

Brown Fat: A Weapon against Obesity

"Brown" fat (brown adipose tissue) is the newest weapon in the battle against obesity. A good type of fat--tagged "brown fat"--converts stored energy into heat. It was long known to exist in infants but had been thought to disappear with age. Three research groups reported last year that brown fat exists in some adults, and two other research groups reported finding cellular switches that can be flipped on to make brown fat cells out of ordinary skin cells and other types of cells.

This discovery raises the possibility that in the future, obesity could be treated by spurring the growth of brown fat cells in patients, transplanting such cells, or increasing the activity level of patients' existing brown fat.

Work by a number of researchers is likely to motivate pharmaceutical companies to figure out how to stimulate "brown" fat, either with a drug that can promote its growth or activity, or by turning cells into "brown" fat and transplanting it into people.