The New York Times https://www.nytimes.com/2022/11/21/opinion/obesity-cause.html

GUEST ESSAY

Scientists Don't Agree on the Cause of Obesity — Does It Matter?

Nov. 21, 2022, 5:00 a.m. ET

By Julia Belluz
Ms. Belluz is a health journalist. She is writing a book about nutrition and metabolism.

LONDON — A select group of the world's top researchers studying obesity recently gathered in the gilded rooms of the Royal Society, the science academy of Isaac Newton and Charles Darwin, where ideas like gravity and evolution were once debated.

Now scientists were arguing about the causes of obesity, which affects more than 40 percent of U.S. adults and costs the health system about $173 billion each year. At the meeting's closing session, John Speakman, a biologist, offered this conclusion on the subject: "There's no consensus whatsoever about what the cause of it is."

That's not to say the researchers disagreed on everything. The three-day meeting was infused with an implicit understanding of what obesity is not: a personal failing. No presenter argued that humans collectively lost willpower around the 1980s, when obesity rates took off, first in high-income countries, then in much of the rest of the world. Not a single scientist said our genes changed in that short time. Laziness, gluttony and sloth were not referred to as obesity's helpers. In stark contrast to a prevailing societal view of obesity, which assumes people have full control over their body size, they didn't blame individuals for their condition, the same way we don't blame people suffering from undernutrition challenges, like stunting and wasting.

The researchers instead referred to obesity as a complex, chronic condition, and they were meeting to get to the bottom of why humans have, collectively, grown larger over the past half century. To that end, they shared a range of mechanisms that might explain the global obesity surge. And their theories, however diverse, made one thing obvious: As long as we treat obesity as a personal responsibility issue, its prevalence is unlikely to decline.

A nutritional biologist presented the idea that all the carbohydrates and fat in our food today dilute the protein our bodies need, driving us to eat more calories to make up for the discrepancy. An endocrinologist spoke of the scientific model behind the low-carb diet approach, suggesting eating patterns heavy in carbohydrates are uniquely fat promoting, while an evolutionary anthropologist argued many lean hunter-gatherer societies ate a lot of carbohydrates, with a special affinity for honey.

Others suggested the problem is ultraprocessed foods, the prepared and packaged goods that make up more than half of the calories Americans consume. A physiologist shared his randomized control trial showing people eat more calories and gain more weight on ultraprocessed diets compared with whole-food diets of the same nutrient composition. But it's still unclear why these foods drive people to eat more, he said.

The mystery could be explained by the thousands of toxins ultraprocessed foods can carry in the form of fertilizers, insecticides, plastics and additives, argued one biochemist. Her research in cells has shown these chemicals interfere with metabolism.

Still others thought perhaps the problem is less about what we're eating and more about what we're not. An ethologist shared her work on the link between food insecurity and obesity in birds. When food becomes scarce, the animals eat fewer calories but gain more weight. Studies in humans have also found a "robust" association between food insecurity and obesity, she said — the so-called hunger obesity paradox.

To add to the complexity, the researchers made it clear that obesity can't be thought of as one condition. They spoke of rare cases caused by single gene mutations or disorders; more commonly, obesity is believed to arise because of still murky gene-environment interactions. Perhaps they should have been talking about obesities the whole time.

By the end of the conference, the attendees were no closer to a unifying theory for the global rise in obesity — a condition that's been with humans since at least Hippocrates but started to become widespread only since the launch of MTV. Yet in that short period, scientists, including many in the room, have learned a lot.

They've identified more than a thousand genes and variants that increase a person's obesity risk. They've figured out that body fat is much more than a storage depot for energy and that not everyone with obesity goes on to develop its associated complications, which include cancer, Type 2 diabetes, high blood pressure, heart attack, stroke and premature death. They've made remarkable progress mapping out how the brain orchestrates feeding and adapts to different diets, altering food preferences along the way. But precisely what changed in recent history to affect these complex biological systems, the scientists couldn't concur.

Since the meeting, I've been struck by the profound gap between the talks I heard and the weight conversation happening in our culture. No scientist spoke of any of the supposed fixes that currently fill diet books and store shelves, with the exception of the carbohydrate discussion. There wasn't serious dialogue about cleanses, diet apps or intermittent fasting. No one suggested that supplements could help people lose weight or that metabolisms need boosting. The sole presenter on the gut microbiome argued that the human trials in obesity to date have mostly disappointed.

In other words, there were no quick fixes or magic hacks in that London meeting room. And while there was excitement about medicine's incredible strides in treating patients with obesity, the effective drugs and surgeries weren't talked about as end-all solutions for the public health crisis.

When I asked many of the researchers how they'd tackle obesity, given the uncertainties, they pointed to policies that would alter or regulate our environment, like outlawing junk food marketing to kids, banning school vending machines and making neighborhoods more walkable. They talked about changing the food system in ways that also address climate change — a related crisis once met with policy inertia that now has international momentum. But when it comes to obesity, governments are still accused of being nanny states if they try to intervene with regulation.

This is in part because instead of viewing obesity as a societal challenge, the individual choice bias dominates. It's steeped with misunderstanding and blame, and it's everywhere. People are simply told to eat more vegetables and exercise — the equivalent of tackling global warming by asking the public only to fly less or recycle. Diet gurus and companies mint billions off food and exercise fads that will ultimately fail.

When people can't control their body weight, they often blame themselves. I recently interviewed a man who, after a brain tumor, developed severe obesity — a common side effect of his condition. The tumor went undiagnosed for months as doctors told him to diet and exercise more. But even today, he told me, the tumor just felt like "another excuse" for longtime weight struggles, so he doesn't talk about it with anyone.

Others provide the shame, too. A recent Times of London column argued that fat shaming is a real solution to obesity, just as Bill Maher ranted earlier that the body positivity movement — a “joyful celebration of gluttony,” he said — harms people by condoning weight gain. Quite the contrary: Researchers have repeatedly found fat shaming promotes weight gain and harms. At least some of obesity’s negative health consequences are thought to be driven by stigma and discrimination, which results in poorer health care.

Until we see obesity as something that’s been imposed on societies, not as something individuals choose, the fat shaming, magic hacks and bad policies will continue. Until we stop blaming ourselves and one another and start focusing attention on environments and systems, the global obesity rate will continue its ascent — a trend no country has substantially reversed, not even in children.

Julia Belluz is a health journalist. She is writing a book about nutrition and metabolism.

The Times is committed to publishing a diversity of letters to the editor. We’d like to hear what you think about this or any of our articles. Here are some tips. And here’s our email: letters@nytimes.com.

Follow the New York Times Opinion section on Facebook, Twitter (@NYTopinion) and Instagram.