

BODY FAT: THE GOOD, THE BAD AND THE UGLY TRUTH

they exceed the limit at which their adipocytes can hypertrophy, so the body creates more fat cells to hold more fat. If a person loses weight after becoming obese, their extra adipocytes remain. You can never lose fat cells; you can only gain them. It is harder for people to lose weight when they have more adipocytes versus when they just have larger ones. This has important implications for childhood obesity. Compared to an adult, a child more easily responds to weight gain with the creation of more adipocytes. When obese children reach adulthood, they will have more adipocytes than someone who never was obese as a child. This makes it harder for them to lose weight as an adult.

(6) There is another type of fat that is found in your bloodstream; it's called cholesterol. Often cholesterol is given a bad name because it is often associated with cardiovascular disease, but the truth is that it is also vital for life. It is so vital that your cells will produce cholesterol on their own. When your diet contains cholesterol, your cells will make less, and when your diet lacks cholesterol, your cells will make more. Cholesterol is needed to make cell membranes and to synthesize hormones like testosterone and estrogen. Cholesterol only becomes a problem when there is too much floating in the bloodstream which can cause cardiovascular disease. Excess cholesterol in the blood occurs due to a combination of genetics, diet and inactivity.

Article Questions

- 1) The scientific term for a fat cell is adipocyte (5). Of the types of fat in your body, you have the least amount of brown (4) fat, but this fat is capable of helping you burn a lot of white fat. The fat floating in your blood is called cholesterol (6).
- 2) In terms of their location, what is the difference between subcutaneous fat and visceral fat?
Subcutaneous fat is located between the skin and the muscles, while visceral fat is located around the organs within the peritoneal cavity.(2)
- 3) If you were overweight, what body shape would be worse for your health and why?
An apple shape is bad for your health because it means that you have a lot of abdominal fat, much of which is visceral fat which is dangerous for your health.(2)
- 4) How is adequate sleep important for weight maintenance?
Lack of sleep causes fat cells to become less responsive to insulin. Insulin is a hormone responsible for properly utilizing glucose for energy and an inability to respond to it can cause a metabolic slow down that can lead to weight gain.(4)
- 5) In terms of fat storage, what are the two ways that your body responds to increased fat in the body?
The body can either increase fat cell size (hypertrophy) or increase the number of fat cells.(5)
- 6) Why does getting fat when you're a child make it harder for you to lose weight as an adult when compared to someone who only started gaining weight in adulthood?
Compared to adults, children's bodies easily respond to fat accumulation by increasing the number of fat cells. Adults that gain weight only in adulthood will usually increase their adipocyte size. It is easier to lose weight if you have larger fat cell than if you have more fat cells, so people who were obese as children will find it harder to lose weight as adults.(5)