

# On the evils of wheat

Dr. William Davis on why it is so addictive, and how shunning it will make you skinny  
by Kate Fillion on Tuesday, September 20, 2011 9:40am –



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William Davis, a preventive cardiologist who practises in Milwaukee, Wis., argues in his new book *Wheat Belly* that wheat is bad for your health—so bad that it should carry a surgeon general’s warning.

**Q:** *You say the crux of the problem with wheat is that the stuff we eat today has been genetically altered. How is it different than the wheat our grandparents ate?*

**A:** First of all, it looks different. If you held up a conventional wheat plant from 50 years ago against a modern, high-yield dwarf wheat plant, you would see that today’s plant is about 2½ feet shorter. It’s stockier, so it can support a much heavier seedbed, and it grows much faster. The great irony here is that the term “genetic modification” refers to the actual insertion or deletion of a gene, and that’s not what’s happened with wheat. Instead, the plant has been hybridized and crossbred to make it resistant to drought and fungi, and to vastly increase yield per acre. Agricultural geneticists have shown that wheat proteins undergo structural change with hybridization, and that the hybrid contains proteins that are found in neither parent plant. Now, it shouldn’t be the case that every single new agricultural hybrid has to be checked and tested, that would be absurd. But we’ve created thousands of what I call Frankengrains over the past 50 years, using pretty extreme techniques, and their safety for human consumption has never been tested or even questioned.

**Q:** *What extreme techniques are you talking about?*

**A:** New strains have been generated using what the wheat industry proudly insists are “traditional breeding techniques,” though they involve processes like gamma irradiation and toxins such as sodium azide. The poison control people will tell you that if someone accidentally ingests sodium azide, you shouldn’t try to resuscitate the person because you could die, too, giving CPR. This is a highly toxic chemical.

**Q:** *Can’t you just get around any potential health concerns by buying products made with organically grown wheat?*

**A:** No, because the actual wheat plant itself is the same. It’s almost as if we’ve put lipstick on this thing and called it organic and therefore good, when the truth is, it’s really hardly any better at all.

**Q:** *A lot of us have switched to whole wheat products because we've been told complex carbohydrates are heart healthy and good for us. Are you saying that's not true?*

**A:** The research that indicates whole grains are healthy is all conducted the same way: white flour is replaced with whole wheat flour, which, no question, is better for you. But taking something bad and replacing it with something less bad is not the same as research that directly compares what happens to health and weight when you eliminate wheat altogether. There's a presumption that consuming a whole bunch of the less bad thing must be good for you, and that's just flawed logic. An analogy would be to say that filtered cigarettes are less bad for you than unfiltered cigarettes, and therefore, a whole bunch of filtered cigarettes is good for you. It makes no sense. But that is the rationale for increasing our consumption of whole grains, and that combined with the changes in wheat itself is a recipe for creating a lot of fat and unhealthy people.

**Q:** *How does wheat make us fat, exactly?*

**A:** It contains amylopectin A, which is more efficiently converted to blood sugar than just about any other carbohydrate, including table sugar. In fact, two slices of whole wheat bread increase blood sugar to a higher level than a candy bar does. And then, after about two hours, your blood sugar plunges and you get shaky, your brain feels foggy, you're hungry. So let's say you have an English muffin for breakfast. Two hours later you're starving, so you have a handful of crackers, and then some potato chips, and your blood sugar rises again. That cycle of highs and lows just keeps going throughout the day, so you're constantly feeling hungry and constantly eating. Dieticians have responded to this by advising that we graze throughout the day, which is just nonsense. If you eliminate wheat from your diet, you're no longer hungry between meals because you've stopped that cycle. You've cut out the appetite stimulant, and consequently you lose weight very quickly. I've seen this with thousands of patients.

**Q:** *But I'm not overweight and I exercise regularly. So why would eating whole wheat bread be bad for me?*

**A:** You can trigger effects you don't perceive. Small low-density lipoprotein [LDL] particles form when you're eating lots of carbohydrates, and they are responsible for atherosclerotic plaque, which in turn triggers heart disease and stroke. So even if you're a slender, vigorous, healthy person, you're still triggering the formation of small LDL particles. And second, carbohydrates increase your blood sugars, which cause this process of glycation, that is, the glucose modification of proteins. If I glycate the proteins in my eyes, I get cataracts. If I glycate the cartilage of my knees and hips, I get arthritis. If I glycate small LDL, I'm more prone to atherosclerosis. So it's a twofold effect. And if you don't start out slender and keep eating that fair trade, organically grown whole wheat bread that sounds so healthy, you're repeatedly triggering high blood sugars and are going to wind up with more visceral fat. This isn't just what I call the wheat belly that you can see, flopping over your belt, but the fat around your internal organs. And as visceral fat accumulates, you risk responses like diabetes and heart disease.

**Q:** *You seem to be saying that aside from anything else, wheat is essentially the single cause of the obesity epidemic.*

**A:** I wouldn't go so far as to say that all obesity is due to wheat. There are kids, of course, who drink Coca-Cola and sit in front of video games for many hours a day. But I'm speaking to the relatively health-minded people who think they're doing the right thing by limiting fat consumption and eating more whole grains, and there's a clear subset of people who are doing that and gaining weight and don't understand why. It causes tremendous heartache. They come into my office and say, "I exercise five times a week, I've cut my fat intake, I watch portion size and eat my whole grains—but I've gone up three dress sizes."

**Q:** *You write that wheat is "addictive," but does it really meet the criteria for addiction we'd use when talking about, say, drugs?*

**A:** National Institutes of Health researchers showed that gluten-derived polypeptides can cross into the brain and bind to the brain's opiate receptors. So you get this mild euphoria after eating a product made with whole wheat. You can block that effect [in lab animals] by administering the drug naloxone. This is the same drug that you're given if you're a heroin addict; it's an opiate blocker. About three months ago, a drug company applied to the FDA to commercialize naltrexone, which is an oral equivalent to naloxone. And it works, apparently, it blocks the pleasurable feelings you get from eating wheat so people stop eating so much. In clinical trials, people lost about 22.4 lb. in the first six months. Why, if you're not a drug addict, do you need something like that? And of course there's another option, which is to cut wheat out of your diet. However, and this is another argument for classifying wheat as addictive, people can experience some pretty unpleasant withdrawal symptoms.

**Q:** *For how long?*

**A:** Generally about five days. And once you're through withdrawal, your cravings subside, your calorie intake decreases and your alertness and overall health improve.

**Q:** *So do you believe food manufacturers are putting wheat into more and more food products, not just bread and crackers, because it's addictive and stimulates appetite?*

**A:** These are not stupid people. The research showing that wheat stimulates appetite didn't come from some little alternative health practitioner. It comes from the NIH. It stretches credibility to believe they have no awareness of the evidence.

**Q:** *If there's all this evidence, why does the government encourage us to "eat healthy" by upping our consumption of whole grains?*

**A:** That's the million-dollar question. Wheat is so linked to human habit, it's 20 per cent of all calories consumed by humans worldwide, that I think there was the presumption, "Gee, humans have consumed this for thousands of years, so what's the problem?" I don't think the misguided advice to eat more whole grains came from evil intentions.

**Q:** *Wheat is a huge industry. What do you say to all the farmers who grow it?*

**A:** To me, it's reminiscent of tobacco farmers, who would say, "Look, I'm just trying to make a living and feed my family." Nevertheless, tobacco is incredibly harmful and kills people. It could turn out that if we wind back the clock 100 or 1,000 years, and resurrect einkorn or some of the heritage forms of wheat, maybe that would be a solution. Of course, wheat products would then be much more expensive. Instead of a \$4 loaf of bread, maybe it would cost \$7 when grown with a heritage wheat. To me, it's similar to free range eggs or organic beef 20 years ago. Everyone said, "No one will pay a premium for those." But people do. And when it comes to wheat, my main goal is to inform people, including farmers, that the prevailing notion that cutting fat and eating whole grains will make you healthy is not only wrong, it's destructive.