

# THE MAGIC OF NUTRITION

## Breakfast is a Bright Idea

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Want to give your children a head start in school this year? Consider serving them oatmeal for breakfast.

Numerous studies already link the morning meal to better classroom performance. But the latest findings suggest that what children eat at breakfast may also shape how well they learn and what knowledge they retain.

In this month's of the journal *Physiology and Behavior*, Tufts University psychologists report on two experiments they conducted on 60 schoolchildren. For breakfast one day, the researchers fixed the youngsters oatmeal made with milk and then had them take a battery of classroom tests. A week later, the students ate Cap'n Crunch cereal with milk and then were tested. During the third week, they skipped breakfast one morning and just took the tests.

Simply eating breakfast produced better test results than missing the morning meal – findings that echo results of numerous other studies. But the researchers also discovered that boys and girls performed better on the tests when they ate oatmeal than when they had Cap'n Crunch. (The research was funded by Quaker Oats, maker of both products used in the study).

After eating a bowl of oatmeal, boys and girls aged 9 to 11 showed enhanced spatial memory, a skill that helps with drawing and doing puzzles. Spatial memory can help not only with art, but also with geography as well as some technical skills used in math and science. Girls, but not boys, also displayed better short-term memory after eating oatmeal.

Six to eight year old children listened better after eating oatmeal than after a breakfast of Cap'n Crunch. And like their older counterparts, they also scored higher on spatial memory. Younger girls also showed improvements in short-term memory similar to that seen in their older counterparts.

So what gives oatmeal its punch? The researchers suggest that the mixture of protein, fiber and complex carbohydrates may account for the differences in test performance. "Oatmeal may provide a slower and more sustained energy source and consequently result in cognitive enhancement compared to low-fiber, high glycemic, ready-to-eat cereal," the team concluded, noting that the results suggest "the importance of what children consume for breakfast before school."

The findings “reinforce the recent move toward whole grains,” said Holly A. Taylor, professor of psychology at Tufts University and a co-author of a study, “Since the brain uses glucose, and the source of glucose is diet, having a sustained-release food for breakfast is going to have a beneficial effect on memory and attention.”

Taylor’s advice to parents is something that she now puts into action for her own three children, who regularly eat oatmeal. As she said, “You don’t have to serve sugared oatmeal.”

Here are some other benefits and tips for eating a healthy breakfast:

Not just for the young. A University of Toronto study of 22 healthy men and women, 61 to 79 years old, published in the American Journal of Clinical Nutrition in 2001 found that breakfast improved memory. And researchers at the University of Wales-Swansea in Great Britain have reported that adults who ate a breakfast of low-glycemic foods such as whole grain unsweetened cereal, bread, or eggs performed better on memory tests in the morning than they did after eating sugary, high-glycemic fare such as sweetened cereals or doughnuts.

Quick is fine. Tufts researchers used packets of instant oatmeal, which are ready in a minute. Other options: make oatmeal ahead of time, refrigerate, then reheat it in the microwave. Top it with a little skim milk, fruit and slivered nuts. Some Lean Plate Club members also report making oatmeal in a slow cooker overnight so it’s ready in the morning.

Think outside the cereal box. Cheese, whole grain crackers, and fruit provide a good breakfast. So do smoothies made with nonfat yogurt and fruit. Or slather peanut butter on a slice of whole-grain bread, top with banana slices and add a glass of skim milk or low-fat soy milk for a nutritionally complete breakfast.

Eat breakfast to keep your waistline whittled. Breakfast doesn’t necessarily help with weight loss, but it appears to be important for long-term weight maintenance. Successful losers – members of the National Weight Control Registry – report that breakfast is a meal they rarely miss. (The registry is a group of several thousand people who have lost about seventy pounds and kept it off for at least five years). Researchers believe that eating breakfast may also help keep appetite under control for the day.

Eating breakfast has helped Arlene Rimer, a Lean Plate Club member from Toronto, maintain a 150-pound weight loss. Now she’s hoping that her example will rub off on her children. As she wrote in an email last week: “I am trying to teach my children to take the few minutes to eat a healthy breakfast at home before they leave for school.”