

## **The role of obesity measures in the development and persistence of major depressive disorder**

### **Summary**

Obesity has been associated with the onset of depression, however many of these studies have not made allowances for other influencing factors. Additionally whether obesity contributes to the chronicity of depression (how long someone remains depressed) is not known. This study examined the relationship between body mass index (BMI) and waist circumference with the development and the chronicity of a major depressive disorder (MDD) over 2-year and 6-year periods.

We used data from the Netherlands Study of Depression and Anxiety. Whether participants were depressed or not was diagnosed by an interview at baseline (the start of the study) and after 2, 4, and 6 years. In order to look at the relationship between obesity measures and the development of depression over 2-year and 6-year periods, we selected participants who had no current depression at the start of the period. Associations between obesity and the chronicity of depression was measured in a similar way by using only participants who had a diagnosis of current MDD at the start of the period.

A higher BMI at baseline slightly increased the chance of developing MDD over a 2-year period, although when other factors such as health status and lifestyle were taken into account, this relationship was no longer significantly relevant. However, over a 6-year period, having a higher BMI or a larger waist circumference did increase (albeit mildly) the chance of developing clinical depression, even after allowances were made for other health and lifestyle factors. Conversely, neither BMI or waist circumference seem to influence how long someone remained depressed. Thus we can conclude that patients who have a higher BMI have a slightly higher risk of becoming depressed over the long term, although it is unlikely to affect how long someone remains depressed.