Reshaping the Food Pyramid

The government's Food Pyramid describes how much of each food group to eat every day. But experts say it's not just how much you eat that counts. Consuming fewer carbs and more "healthy" fats may help stave off chronic disease.

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WebMD Feature

The Food Guide Pyramid, the U.S. Department of Agriculture's map of what's supposed to make up a healthy diet, is familiar to everyone from children in school to health-conscious senior citizens.

But recent research involving more than 100,000 people could turn the pyramid on its side.

The study found that people whose diets contained fewer carbohydrates -- foods like bread and cereals -- and a bigger proportion of "healthy" fats, such as olive oil, than recommended by the pyramid were 20% to 40% less likely to develop chronic disease than those whose diets more closely matched the USDA guidelines.

"The Food Pyramid is flawed," says researcher Walter Willet, MD, a professor of nutrition at the Harvard University School of Public Health. "It says all fats are bad, all complex carbohydrates are good, all protein sources offer the same nutrition, and dairy should be eaten in high amounts."

More specifically, the Pyramid recommends eating the following every day:

- Six to 11 servings of carbohydrates such as bread, cereal, rice, and pasta.
- Three to five servings of vegetables.
- Two to four servings of fruit.
- Two to three servings of dairy (milk, yogurt, cheese).
- Two to three servings of protein (meat, fish, eggs, poultry, dry beans, nuts).
- As few fats, oils, and sweets as possible.

Goodbye, Pyramid?

The USDA is responsible not only for the Food Pyramid, but for the guidelines behind it. The agency uses a tool called the Healthy Eating Index, or HEI, to measure how closely people's diets follow its dietary guidelines.

"The pyramid guidelines are changed by the USDA every five years," Willet tells WebMD. "But the pyramid has never been revised. Can the USDA actually do a meaningful revision of it without being influenced by meat and dairy lobbying groups? That's the big question."

So the Harvard researchers set out to develop an Alternative Healthy Eating Index (AHEI) based on scientific evidence. They looked at the diets of more than 100,000 men and women enrolled in two other major studies, the Health Professionals Follow-up Study and the Nurses' Health study. The subjects chosen for the Harvard study filled out questionnaires that allowed the researchers to plot what kinds of foods they were eating.

The researchers came up with their AHEI by looking at dietary patterns and eating behaviors that, according to the findings of earlier studies, were associated with lower rates of chronic disease, Willet says. Unlike the USDA index, the AHEI emphasizes the quality of food choices -- such as white meat over red meat; whole grains over refined grains; oils high in unsaturated fat, such as many vegetable oils, over those with saturated fat; and multivitamin use.

In the Harvard study, men whose diets most closely matched the AHEI lowered their overall risk of major chronic disease by 20%; women did so by 11%, compared with those whose diets least closely followed these guidelines. In fact, the researchers found that men and women who followed the AHEI lowered their risk of cardiovascular disease by 39% and 28%, respectively.