

The truth about the war on wheat

October 3 2014, by David Fryxell



“I personally recommend a moderate, rather than a high-carbohydrate diet for most people based on the weight of evidence,” says Susan Roberts. Credit: IngImages

If you believe the best-seller lists, the biggest bad in the supermarket aisles is not fat or sodium or sugar, but wheat. We have been warned that eating wheat makes our bellies fatter and triggers diseases ranging from diabetes to autism.

It's true that refined [grains](#), including [wheat](#), have been stripped of much

of their natural nutrition, and that processed carbohydrates have contributed to America's obesity epidemic. But nutrition experts, the American Heart Association and the Dietary Guidelines for Americans all recommend regular consumption of [whole grains](#), including whole wheat. So do the best-selling authors know something that these experts don't?

"Americans tend to over-consume refined wheat products—energy-dense, nutrient-poor foods that are high in sugar and fat," says Nicola McKeown, an associate professor at the Friedman School and a scientific advisor to the Whole Grains Council. "So in this context, cutting out these foods will lead to weight loss. However, the troubling public health message that results from this is that wheat is the culprit," she says, noting that "there is a lack of scientific evidence to support the claims that eating wheat is an independent risk factor for weight gain."

The term "wheat belly" was popularized in 2012 by the cardiologist William Davis in his book *Wheat Belly: Lose the Wheat, Lose the Weight and Find Your Path Back to Health*. Davis calls wheat the "world's most destructive dietary ingredient." His attack on the grain that accounts for one-fifth of the world's food was followed late last year by *Grain Brain: The Surprising Truth about Wheat, Carbs and Sugar—Your Brain's Silent Killers*, a book by neurologist David Perlmutter that hit the best-seller lists.

Grain Brain states that today's high-carb diets run contrary to how human brains evolved. "It turns out that humans have never eaten grain. In 99.9 percent of our time walking this Earth, we have never eaten grain." In an interview, Perlmutter explained, "Human genes have evolved over thousands of years to accommodate a high-fat, low-carb diet. But today we feed our bodies the opposite way." He advocates eating closer to the "ancient ancestral diet" that he characterizes as 75 percent fat, 20 percent protein and 5 percent carbs.

But Susan Roberts, director of the Energy Metabolism Laboratory at the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts, who has studied such ideas for her book *The "i" Diet*, says, "There is no evidence I'm aware of that early humans routinely ate a 75-percent fat diet. I personally recommend a moderate rather than a high-carbohydrate diet for most people based on the weight of evidence. Sweeping statements about the grave danger of grains, in my opinion, are inconsistent with the substantial body of research on the health-giving benefits of whole grains. There are certainly some people who are healthier with a higher-fat, lower-[carbohydrate](#) diet, but we have no evidence that this is more than a small percentage of the population."

Short-term Gain

Is it true, as *Wheat Belly* asserts, that consuming wheat contributes significantly to belly fat? After all, it is widely accepted that abdominal fat surrounding the internal organs is linked to heart disease and diabetes. "It is true that many popular weight-loss diets target the grains food group, emphasizing eliminating these foods completely from your diet," McKeown says. "If you do cut out grains, you'll lose weight, mostly because you are cutting out calories associated with an energy-rich food group." However, she notes, "this is a short-term, effective weight-loss strategy. The long-term sustainability of this approach is questionable, as any one-time, low-carb dieter will attest."

The sources of our carbohydrates matter, she says, as does the food form. Research by McKeown and her colleagues found that higher intakes of refined grains lead to more visceral adipose tissue (VAT)—essentially, belly fat. But the same 2010 study also concluded that increased consumption of whole grains was associated with lower VAT in adults.

Compared to individuals who ate no whole grains, those consuming at

least three servings daily, including whole wheat, rice and oatmeal, had 10 percent lower belly fat, even after accounting for other dietary and lifestyle factors. Those findings supported an earlier study by McKeown and colleagues that concluded that "higher intakes of cereal fiber, particularly from whole-grain sources, are associated with lower total percent body fat and [less] trunk fat mass in older adults."

But because grains can be high in calories, McKeown and colleagues cautioned, "Emphasis needs to be placed on the substitution of refined grains with whole grains rather than the addition of whole grains to a diet already high in [refined grains](#)."

Is it also true that "modern grains are silently destroying your brain," as Grain Brain claims? Eating a diet that is high in carbohydrates seems to be associated with mental decline. In a 2012 study published in the *Journal of Alzheimer's Disease*, for example, scientists reported that people age 70 and older who ate the most carbohydrates in relation to protein and fat were at nearly four times the risk of developing mild cognitive impairment than their counterparts who ate fewer carbs. A study published in 2013 in the *New England Journal of Medicine* also concluded that higher glucose levels—which can be caused by too many carbs—may be a risk factor for dementia.

But cutting out too many carbohydrates may deprive your brain of fuel. In 2009, Tufts researchers found that women on an Atkins-style, [low-carb diet](#) suffered a gradual decrease in memory performance. Researchers theorized that low-carb diets could have a negative impact on thinking and cognition because the brain doesn't store glucose, its primary fuel, instead relying on the body to produce it from carbohydrates in the diet. Tufts psychology professor Holly A. Taylor, corresponding author on the study, explains, "The brain needs glucose for energy, and diets low in carbohydrates can be detrimental to learning, memory and thinking."

While wheat isn't the bogeyman that these popular books claim, don't depend on it as your only source of grains. "I would choose a variety of whole grains, including brown rice, oats, quinoa, farro and popcorn," advises McKeown.

Provided by Tufts University

Citation: The truth about the war on wheat (2014, October 3) retrieved 24 April 2024 from <https://phys.org/news/2014-10-truth-war-wheat.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.