

SUMMARY OF RESULTS FROM WHO COSI 2018/2019

# Overweight and obesity are common and increase with age in 6–9 year olds

Overweight and obesity are common among 6–9 year olds in Sweden. This result is based on anthropometric measurements collected by the School Health Services in Sweden in the 2018/2019 school year. Furthermore, overweight and obesity become more common with increasing age and over time.

A nationwide survey shows that approximately every fifth child (21 percent), has overweight or obesity: 15 percent have overweight and 6 percent have obesity. In addition, the proportion of 6–9 year olds with overweight or obesity has increased by about 3 percentage points since 2015/2016.

# Gender and age differences

Overweight and obesity become more common with increasing age for both girls and boys, and they are more than twice as common among 9 year olds when compared to 6 year olds. There are also gender differences. The largest gender difference for obesity is found among 9 year olds, where the proportion of obesity in boys is 11 percent compared with about 9 percent in girls. In the same age group, 22 and 23 percent of boys and girls, respectively, are overweight. Among 6–8 year olds, it is more common for girls than boys to be overweight.

# **Geographical differences**

There are differences between regions in the occurrence of overweight and obesity. The proportion of children with overweight and obesity is highest in Västmanland with 23 percent, followed by Skåne with 22 percent and Södermanland with 21 percent, while Västerbotten has the lowest share at 13 percent. The highest proportion of children with obesity is in Västmanland with 8 percent, followed by Skåne with about 7 percent. The lowest share is in Norrbotten with 3 percent and Västerbotten with 2 percent. The WHO Child Obesity Surveillance Initiative (COSI)

is a survey of weight status among children aged 6–9 years (i.e. pre-school class and grades 1–3) in Europe. Data have been collected every three years since 2007/2008. The Public Health Agency of Sweden has been responsible for the Swedish data collection in the last two surveys. COSI seeks to:

- contribute with information about current weight and height
- provide an understanding of the development of overweight and obesity
- enable comparisons between different countries
- monitor and follow-up developments to counteract overweight and obesity.

**Figure 1.** Percentage of children aged 6–9 years old with overweight and obesity in the school year 2018/19, divided by age and sex.



IsoBMI according to IOTF (International Obesity Task Force).

There are also gender differences between regions. The proportion of girls with overweight or obesity is highest in Västmanland with 25 percent and lowest in Norbotten with around 16 percent. When it comes to boys, Kalmar and Skåne have the highest share, approximately 22 percent, while Västerbotten has the lowest share with10 percent. For both sexes, the proportion with obesity is lowest in Västerbotten (approximately 2 percent), while it is highest in Västmanland (8 percent In addition to gender differences, there are also age differences. The proportion with overweight or obesity

Figure 2. Percentage of children aged 6–9 years old with overweight and obesity in the school year 2018/19, divided by region.

for boys and 9 percent girls).



IsoBMI according to IOTF (International Obesity Task Force).

## METHOD

The Swedish Public Health Agency has, in consultation with the Swedish Association of Local Authorities and Regions (SKR), collected data on anthropometric measurements made by school nurses during the 2018/2019 school year. All regions and municipalities were asked to participate, and 16 of 21 regions agreed. A total of 61,763 children were included in the analysis, of which 30,060 were girls and 31,703 were boys. All data were annonymised. The majority of the children in the analysis were either 6 or 8 years old (39 and 32 percent, respectively). The reason for this is that the anthropometric measurements are taken in conjunction with the vaccination program, which is done at those ages.

among 6 year olds is highest in Dalarna with 21 percent and lowest in Stockholm with about 12 percent. Among 7 year olds, the lowest proportion of children with overweight or obesity is in Västerbotten, with about 12 percent, while Västmanland has the highest with about 25 percent. Fewer regions reported data for 7 and 9 year olds than for 6 and 8 year olds. However, the proportion with overweight or obesity among 8 and 9 year olds is highest in Västmanland at approximately 31 and 44 percent, respectively.

## **Overweight and obesity increases**

In a similar survey in 2015/2016, approximately 18 percent of 6-9 year olds were overweight or obese. This means that there has been an increase in the prevalence by 3 percentage points between the two measurement periods. The results show that the increase was unevenly distributed between the measurement points, with a larger increase among boys aged 7-9 years compared with girls. The largest increase among both sexes was at the age of 8 (5 percentage points among boys and 3 percentage points among girls). Overall, the proportion of children with obesity has increased, while the prevalence of overweight is largely unchanged. The results from statistical analyses between the two measurement points 2015/2016 and 2018/2019 indicate that the risk of children aged 6-9 being overweight or obese has increased, which means that the probability of normal weight in children has decreased.

TARGET GROUP AND PURPOSE This factsheet shows the prevalence and development of overweight and obesity among 6-9-year-old children in Sweden. This information is important for identifying target groups for the health-promoting and preventive work with overweight and obesity.

Both individual-based and societal efforts are needed to give children the opportunity for more physical activity and healthy eating habits. Such efforts are also a prerequisite for achieving the sustainability goals in Agenda 2030.

This factsheet is addressed to you who decide on, develop, or work with health promotion and prevention efforts, for example, in the municipality, region, or school.

