



# Brown fat stem cells

## **Brown fat stem cells hold possibilities for treating diabetes and obesity**

Obesity and diabetes have become a global epidemic leading to severe cardiovascular (heart and circulatory) disease. Children have large amounts of brown fat that is highly metabolically active and this allows them to eat large amounts of food and not gain weight. It was thought that brown fat stem cells did not exist in adults but researchers have found them! Adults have a lot of white fat in their bodies, which leads to weight gain and cardiovascular disease but this does not happen with brown fat. Scientists have identified brown fat stem cells in the chest of patients aged from 28 to 84 years. They have been able to isolate the human stem cells, culture and grow them, and implant them into a pre-human model. This has shown positive effects on glucose levels- a good sign for treating diabetes.

This new discovery of finding brown fat stem cells may help in identifying potential drugs that may increase the body's own ability to make brown fat or find new ways to directly implant the brown fat stem cells into patients.

<http://www.sciencedaily.com/releases/2013/11/131121125655.htm>

