

Saturated vs. Unsaturated: Why Some Fats Are Healthier Than Others

Our doctors have found the following article explaining the difference between saturated and unsaturated fats. By Almas Eftekhari of the American Diabetes Association, it will help you understand how the right food can help fight diseases like diabetes.

When eaten as part of a nutritious diet, unsaturated fats can provide protective health benefits for people with insulin resistance. Essential fatty acids found in this type of fat aid the breakdown of sugar and have anti-diabetic properties that enhance insulin sensitivity and reduce inflammation in fat tissue. Polyunsaturated fatty acids, like omega-3, are currently used to treat high triglyceride levels and can lower the risk of cardiovascular disease and type 2 diabetes. Studies show that eating foods rich in these acids, like salmon and nuts, improve blood-sugar control even in people that are overweight or obese.

On the other hand, foods high in saturated fat, like red meat, butter, and cheese, can be harmful to health. Elevated levels of saturated fatty acids often accompany obesity, which can initiate and worsen insulin resistance – potentially leading to type 2 diabetes. Overconsumption of saturated fat can also contribute to the development of heart disease, stroke, and even cancer. A recent ADA-funded study conducted by [Michael Karin, PhD](#) and his postdoctoral fellow [Debanjan Dhar, PhD](#) from the University of California, San Diego, may help explain why saturated fat is more likely to cause insulin resistance and type 2 diabetes.

The researchers discovered that fat cells are capable of sensing and discriminating between the types of fatty acids that reach its membrane. They found that increases in saturated fatty acids in the cell membrane trigger a response that activates enzymes called Jun kinases (JNK) and interferes with insulin function. Conversely, they observed that mono- and polyunsaturated fatty acids in the cell membrane elicit an opposite effect that blocks this pathway and prevents insulin resistance.

The research team is the first to identify membrane composition as a key JNK regulator and to clarify the mechanism that accounts for the differing effects of saturated and unsaturated fatty acids. “These findings not only explain the long-standing enigma regarding the differential health effects of saturated and unsaturated fatty acids, they also provide improved tools and a mechanistic framework for the potential development of dietary supplements to treat obesity,” said Dr. Karin, senior author of the paper published in the September 30, 2011 issue of Cell.

Doctors advise patients to read nutrition labels and monitor their saturated fat intake. This awareness can help encourage healthy eating and lower their risk for cardiovascular complications and diabetes.

Reprinted from the American Diabetes Association web site

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