

# People who eat a big breakfast may burn twice as many calories

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Eating a big breakfast rather than a large dinner may prevent obesity and high blood sugar, according to new research published in the Endocrine Society's *Journal of Clinical Endocrinology & Metabolism*.

Our [body](#) expends energy when we digest food for the absorption, digestion, transport and storage of nutrients. This process, known as diet-induced thermogenesis (DIT), is a measure of how well our metabolism is working, and can differ depending on mealtime.

"Our results show that a meal eaten for breakfast, regardless of the amount of calories it contains, creates twice as high diet-induced thermogenesis as the same meal consumed for [dinner](#)," said the study's corresponding author, Juliane Richter, M.Sc., Ph.D., of University of Lübeck in Germany. "This finding is significant for all people as it underlines the value of eating enough at breakfast."

The researchers conducted a three-day laboratory study of 16 men who consumed a low-calorie breakfast and high-calorie dinner, and vice versa in a second round. They found identical calorie consumption led to 2.5 times higher DIT in the morning than in the evening after high-calorie and low-calorie meals. The food-induced increase of blood sugar and insulin concentrations was diminished after breakfast compared with dinner. The results also show eating a low-calorie breakfast increased appetite, specifically for sweets.

"We recommend that patients with obesity as well as healthy people eat a large [breakfast](#) rather than a large dinner to reduce [body weight](#) and prevent metabolic diseases," Richter said.

**More information:** The manuscript, "Twice as High Diet-Induced Thermogenesis After Breakfast Versus Dinner on High Calorie as Well as Low-Calorie Meals." was published online, ahead of print.

Provided by The Endocrine Society

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