

Viewpoint: Here's what 'whole grain' really means—and it's not the health claim you've been told it is



onsumers have been so saturated with vague marketing claims that nearly 50 percent can't correctly identify what is claimed to be a "healthier" option on packages. That sounds bad, except buying whole grain or white bread or fancy crackers are not making any difference in health anyway.

[A new paper](#) finds many people can't make any sense of labels at all, but the authors [then argue](#) that even more labeling created by government committees is the solution. That would take a muddy situation, labels and food claims have become as political as everything else, and make things even less clear.

The choice experiment (conducted in 2018, analyzed in 2019, published in August 2020) had 1,030 U.S. adults chosen (and compensated) by Survey Sampling International look at photos of real and fake products. The photos had whole grain claims and information about ingredients like salt and sugar. For the fake products participants were asked to identify the "healthier" version of bread, crackers, or cereal and for the real products to assess the whole grain content. For fake products, 47 percent could not identify what epidemiologists want to suggest is "healthier" bread.

Here's the thing. An inability to discern bread someone believes is healthier does not mean the public are stupid. America actually leads the world in adult science literacy. It may be that, like you and me, respondents recognize that bread is bread and claims about it being health food based on a manufacturing process or how tedious it is to chew are simply correlational. Whole grain bread, crackers, or cereal positioned as a healthier alternative is as ridiculous as buying low-fat ice cream or orange juice.

For the real products part of the study, content analysis of packages, people even overestimated the whole grain content, likely due to marketing on the packaging. And that's the issue. People may think something has whole grain content because of marketing. And people may think whole grain bread is healthier because of marketing. The former is done by companies who are simply catering to a consumer base created by the people who created the latter; epidemiologists and nutritionists who chose to believe whole grain junk food is better for you and market it to media and the public.



Bread that chews like cardboard is not healthier for you than regular white bread.

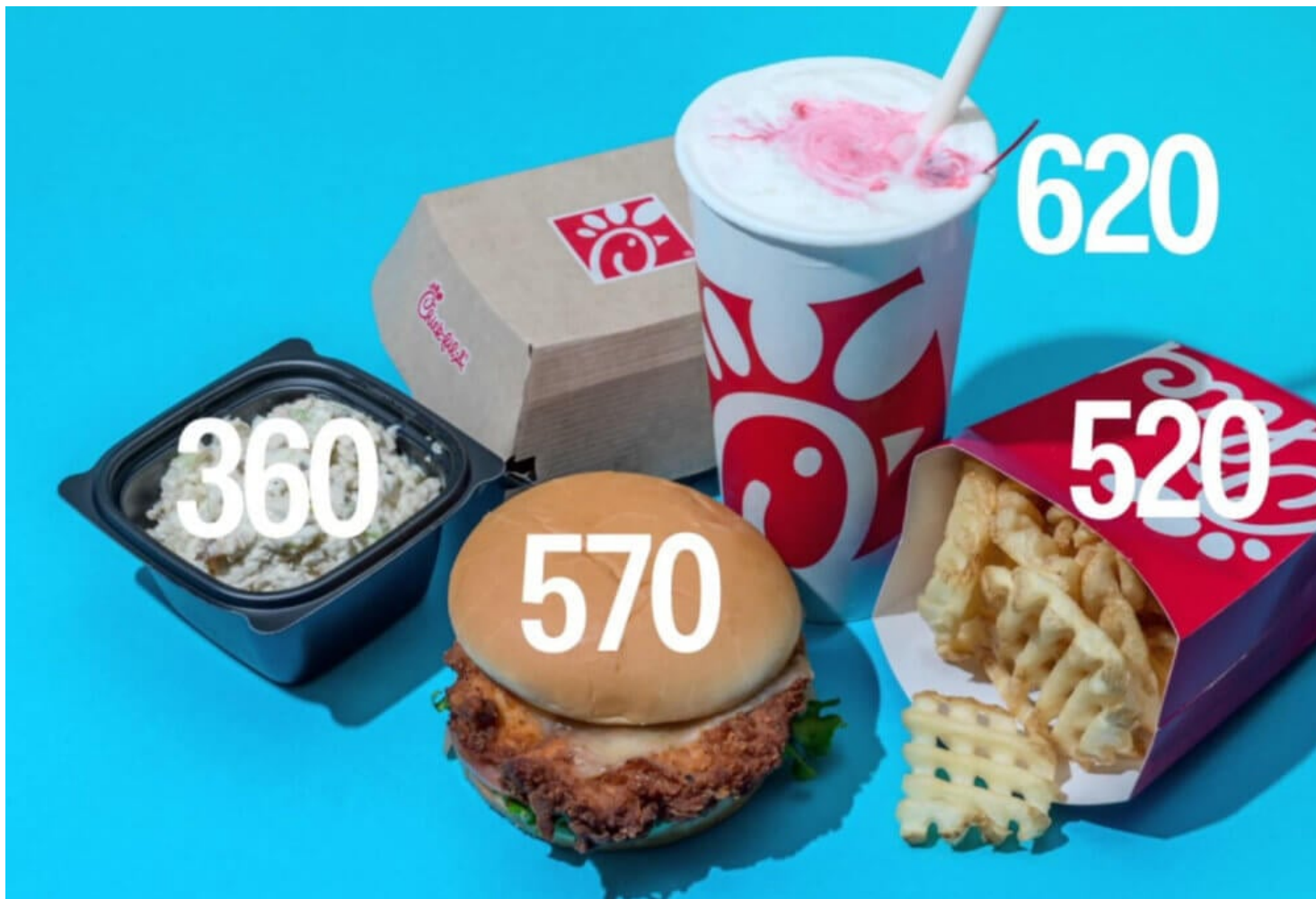
Confounders are:

First, these kinds of results are always in the “exploratory” category, even if they involve an experiment, and should not be used to create policy when it comes to science and medicine; because they can’t show links the authors then advocate anyway in their press release. Even the notion of healthier is subjective; a vegetarian regards meat as unhealthy whereas an evolutionary biologist does not. We can call it a discrete choice experiment but the chance of “imaginative suggestion” is very high when people educated by advertising fill out responses.

Second, ignoring calories, how much salt and sugar is bad for you versus another person in your office? No one knows. Salt recommendations, for example, are only based on correlation using population-level metrics, they have no more individual health relevance than BMI does.

Now, if your physician tells you to cut down on salt, don't be annoying and ask what makes them think that salt as a risk factor for a risk factor is making a difference in your health or longevity, they'll know you read Science 2.0 and curse us for enabling critical thinking, but don't bother eating bland food either. It would be more help to simply eat less food, not the same calories of something that epidemiologists imply is health food because of its manufacturing process. Epidemiology also claimed butter is bad for you, trans fats are good, and that drinking a glass of wine will give you breast cancer. It can even claim bacon and weedkillers will give you the same cancer, when epidemiologists torture the data long enough.

Yes, people are getting fatter, but that is because we have created a miracle of economics and agriculture and for the first time in history our poorest people can afford to not only avoid starvation, but to get obese if they choose. It's a choice whereas famine was not. That means we have a cultural maturity problem regarding food, not a lack of \$6 a loaf "stone milled" whole grain artisanal bread.



Credit: Business Insider

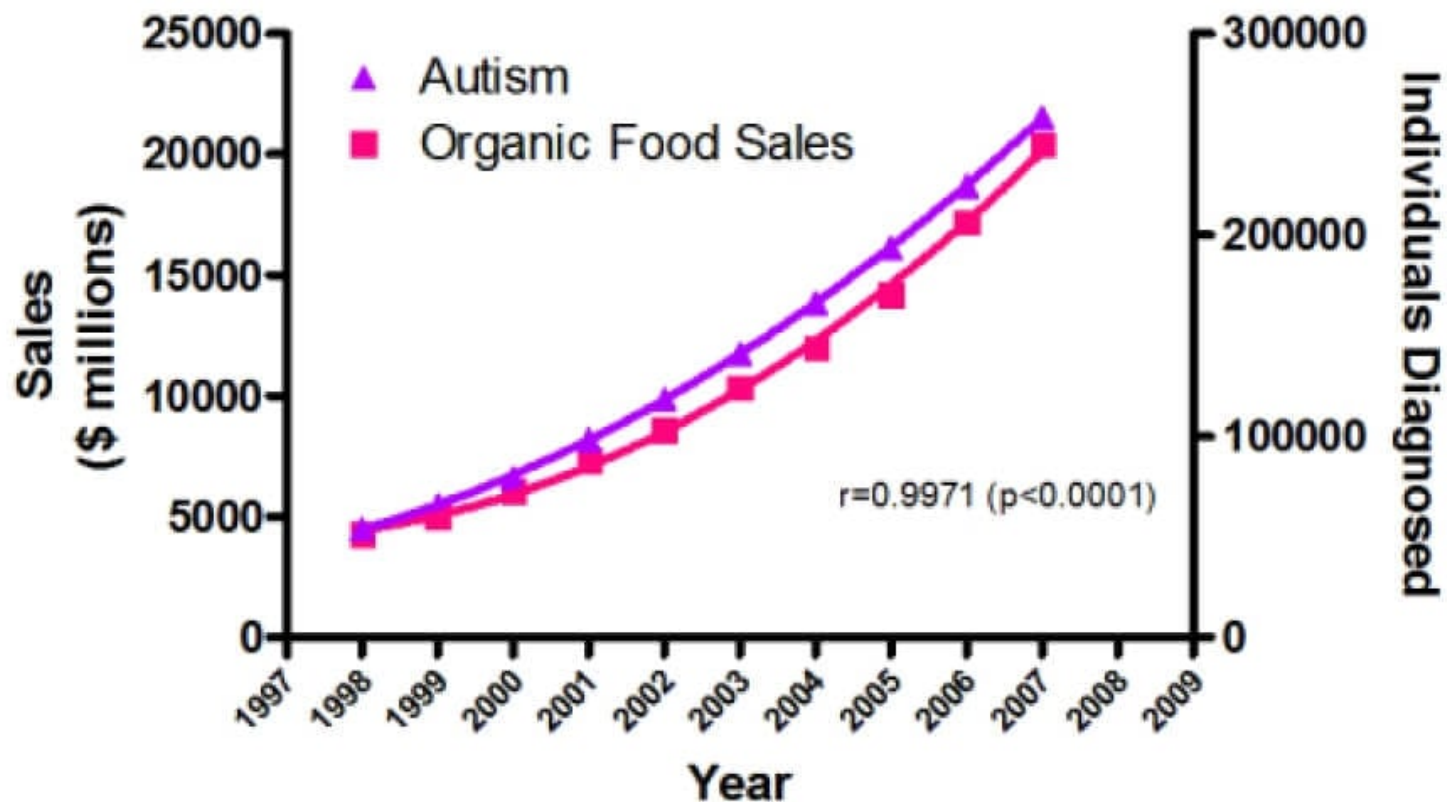
Third, whole grain bread is not healthier. There is no healthy bread or crackers, being "whole" grain only makes a difference in statistical links to health outcomes created in questionable food frequency

questionnaire papers and then choice experiments where people cite them. There is also no unhealthy bread. [Want to make bread like they did 2,000 years ago](#)? Well, you really can't, the ingredients have all improved since then. But you can use their recipe, and it won't make you any healthier just because Celtic slaves in Rome once made it that way. The only thing that will make it unhealthy is eating a whole loaf of it every day.

Whole grain statistical correlation has been embraced by marketing groups for a simple reason that warms the hearts of capitalists everywhere; it gave companies a way to not only compete with Wonder bread, they could charge more by selling people a “nocebo”—the notion that a product without something provided a health benefit. It's not a Big Food conspiracy, nor are “low-quality carbohydrates” addictive. They don't even exist. To claim they do is a sympathetic magic take on biology masquerading as a hot take on solving disease.

Food epidemiology hype ruins trust in disease epidemiology

It's been a real challenge to get people to listen to disease epidemiologists when it comes to coronavirus precisely because the public have become jaded about epidemiological claims due to weekly papers promoting Miracle Vegetables or carcinogen “links.” Researchers often use statistics to manufacture a correlation without showing any science as to why or how the link could be anything but coincidence.



Sources: Organic Trade Association, 2011 Organic Industry Survey; U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), OMB# 1820-0043; "Children with Disabilities Receiving Special Education Under Part B of the Individuals with Disabilities Education Act"

Correlations, though sometimes striking, aren't evidence that one thing causes another.

And they often seek to advocate for more government interference, without showing how that actually helps the public. Instead of being an exploratory field, some think they are discovering a new world of natural laws using statistics that scientists are too myopic to find. Have you been unable to get Purell during the pandemic? That's because government treated alcohol and aloe gel in a bottle like a new drug or medical device. Instead of creating a standard and telling companies to comply or else penalties would ensue, a new competitor had to hire a phalanx of lawyers and spend years and tens of millions of dollars to give people cleaner hands. When the pandemic hit, bootleg products sprang up everywhere and now FDA has to convince us they are essential in stopping the problem they created.

We want more of that bureaucracy controlling our food?

Bad epidemiological correlation has led to nutrition guidelines that only 2 percent of the public can meet. That is meaningless from a public health point of view, as meaningless to health as aspirational wellness

videos from paid influencers with heavily bleached teeth.

All bread is processed food. None of us are pulling wheat out of the ground and chewing it. How much processing is “healthy” is a capricious metric with no legitimate foundation. Yet one co-author throws out the truth-y sound statistic that 42 percent of people’s food is “low-quality carbohydrates” and whole grains will fix that. Where did that crazy number come from? Another paper based on surveys [that FDA uses](#), because epidemiologists pick the papers.

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Knowing the many weaknesses in their data, in the conclusion co-author Professor Jennifer L. Pomeranz of NYU still claims that companies need to have even more government restrictions. “With the results of this study, we have a strong legal argument that whole grain labels are misleading in fact. I would say when it comes to deceptive labels, ‘whole grain’ claims are among the worst. Even people with advanced degrees cannot figure out how much whole grain is in these products.”

That’s not editorializing. They write “Using a legal standard for scrutinizing the regulation of food label claims” as the first sentence of the abstract. They are virtue signaling to lawyers.

Lawyers probably shot coffee out of their noses reading that an epidemiologist claimed their experiment with paid participants makes a legal case to sue over fraud in whole grain marketing. Maybe that is the intent; lots of other epidemiologists have gotten lucrative contracts being expert witnesses, while scientists get dismissed because of, you know, evidence.

Since jury trials require no science, epidemiologists may be on the winning side in future lawsuits over whole grain claims in food, but in reality the fault is not with the companies for selling what people want. Instead, food epidemiologists have to take the blame for the problem they now claim they want to solve. Companies sell what people want, and Harvard, Columbia, NYU and more told them to want “whole grain” foods, even though there was never any evidence they make anyone healthier.

There is science when it comes to bread, even healthier bread, but it doesn’t involve statistical correlation and papers that read more like prosecuting attorney documents. [You can read it here.](#)

Hank Campbell is the founder of Science 2.0 and co-author of the book Science Left Behind. Follow him on Twitter [@HankCampbell](#)

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