

# Sourdough Bread Has Most Health Benefits, Prof Finds

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Not all bread is created equal. The type of toast you eat for breakfast can affect how your body responds to lunch, a University of Guelph researcher has discovered.

Prof. Terry Graham studied four types of breads to determine which had the most positive health effects when it comes to carbohydrate metabolism, blood sugar and insulin levels.

"There's an urban myth that if you want to lose weight, you shouldn't eat bread," said the human health and nutritional sciences professor. "But the truth is, bread is one of our biggest sources of grains and has a number of healthy benefits. With this study we wanted to find out which breads are better so that we can optimize the benefits by combining them into one type of bread."

Using white, whole wheat, whole wheat with barley and sourdough white breads, Graham and a team of researchers examined how subjects responded just hours after eating the bread for breakfast and again just hours after eating a standard lunch.

The subjects, who were overweight and ranged between 50 and 60 years of age, showed the most positive body responses after eating sourdough white bread, and those positive responses remained even after eating a second meal that didn't include bread.

"With the sourdough, the subjects' blood sugar levels were lower for a similar rise in blood insulin," said Graham, whose findings are to be published in the British Journal of Nutrition. "What was even more interesting was that this positive effect remained during their second meal and lasted even hours after. This shows that what you have for breakfast influences how your body will respond to lunch."

He said it's likely that the fermentation of the sourdough changes the nature of the starches in the bread, creating a more beneficial bread.

And while sourdough came out on top, the whole wheat varieties used in the study came out on bottom – even below white bread.

The whole wheat breads caused blood sugar levels to spike, and these high levels lasted well after lunch.

Graham said the less positive blood responses sparked by the whole wheat are likely due to the fact that the milling process involved in making the whole wheat bread used in the study is similar to that used for white bread. This is not the case with all whole wheat or whole grain breads, he added.

"The parts of the grain like wheat germ and bran that have the health benefits are taken out to create white flour and then partially added back in to make whole wheat. Based on the findings of this study, as well as a followup study using whole grain rather than whole wheat, we are learning that the best way to get these nutrients is through a whole grain bread, not whole wheat."

Funded by the Ontario Ministry of Agriculture, Food and Rural Affairs, the results of this study have led Graham and a team of researchers to continue studying the healthy benefits of sourdough bread and whole grain.

In collaboration with Scarborough bakery Stonemill Bakehouse, they have developed a whole grain sourdough bread and are currently testing the long-term health benefits of the bread on subjects. They are comparing the results to the subjects' responses to a standard white bread.

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