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## Self-Experimenters: Filmmaker Gained Weight to Prove a Point about Portion Size

### Morgan Spurlock turned an extreme Big Mac attack into a public health wake-up call

By Christie Nicholson

*This is the second of eight stories in our Web feature on [self-experimenters](#).*

Morgan Spurlock's "really great bad idea," as it would later be called, came to him after a gluttonous Thanksgiving meal. Jeans unbuttoned, stomach engorged with turkey—and eyeing a second helping—the 32-year-old playwright noticed on the television news that two teenage girls from New York City were suing McDonald's for allegedly making them fat.

"It was the dumbest thing I'd ever heard of," Spurlock recalls thinking. Until, that is, a McDonald's spokeswoman appeared on screen to deny any link between the chain's food and the girls' obesity, claiming that Big Macs, Chicken McNuggets and the rest of the gang were nutritious. "That was even crazier than the lawsuit," says Spurlock, now 37. "If it's so nutritious, I should be able to eat it every day."

Against the better judgment of three doctors and the pleading of [Alexandra Jamieson](#), his vegan chef girlfriend (now his wife), he enlisted himself as experimental subject, eating only McDonald's fare, three meals a day, for 30 days. [Super Size Me](#), the chronicle of his February 2003 "McOrgy," became the eighth-highest grossing documentary in movie history, and is widely regarded as encouraging the end of the fast food "super size" era.

Spurlock, who consumed about 5,500 calories per day (the recommended dietary allowance, or RDA, for adult men is 2,900 calories per day) to satisfy what could be viewed as his reckless curiosity, gained nearly 25 pounds (11 kilograms) in the process. (An increase in consumption of 3,500 calories will lead to an increase of one pound, or 0.45 kilograms.) His [overall cholesterol](#) levels shot up 70 points, from 159 to 229, by the third week, and he developed [heart palpitations](#). His sex drive flat-lined, too. "I was a prick to be around," he says.

But what most alarmed his physicians was the damage to his [liver](#), which became so engorged with fat that it could have been marketed as pâté. "I expected his [triglycerides](#) would increase temporarily, his blood pressure would go up, he'd feel miserable," said Dr. Daryl Isaacs, Spurlock's general practitioner. "I never expected an acutely fatty liver. By the third week he had the liver of a binge alcoholic." All three physicians ordered Spurlock to stop, but he nervously stuck it out.

The striking documentation of his health problems put fast food purveyors on high alert. "Food portions in America have increased in parallel with rates of obesity," [Lisa Young](#), adjunct professor of nutrition at New York University, wrote in a recent study published in the *Journal of Public Health Policy*. [Obesity](#) in adults skyrocketed in the U.S. from 15 percent in 1980 to nearly 33 percent in 2004, according to the U.S. Centers for Disease Control, putting Americans at greater risk of heart disease, diabetes and cancer. Young says that the average daily U.S. food intake per person has increased up to 300 calories since the 1980s.

Within weeks of the movie's May 2004 debut at the Sundance Film Festival, McDonald's pulled Super Sizes from its menu, saying the move was designed to simplify diners' choices. "The only thing that got McDonald's to reduce its portions," [Young](#) tells *Scientific American*, "was the publicity of the movie."

Beyond its effect on commercial food portions, Spurlock's self-experiment brought attention to unusual obesity-related illnesses. Lisa Ganjhu, Spurlock's gastroenterologist, says the film increased public awareness of nonalcoholic steatohepatitis (NASH), a severe [liver inflammation](#) that is not due to alcohol but rather brought on by rapid weight gain; it is associated with insulin resistance and metabolic syndrome. Fredrik Nystrom, a professor of endocrinology and metabolism at Linköping University Hospital in Sweden, replicated Spurlock's experiment with 18 subjects, nearly all of whom experienced the same rapid liver damage, but [recovered](#) after they ended the fatty diet.

"I don't know about my contribution to science," says Spurlock—who admits that he has a lingering fondness for Big Macs—on a break from shooting his reality television series [30 Days](#) (on FX, and now in its third season). "It's not like I had the courage to drink from a [petri dish](#)," he says. "Knowing how dangerous it was, I might not do it again. But because of the impact—that parents and teachers around the world are now caring about the contents of this food—of course I'd do it again."