

The Trouble with Fries

Malcolm Gladwell

Fast food is killing us. Can it be fixed?

In 1954, a man named Ray Kroc, who made his living selling milkshake machines, began hearing about a restaurant that had no fewer than eight of his machines in operation, meaning that it could make forty shakes simultaneously. Kroc was astounded. He flew from Chicago to Los Angeles, and drove to San Bernardino, where he found a small octagonal building on a corner lot. He sat in his car and watched as the workers showed up for the morning shift. As lunchtime approached, customers began streaming into the parking lot, lining up for bags of hamburgers. Kroc approached a blonde in a convertible.

"How often do you come here?" he asked.

"Anytime I am in the neighborhood," she replied, and, Kroc would say later, "it was not her sex appeal but the obvious relish with which she devoured the hamburger that made my pulse begin to hammer with excitement." He came back the next morning, and this time set up inside the kitchen, watching the griddle man, the food preparers, and, above all, the French fry operation, because it was the French fries that captured his imagination. They were made from top-quality Idaho potatoes, deep-fried to a golden brown, and salted with a shaker that, as he put it, kept going like a Salvation Army girl's tambourine. They were crispy on the outside and buttery soft on the inside, and that day Kroc had a vision of a chain of restaurants selling golden fries from one end of the country to the other. He asked the two brothers who owned the hamburger stand if he could buy their franchise rights. They said yes. Their names were Mac and Dick McDonald.

Ray Kroc was the great visionary of American fast food, the one who brought the lessons of the manufacturing world to the restaurant business. Before the fifties, it was impossible to buy fries of consistent quality. Ray Kroc was the man who changed that. "The French fry," he once wrote, "would become almost sacrosanct for me, its preparation a ritual to be followed religiously." A potato that has too great a percentage of water will come out soggy at the end of the frying process. It was Kroc who sent out field men, armed with hydrometers, to make sure that all his suppliers were producing potatoes in the optimal solids range of twenty to twenty-three per cent. Freshly harvested potatoes, furthermore, are rich in sugars, and if you slice them up and deep-fry them without curing the sugars will caramelize and brown the outside of the fry long before the inside is cooked.

Perhaps his most enduring achievement, though, was the so-called potato computer-- developed for McDonald's by a former electrical engineer, which precisely calibrated the optimal cooking time for a batch of fries. (The key: when a batch of cold raw potatoes is dumped into a vat of cooking oil, the temperature of the fat will drop and then slowly rise. Once the oil has risen three degrees, the fries are ready.) Previously, making high-quality

French fries had been an art. The potato computer, the hydrometer, and the curing bins made it a science. By the time Kroc was finished, he had figured out how to turn potatoes into an inexpensive snack that would always be hot, salty, flavorful, and crisp, no matter where or when you bought it.

This was the first fast-food revolution--the mass production of food that had reliable mass appeal. But today, as the McDonald's franchise approaches its fiftieth anniversary, it is clear that fast food needs a second revolution. As many Americans now die every year from obesity-related illnesses--heart disease and complications of diabetes--as from smoking, and the fast-food toll grows heavier every year. In the fine new book "Fast Food Nation," the journalist Eric Schlosser writes of McDonald's and Burger King in the tone usually reserved for chemical companies, sweatshops, and arms dealers, and, as shocking as that seems at first, it is perfectly appropriate. Ray Kroc's French fries are killing us. Can fast food be fixed?

Consider the cautionary tale of the efforts of a group of food scientists at Auburn University, in Alabama, more than a decade ago to come up with a better hamburger. The Auburn team wanted to create leaner beef that tasted as good as regular ground beef. They couldn't just remove the fat, because that would leave the meat dry and mealy. They wanted to replace the fat. The goal of the Auburn scientists was to cut about two-thirds of the fat from normal ground beef, which meant that they needed to find something to add to the beef that would replace fat. Their choice? Seaweed, or, more precisely, carrageenan. The result was a beef patty roughly three-quarters water, twenty per cent protein, five per cent fat, and a quarter of a percent seaweed. They called it AU Lean.

It didn't take the Auburn scientists long to realize that they had created something special. They installed a test kitchen in their laboratory and began doing blind taste comparisons of AU Lean burgers and traditional twenty-percent-fat burgers. Time after time, the AU Lean burgers won. Next, they took their invention into the field. They recruited a hundred families and supplied them with three kinds of ground beef for home cooking over consecutive three-week intervals--regular "market" ground beef with twenty per cent fat, ground beef with five percent fat, and AU Lean. The families were asked to rate the different kinds of beef, without knowing which was which. Again, the AU Lean won hands down--trumping the other two on "likability," "tenderness," "flavorfulness," and "juiciness."

In 1990, the Auburn team suggested to McDonald's that it make a Big Mac out of AU Lean. Shortly thereafter, McDonald's came out with the McLean Deluxe. Nutritionists were delighted. And fast food appeared on the verge of a revolution.

Only, it wasn't. The McLean was a flop, and four years later it was off the market. What happened? The burger faced a psychological handicap. People liked AU Lean in blind taste tests because they didn't know it was AU Lean; they were fooled into thinking it was regular ground beef. But nobody was fooled when it came to the McLean Deluxe. It was sold as the healthy choice--and who goes to McDonald's for health food?

Leann Birch, a psychologist at Penn State, has looked at the impact of these sorts of expectations on children. In one experiment, she took a large group of kids and fed them a big lunch. Then she turned them loose in a room with lots of junk food. "What we see is that some kids eat almost nothing," she says. "But other kids really chow down, and one of the things that predicts how much they eat is the extent to which parents have restricted their access to high-fat, high-sugar food in the past: the more the kids have been restricted, the more they eat." Birch explains the results two ways. First, restricting food makes kids think not in terms of their own hunger but in terms of the presence and absence of food. As she puts it, "The kid is essentially saying, 'If the food's here I better get it while I can, whether or not I'm hungry.'" Birch's second finding is more important. Because children on restricted diets had been told that junk food was bad, they thought that it had to taste good. When it comes to junk food, we seem to follow an implicit script that powerfully biases the way we feel about food. We like fries not in spite of the fact that they're unhealthy but because of it.

That is sobering news for those interested in improving the American diet. For years, the nutrition movement in this country has made transparency one of its principal goals: it has assumed that the best way to help people improve their diets is to tell them precisely what's in their food, to label certain foods good and certain foods bad. But transparency can backfire, because sometimes nothing is more deadly for our taste buds than the knowledge that what we are eating is good for us. McDonald's should never have called its new offering the McLean Deluxe. They should have called it the Burger Supreme or the Monster Burger, and then buried the news about reduced calories and fat in the tiniest type on the remotest corner of their Web site. And if we were to cook fries in some high-tech, healthful cooking oil with a minimum of trans and saturated fats, the worst thing we could do would be to market them as healthy fries. They will not taste nearly as good if we do. They have to be marketed as better fries, as Classic Fries, as fries that bring back the rich taste of the original McDonald's.

What, after all, was Ray Kroc's biggest triumph? A case could be made for the field men with their hydrometers or the potato computer, which turned the making of French fries from an art into a science. But we should not forget Ronald McDonald, the clown who made the McDonald's name irresistible to legions of small children. Kroc understood that taste comprises not merely the food on our plate but also the associations and assumptions and prejudices we bring to the table--that half the battle in making kids happy with their meal was calling what they were eating a Happy Meal. The marketing of healthful fast food will require the same degree of subtlety and sophistication. The nutrition movement keeps looking for a crusader--someone who will bring about better public education and tougher government regulations. But we need much more than that. We need another Ray Kroc.