



A report on obesity in Rotherham, how it compares to other areas in England, and how the Covid-19 pandemic has affected weight loss related services



## **A report on obesity in Rotherham, how it compares to other areas in England, and how the Covid-19 pandemic has affected weight loss related services**

This report looks at some of the facts, causes and effects of obesity with a particular focus on Rotherham in South Yorkshire, England.<sup>1</sup> Obesity is a complex condition defined by having a BMI of over 30kg/m<sup>2</sup> and is associated with many health conditions. A Rotherham based case study is used to show how the Covid-19 pandemic has affected this service and its users. Finally, some recommendations for the public are shared.

### **The facts and stats:**

- Obesity has reached a global epidemic level in the past few decades with 1.9 billion over 18s overweight, 650 million of these people being obese.
- In 2016, 39% percent of the global population were overweight, of which, 13% of the population were obese, three times higher than in 1975.<sup>2</sup>
- In England, 61.3% of the population is overweight or obese.
- In Rotherham, 71.2% of the population is overweight or obese, nearly 10% higher than the national average.<sup>3</sup>
- Obesity is a major risk factor for many life-threatening diseases such as heart disease, type 2 diabetes, some cancers as well as multiple mental health problems.<sup>4</sup>
- From May 2019 - May 2020, there were 11,117 hospital admissions in England directly attributed to obesity being the cause, a 4% increase from the previous year.<sup>5</sup>
- Despite the rising levels of obesity, there's been an increase in nutritional deficiencies due to these high calorie diets also being lacking in nutrients.

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<sup>1</sup> This report was produced by Jayati Hine from the University of Sheffield Medical School as part of a Community Placement in Nov-Dec 2020.

<sup>2</sup> <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>

<sup>3</sup> <https://news.sky.com/story/the-town-where-obesity-levels-are-high-but-nhs-funding-has-been-cut-11598807>

<sup>4</sup> [https://www.who.int/dietphysicalactivity/media/en/gsf\\_obesity.pdf](https://www.who.int/dietphysicalactivity/media/en/gsf_obesity.pdf)

<sup>5</sup> <https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-obesity-physical-activity-and-diet/england-2020>

## The causes

Obesity develops over years of consistent unhealthy habits and is ultimately due to an over consumption of high calorie food and drink (including alcohol) with reduced levels of activity. The issue is, however, more complex than that with multiple factors simultaneously contributing to cause a population level increase in obesity levels. This section looks at some of the key causes that have contributed to this:

- **The Food industry-** Unhealthy foods have been heavily marketed in the past few decades leading to increased consumption of cheap, high calorie foods.
- **Sedentary lifestyles-** Societal changes have meant that now it is possible to have a very comfortable life with little movement. Some examples are:
  - Online shopping- people don't even have to leave their front door to get everything they need.
  - Multiple cars per household- fewer people are walking places.
  - Unlimited access to online information- all information is in the home, no need to go anywhere.
  - Online socialising- people will often connect more often online and less in person.
  - Fewer physical jobs e.g. on farms, in factories, down the pits.<sup>6</sup>
- **The Media-** people are watching television more and moving less. Therefore, people see more unhealthy food adverts and are more likely to buy unhealthy foods. Simultaneously, increased media exposure has led to unrealistic body images adding to more mental health problems relating to self-esteem, anxiety and depression.<sup>7</sup>
- **Mental health-** obesity has been associated with depression and anxiety. It has been recognised that people who are obese are more likely to experience social exclusion due to society's expectations, internalised stigma and body image norms which has been correlated with further weight gain.<sup>8</sup>
- **Eating out-** restaurants and fast-food restaurants focus on food tasting good and bringing customers back with little focus on being 'healthy'. Deals, promotions and large portions mean that people eat a lot of high calorie food in one sitting.
- **Family lifestyles-** family members often form similar habits to the people they live with meaning parents that are obese are likely to introduce unhealthy habits to their children.<sup>6,7</sup>
- **Deprivation association-** areas with more deprivation are more likely to have higher rates of obesity. In the least deprived areas in England, there is a 56% obesity rate compared to 67% in the most deprived areas.<sup>9</sup>

In a complex and integrated way, these factors have been found to cause rising levels of obesity across the country.

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<sup>6</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2932668/>

<sup>7</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4408699/>

<sup>8</sup> <https://www.karger.com/Article/Fulltext/500095>

<sup>9</sup> <https://commonslibrary.parliament.uk/research-briefings/sn03336>

## Childhood obesity

Whilst obesity rates have been increasing, the age at which people are becoming obese is lowering. This means there are more children becoming obese and overweight in all age categories:

- In 2017/18, in England, 9.5% of children aged 4-5 were obese with a further 12.8% being overweight
- In children aged 10-11, the rates were higher with 20.1% being obese and 14.2% being overweight <sup>10</sup>

**Associated health problems-** obesity in childhood can cause both physical and mental wellbeing problems. Being obese from a younger age increases the time these people are exposed to these risk factors. Some of these are listed below:

- More likely to develop diseases such as heart disease, some cancers and type 2 diabetes at a younger age than previously seen which increase the risk of heart attacks, strokes and even death
- More likely to have problems with self esteem
- Emotional and mental wellbeing are more likely to be negatively affected

### **Main causative factors:**

#### **Media impact-**

- Children watch more television now whereas in the past children would be doing some form of physical exercise e.g. playing outside.
- Simultaneously, children are more exposed to unhealthy food advertisements meaning they are more likely to eat this unhealthy food whilst still moving less.

#### **Sugary drinks and snacks-**

- Fizzy drinks, juices and sweet snacks are easy to eat, not very filling and high in calories. They are often given to children to eat hence contribute to the increasing obesity rate in children.

#### **Reduced activity levels-**

- Children are more sedentary now than ever in the past which is strongly associated with causing obesity.
- Many of these children are sedentary whilst watching television in place of doing physical activity outside.<sup>11</sup>

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<sup>10</sup> <https://commonslibrary.parliament.uk/research-briefings/sn03336>

<sup>11</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4408699/>

## In Rotherham

Obesity levels in Rotherham are higher than the national average. Between 2013-16, children aged 10-11 years:

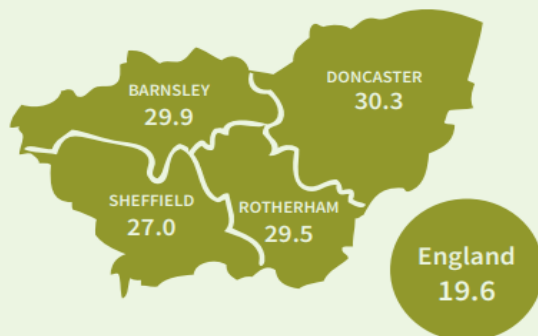
- England rate: 19.3%
- Rotherham rate: 22.3 %
- Rotherham central region (most deprived area in Rotherham): 28.2%<sup>12</sup>

Childhood obesity rates are also higher in Rotherham compared to the national average. This is due to a complex combination of factors as stated in the previous section that in turn lead to increasing rates of obesity amongst the Rotherham population.

### IMD Rank\*

Figures suggest that **Doncaster** is experiencing the **highest overall levels of deprivation** in South Yorkshire, shortly followed by **Barnsley**, **Rotherham** and then **Sheffield**.

All are performing worse than the national average.



\*The IMD is a relative measure of deprivation for small areas across England. The overall IMD rank combines together indicators under seven different domains of deprivation: income, employment, education, health, crime, housing and living environment.

This infographic is taken from the South Yorkshire Community Foundation Vital Signs report 2019.

The image represents the deprivation rate of the four main areas in South Yorkshire. All four areas are ranked higher (therefore more deprived) than the England average. Rotherham has a score slightly lower than Doncaster and Barnsley but higher than Sheffield. The rank used is the Index of Multiple Deprivation (IMD). It looks at seven domains to form a deprivation score. These domains include income, employment, education, health, crime levels, housing and living environment. This deprivation rate correlates with higher obesity levels in the more deprived areas.<sup>13</sup>

Rotherham has a higher rate of deprivation throughout the borough which in a complex cycle can lead to more people with both mental health problems and obesity. For example, one study found that people who were obese were 55% more likely to develop depression and people with depression were 58% more likely to become obese.<sup>14</sup>

<sup>12</sup> <https://www.rotherham.gov.uk/downloads/file/608/rotherham-east-ward-profile>

<sup>13</sup> [https://www.sycf.org.uk/wp-content/uploads/2019/11/SYCF\\_VitalSigns2019\\_v10\\_20191016.pdf](https://www.sycf.org.uk/wp-content/uploads/2019/11/SYCF_VitalSigns2019_v10_20191016.pdf)

<sup>14</sup> <https://www.priorygroup.com/blog/the-relationship-between-mental-health-and-obesity>

## **A case study of how a Rotherham based weight loss service was affected during the Covid-19 pandemic since March 2020 and how their service has been adapted in response**

This is a case study example from Rotherham United Community Sports Trust (RUCST) looking at how their services have been affected and engaged with since the beginning of the Covid-19 March 2020 lockdown.

- Prior to lockdown, weight loss services were in person and very interactive with part of the session being education focused alongside an exercise session.
- When the March 2020 lockdown came into place, all services had to stop as face to face contact was banned.
- Initially, services were put online during their usual time slots but adapted to work in a home environment.
- When restrictions eased, in person sessions started in smaller groups of 6 with covid-secure measures and protocols in place.

### **Responses to the lockdown coming into place in March 2020**

RUCST found that their service users responded in a range of ways depending on their personal circumstances with the two extremes being seen in terms of engagement with their services.

- Many people who stopped working (were put on the government furlough scheme or similar) found they had more time to engage with the service to lose weight and be more active. These people found they were losing weight faster than before lockdown.
- Many essential workers were working longer shifts in an increasingly stressful environment. These people found they had less time and energy to focus on their weight loss journey so became less engaged with the service at this time.
- Some people did not like using the service in an online format and chose to leave with a plan to re-engage when services could begin in-person again.
- New interest in the service increased as many people started to gain weight as a result of binge eating more often, consuming more alcohol and/or exercising less than before lockdown began.
- Many new customers contacted the service for future support after evidence emerged that overweight and obese people were at a higher risk of hospitalisation and death from Covid-19.

Overall, there were contrasting experiences due to differences in personal circumstances. RUCST found that 60% of previous members (who joined before lockdown) stayed, engaged with and saw positive weight loss results.

## Recommendations

### Resources available:

Rotherham United Community Sports Trust is one example of a service available to people in Rotherham looking for weight loss or healthy lifestyle support. The following are some other services available:

- Slimming world services- >25 groups in Rotherham
- Get Healthy Rotherham
- Reshape Rotherham
- Weight Watchers Rotherham

\*This is not an exhaustive list; these are services found online that appear available as of December 2020.

### Lifestyle changes you can keep a healthy weight and lifestyle:

- Speak to your doctor about ways to safely lose weight for you
- Join an **exercise class**- a more fun way to start moving and keep you enjoying it meaning you're more likely to carry on.
- Learn some new ways to **cook**- there are a lot of healthy and tasty recipes online and in books. **Home-cooked meals** with lots of **vegetables** are usually much healthier and have fewer calories than take-aways, restaurant meals or ready-made meals.
- **Walk or cycle to places**- find ways of moving more in your everyday routine to burn more calories.
- Get enough **sleep**- the recommended number of hours of sleep is 6-9 hours a night. A lack of sleep can lead to eating more unhealthy foods throughout the day.
- Contact a local support service and see what they can do for you.