Understanding Age-Related Weight Gain

The body's ability to remove and store fat declines with age.

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Many people struggle to keep off extra pounds, especially as they age. Doctors say eating more and exercising less often are frequently to blame, but research recently published in the journal Nature Medicine has uncovered a hidden reason our waistlines may expand as we rack up birthdays. It turns out that the body's ability to remove and store fat in its cells—a process called lipid turnover—may decline.

For the study, researchers from Sweden's Karolinska Institutet in collaboration with Uppsala University (also in Sweden) and the University of Lyon in France tracked fat cells from 54 men and women during 13 years on average. Results showed that by the end of the investigation, all participants exhibited significant decreases in lipid turnover in their fat tissue cells—regardless of whether they gained or lost weight.

Scientists noted that those who did not compensate for the slowdown by eating less gained an average of 20% more weight than those who did. This means that watching one's calorie intake can help mitigate weight gain.

"The results indicate for the first time that processes in our fat tissue regulate changes in body weight during aging in a way that is independent of other factors," said Peter Arner, PhD, a professor in Karolinska's Department of Medicine and an author of the study.

Arner added that the findings could lead to the development of new drugs to help stop this cellular slowdown and offer new ways to treat obesity.

For another aspect of the study, researchers also checked how lipid turnover rate affected the ability of 41 women who had undergone bariatric surgery to keep pounds off four to seven years after the procedure. Scientists found that only women with a low lipid turnover rate prior to surgery were able to preserve their weight loss.

Scientists theorized that these individuals might have had more space in their cells to increase lipid turnover compared to those with high levels of turnover prior to surgery.

In the meantime, experts recommend that older adults exercise—by walking, swimming or cycling—at least three times each week. Strength training is also recommended, as are eating healthy and tracking calorie intake.

It’s also key to understand one scientific fact: The older individuals are, the longer it will take them to lose weight.

To learn more about exercises that help keep older bodies and minds fit, read “Senior Benefits.”

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