



# DID YOU KNOW?

## There are sex differences in metabolism and obesity.

Obesity is a complex disease resulting from a combination of internal and external factors, including sex, genetics, hormones, psychology, environment, and socioeconomics.

**2 in 5**  
**women**  
**in the U.S.**  
**living with**  
**obesity<sup>1</sup>**

**12.1%**      **6.7%**  
**of females**      **of males**  
**Prevalence of Class III**  
**(severe) obesity in**  
**the U.S.<sup>1</sup>**

Adipose tissue (body fat) is essential for energy storage by balancing fats and sugars. In patients living with obesity, adipose tissue often does not function properly. Women have more adipose tissue than men and experience changes in adipose tissue function during hormonal milestones like puberty, pregnancy, and menopause.



Other differences between males and females that impact weight and health:

- ▶ **Body composition**
- ▶ **Adipose tissue distribution**
- ▶ **Metabolism**
- ▶ **Inflammation**
- ▶ **Risks for developing obesity and related conditions (e.g., diabetes, heart disease, dementia)**

There are sex differences in brain structure and function that influence eating behaviors, hunger, and fullness. Higher neural responses to food stimuli in females can lead to overeating and higher body mass index (BMI). Sex differences have been shown in responses to obesity treatments and weight loss interventions. Males tend to lose more weight than females with behavioral treatments. Trials examining new obesity management medications report females tending to lose more weight than males, although further research is needed.

1. NCHS Data Brief No. 508, September 2024. <https://www.cdc.gov/nchs/products/databriefs/db508.htm> Accessed: 20 Aug 2025.