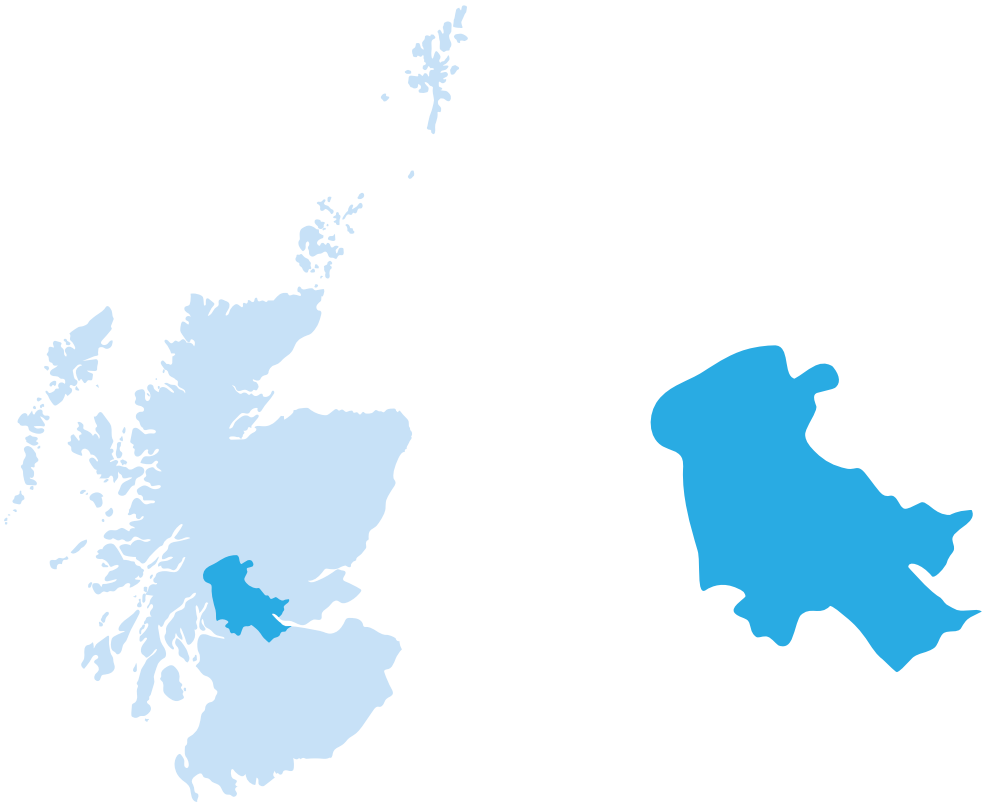
Obesity Action Scotland
Healthy weight for all

FACTSHEET

July 2023



OBESITY PREVALENCE

Forth Valley 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 Forth Valley Health Board area.

HEADLINE STATISTICS FOR FORTH VALLEY

- Population – 305,710 people (2021)[1].
- 65% of the adult population have overweight and obesity (national figure - 67%) 31% have obesity (national figure – 30%)[2].
- 10% of children in the area were at risk of developing obesity in the academic year 2021/22 compared to a national average of 11.7%[3].
- Average adult daily portions of fruit and vegetables – 3.1[2] (national average – 3.4 portions).
- Proportion of the adult population who meets recommended daily intake of 5 portions of fruit and vegetables – 21%[2] (national figure 22%).
- Proportion of the adult population who meets recommended physical activity levels – 66%[2] (national figure 66%).

Note on the data included 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).

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 (excluding 2020) 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 2021. All data obtained from the SHeS is the most recent data available at the time.

No data is available by health board area for 2020. The **SHeS 2020** was carried out in a different way to the usual format due to the COVID-19 pandemic. The survey was undertaken over the telephone, and respondents were required to provide self-reported height and weight measurements. There was also no data on children collected. Evidence suggests that self-reported measurements can overestimate height and underestimate weight and therefore provide inaccurate overall results and underreport the prevalence of obesity in Scotland during the pandemic. As a result, the 2020 SHeS does not provide data broken down by health board area.

Please note: Throughout this factsheet, we use the terminology morbid obesity/morbidly obese as that is the terminology used within the Scottish Healthy Survey and we wished to be in line with the original data. That is not our preferred terminology.

Primary 1 BMI data: in 2021/22, the number of children included (92%) is significantly higher than the previous year (38%) due to disruptions to measurement caused by the pandemic. Data from 2020/21 were also slightly under-representative of children from the least deprived backgrounds (SIMD 5). However, the report highlights that the lower rates of measurement do not account for all the changes seen in this year's data, and it is likely that the child BMI distribution has been impacted directly by factors associated with the pandemic period.

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^2 and obesity is defined as having a BMI of 30kg/m^2 and higher. Morbid obesity is defined as having a BMI of 40kg/m^2 or higher[4].

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[2]

- 65% of the adult population have overweight (including obesity); 31% have obesity and 3% have morbid obesity. The national figures from the most recent Scottish Health Survey publication (2021) are 67%, 30% and 4% respectively.
- Obesity trends in men – 65% of men living in the health board area have overweight (including obesity), 29% have obesity and 1% have morbid obesity.
- Obesity trends in females - 65% of women living in the health board area have overweight (including obesity), 34% have obesity and 5% have morbid obesity.
- 33% of the adult population situated within the health board area are of a healthy weight (i.e., those with a BMI between 18.5 and 24.9) - nationally 32% of the population is a healthy weight. For males, the figure is 32% and for females, 34% (nationally, the figures are 30% and 35% respectively).
- Underweight is not recorded as a separate data category in the statistics.

OBESITY TRENDS – CHILDREN[3]

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

- In the academic year 2021/22, 11.5% of children in the health board were at risk of becoming overweight, and a further 10% were at risk of obesity.
- The proportion of children at risk of obesity has increased from the latest previously available year (academic year 2019/20).

Table 1 (below) provides a comparison of the last 3 available academic years for the primary 1 BMI in the health board area. The national figure is included in brackets. The table shows that the risk of overweight and obesity increased between the academic years 2019/20 and 2021/22.

Table 1
Primary 1 Body Mass Index (BMI) statistics for academic years 2018/19, 2019/20 & 2021/22 (the national figure is included in brackets for comparison)

	2018/19[5]	2019/20[6]	2021/22[3]
Healthy	77% (76.6%)	77.5% (76.3%)	77.7% (74.4%)
Risk of overweight	11.8% (12.2%)	12.2% (12.3%)	11.5% (12.4%)
Risk of obesity	10.3% (10.3%)	9% (10.4%)	10% (11.7%)
Risk of overweight & obesity	22.1% (22.5%)	21.2% (22.7%)	21.5% (24.1%)
Risk of underweight	0.9% (1%)	1.4% (1%)	0.8% (1.1%)

MATERNAL OBESITY[7]

- In the year ending 31st March 2022, 29.7% of expectant mothers living in the health board area were overweight and 27.6% had obesity. Nationally, 29.6% of expectant mothers were overweight and 27.3% had obesity.
- This means that over 57% (57.3%) of expectant mothers in the health board area were recorded as having overweight and obesity, which exceeds the national figure (of 56.9%).
- 40.4% were of a healthy weight, and the remaining 2.3% were recorded as being underweight.
- Nationally, 56.9% of expectant mothers are overweight or have obesity, 40.9% were a healthy weight and 2.3% were underweight.

FRUIT AND VEGETABLE CONSUMPTION[2]

- Just over 1 in 5 adults (21%) in the health board area meet the recommended guidelines for 5 or more portions of fruit and vegetables per day. 68% reported eating fewer than 5 portions per day and 11% reported eating no fruit and vegetables.
- There are slight variations by gender:
  - For females, 22% meet the guidelines of 5 or more portions of fruit and vegetables per day. 68% consume fewer than 5 portions per day and 10% do not consume any fruit and vegetables.
  - For males, 19% meet the guidelines of 5 or more portions of fruit and vegetables per day. 68% consume fewer than 5 portions per day and 13% do not consume any fruit and vegetables.
- The mean number of daily portions of fruit and vegetables consumed in the health board area is 3.1 portions. This is below the national average of 3.4 portions. For males, the figure is 3 portions and for females 3.3 portions.
- This information is not available for children.

FOOD INSECURITY[2]

- Across the region, 5% of adults report being food insecure i.e., worried that they would run out of food. This is below the national figure of 9% in 2021.
- For males, the figure is 4% and for females, 7%. Nationally, the figure for both males and females is 9%.

TYPE 2 DIABETES PREVALENCE[8]

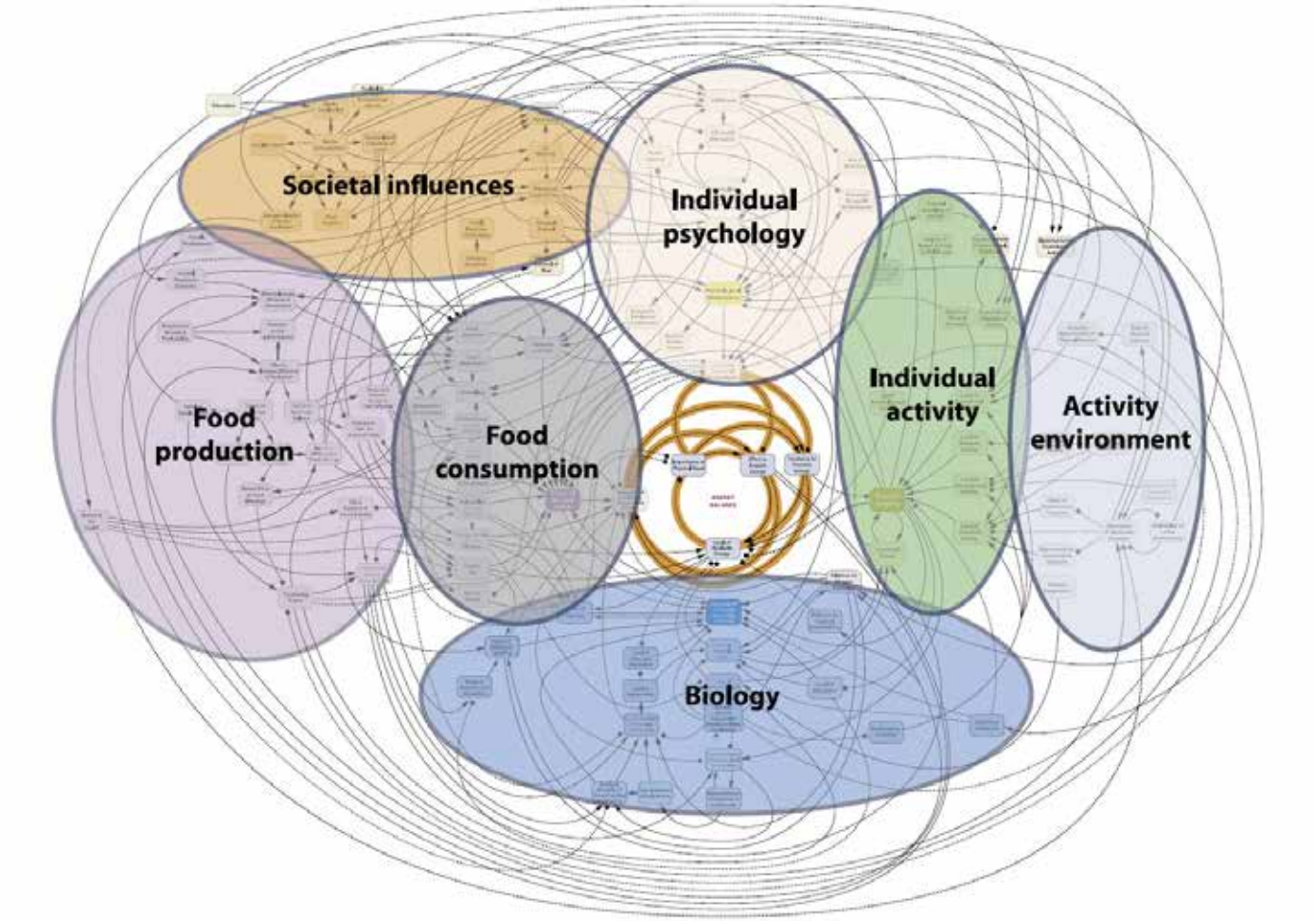
- Data from 2021 concluded that 17,023 individuals in the health board area had type 2 diabetes. This accounts for 87.9% of all cases recorded in this area.
- Out of the 14 regional health boards, Forth Valley had the 6th highest recorded prevalence for type 2 diabetes.
- This data excludes children, as data by diabetes type is not recorded for children (aged 16 and under).

PHYSICAL ACTIVITY[2]

- 66% of people in the health board area meet the recommended physical activity guidelines. This is the same as the national figure (of 66%).
  - 5% report low levels of activity, compared to 4% nationally.
  - 11% report some level of activity, compared to 10% nationally.
  - 18% report very low levels of physical activity, compared to 20% nationally.
- More males than females achieve the recommended levels of physical activity – 72% of males, compared to 60% of females. The national figures for males and females are 71% and 62% respectively.
  - 4% of males report low levels of physical activity compared to 6% of females. Nationally, the figure is 3% for males and 4% for females.
  - 15% of males report very low levels of physical activity, compared to 21% of females. Nationally, the figure is 17% for males and for females 22%.
  - 9% of males report some level of physical activity, compared to 13% 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[9] 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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Obesity Action Scotland
232-242 St Vincent Street Glasgow
G2 5RJ

www.obesityactionscotland.org
Twitter - @obesityactionsc
E-mail - info@obesityactionscotland.org