Gene determines size of fat cells, might help treatments for insulin resistance

Researchers at Karolinska Institutet in Sweden have for the first time identified a gene driving the development of pernicious adipose tissue in humans. The findings imply, which are published in the scientific journal Cell Metabolism, that the gene may constitute a risk factor promoting the development of insulin resistance and type 2 diabetes.

Adipose tissue can expand in two ways: by increasing the size and/or the number of the fat cells. It is well established that subjects with few but large fat cells, so-called hypertrophy, display an increased risk of developing type 2-diabetes. In the current study, researchers identified a gene, EBF1, which according to these new findings drive the development of the unhealthy adipose tissue. This gene encodes a protein that controls a set of other genes, a so-called transcription factor, and regulates the formation of new fat cells as well as their metabolic function.

Read the full, original story: Gene behind unhealthy adipose tissue identified