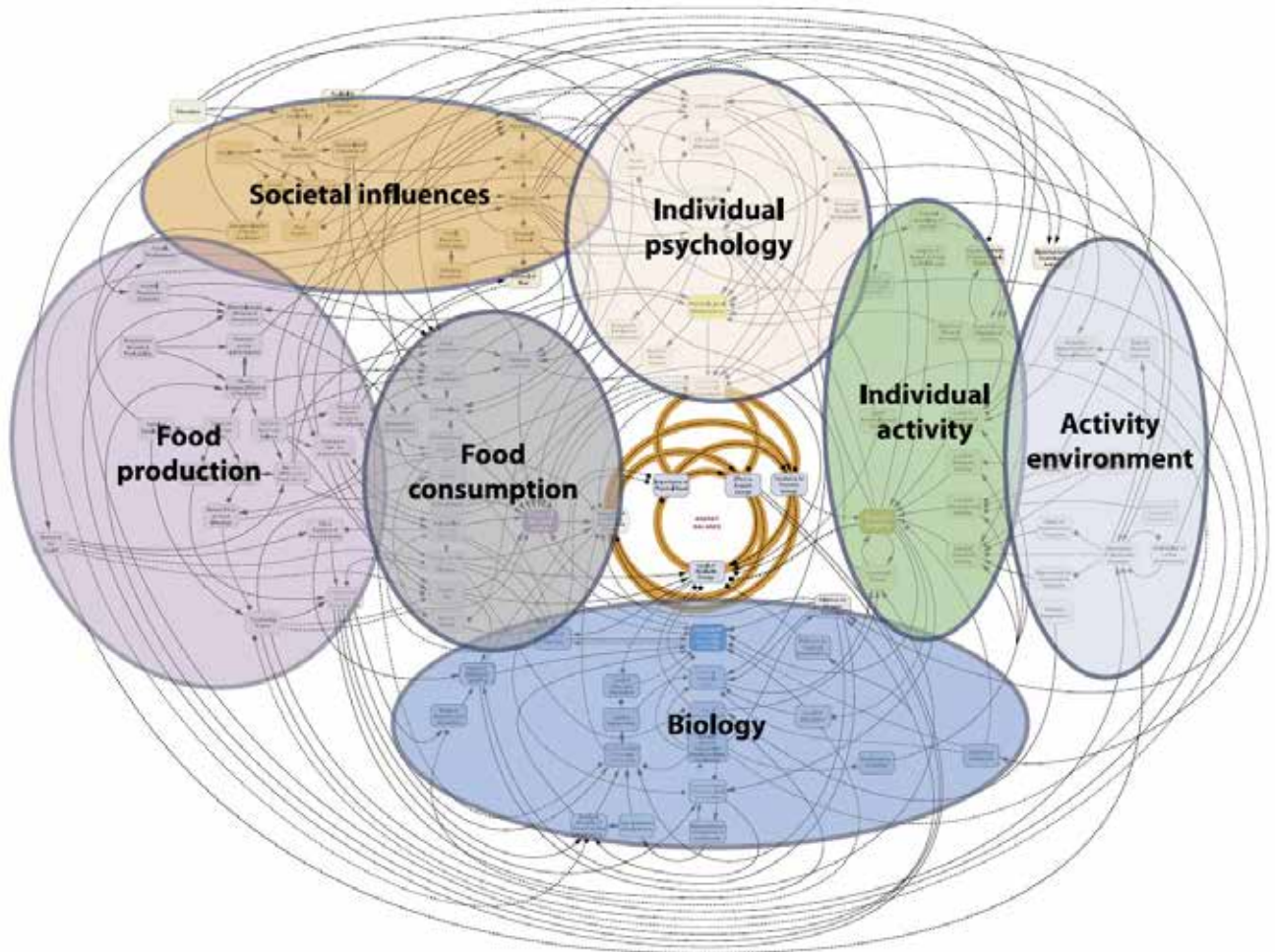
- » 72% of people in the health board area meet the recommended physical activity guidelines, which is above the national figure of 65%.
  - » 3% report low levels of activity, compared to 4% nationally.
  - » 8% report some level of activity, compared to 10% nationally.
  - » 16% report very low levels of physical activity, compared to 20% nationally.
- » More males than females achieve the recommended levels of physical activity – 76% of males, compared to 68% of females. The national figures for males and females are 71% and 62% respectively.
  - » 2% of males report low levels of physical activity compared to 4% of females. Nationally, the figure for males is 3% and 4% for females.
  - » 13% of males report very low levels of physical activity, compared to 17% of females. Nationally, the figure for males is 18% and for females 22%.
  - » 7% of males report some level of physical activity, compared to 10% of females. Nationally, the figure for males is 8% and for females 12%.
- » There is no data available by health board area for children.



# 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 food. 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<sup>9</sup> for the UK government identified 7 clusters of factors / behaviours that are contributing to obesity (termed a 'system's map'):** food consumption, food production, individual psychology, social psychology, physiology, individual activity and physical activity environment.

These clusters are interconnected, e.g. some individuals may exhibit compensatory behaviour such as allowing themselves an energy-dense snack as a 'reward' after exercising. 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.

Obesity is complex. Rather than being the sole responsibility of individuals, overweight and obesity

are the result of a complex web of interrelated policy, environmental, social, economic, cultural and biological factors. Despite this, however, many interventions continue to place emphasis on approaches that focus on individual behaviour change. Local authorities and health boards hold a unique power in leading their stakeholders to focus interventions away from the individual towards recognition of the multiple interrelated factors influencing weight outcomes.



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