

# The Bitter Truth About Fast Food

It's no good denying it: people like fast food because it can taste pretty good. But what they may not know about is the cocktail of chemicals that gives the French fry its taste - nor the grisly events in the slaughterhouses that can put so much along with the beef. Eric Schlosser followed the food chain in the US, home of the fast food franchise

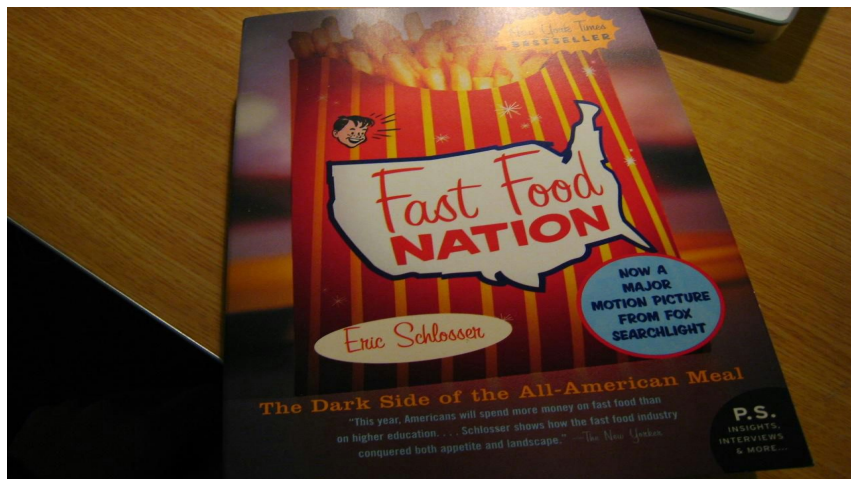
Pull open the glass door, feel the rush of cool air, walk in, get in line, study the backlit color photographs above the counter, place your order, hand over a few dollars. Watch teenagers in uniforms pushing various buttons, and moments later take hold of a plastic tray full of food wrapped in colored paper and cardboard.

The whole experience of buying fast food has become so routine, so thoroughly unexceptional and mundane, that it is now taken for granted, like brushing your teeth or stopping for a red light. It has become a social custom as American as a small, rectangular, hand-held, frozen and reheated apple pie.

Over the past three decades, an industry that began with a handful of hot dog and hamburger stands in southern California has spread to almost every corner of the globe. Fast food is now served at restaurants, stadiums, airports, zoos, schools and universities, on cruise ships, trains and airplanes, at supermarkets, petrol stations and even in hospital cafeterias. Americans now spend more money on fast food - \$110 billion last year - than they do on higher education. They spend more on fast food than on movies, books, magazines, newspapers, videos and recorded music - combined.

What people eat (or don't eat) has always been determined by a complex interplay of social, economic and technological forces. The early Roman Republic was fed by its citizen-farmers; the Roman Empire, by its slaves. During a relatively brief period of time, the fast food industry has helped transform not only our diet, but also the landscape, economy, workforce and popular culture. Fast food and its consequences have become inescapable, regardless of whether you eat it twice a day or have never taken a single bite. In some cases (such as the malling and sprawling of the west), the fast food industry has been a catalyst and a symptom of larger economic trends. In other cases (such as the rise of franchising and the spread of obesity), fast food has played a central role.

Hundreds of millions of people buy fast food every day without giving it much thought, unaware of the subtle and not so subtle ramifications of their purchases. They rarely consider where this food came from, how it was made, what it is doing to the community around them. I think people should know what lies behind the shiny, happy surface of every fast food transaction. They should know what really lurks between those sesame-seed buns. As the old saying goes: You are what you eat.



During my research for my book Fast Food Nation, I ate an enormous amount of fast food. Most of it tasted pretty good. That is one of

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the main reasons people buy fast food; it has been carefully designed to taste good. The taste of McDonald's French fries, for example, has long been praised by customers, competitors and even food critics. James Beard, the legendary American gourmet, loved McDonald's fries. Their distinctive taste does not stem from the type of potatoes that McDonald's buys, the technology that processes them, or the restaurant equipment that fries them. Other chains buy their French fries from the same large processing companies, use Russet Burbanks and have similar fryers in their restaurant kitchens. The taste of a fast-food fry is largely determined by the cooking oil. For decades, McDonald's cooked its French fries in a mixture of about 7% cottonseed oil and 93% beef tallow. The mix gave the fries their unique flavor - and more saturated beef fat per ounce than a McDonald's hamburger.

Amid a barrage of criticism over the amount of cholesterol in its fries, McDonald's switched to pure vegetable oil in 1990. The switch presented the company with an enormous challenge: how to make fries that subtly taste like beef without cooking them in tallow. A look at the ingredients now used in the preparation of McDonald's French fries suggests how the problem was solved. At the end of the list is a seemingly innocuous yet oddly mysterious phrase: "natural flavor". That ingredient helps to explain not only why the fries taste so good, but also why most fast food - indeed, most of the food Americans eat today - tastes the way it does.

Ever since Morgan Spurlock held up that jar of mysteriously well-preserved fries in "Super Size Me," the list of exhibits in the McDonald's museum of food-that-refuses-go-bad has grown exponentially. The latest entrant is the Happy Meal Project, a burger and a packet of fries that have soldiered on undecayed for 137 days.

Started by New York photographer Sally Davies, as a part-art, part-food science experiment, the Happy Meal Project involves Davies documenting a Happy Meal every few days until it spoils. It's pretty much conventional wisdom that you don't head to McDonald's for a healthy treat. . Davis created the Happy Meal art project that provides evidence that Mickey D's food really is some of the worst chemicals that you can put in your body. Davies took a Happy Meal sized burger and fries, put it on her living room table, and as Bravo says, decided to "watch what happens." She photographed the meal every day, and 137 days into the project (with no end in sight), the results are remarkable in the fact that they're really unremarkable. To our eyes, the burger and fries look exactly on the same on day 1 as on day 137. At day 137, the meal still looks pretty great.



For its part, McDonald's has remained largely silent. The fast food giant's Chinese arm released the following statement this May to counter the hysteria over experiment:

*No preservatives are added to the beef patties in McDonald's hamburgers. All of our patties are made of 100 percent USDA-approved beef and are completely preservative-free.*

Sneakily, though, it made no mention of its fries, bread, cheese or sauce.

## Where's the Mold?

Everything in the world ultimately decomposes (breaks down). Decomposition is the process by which organic matter is broken down. The rate at which food decomposes depends largely upon the type of matter that is being broken down and the rate at which certain reactions will need to occur. The process is essential for recycling the finite matter that occupies physical space in the biome. Bodies of living organisms begin to decompose shortly after death. Although no two organisms decompose in the same way, they all undergo the same sequential stages of decomposition. The science which studies decomposition is generally referred to as *taphonomy* from the Greek word *taphos*, meaning tomb.



of decomposition. Often, we go to the refrigerator to grab a snack and realize that a nice snack that we were about to eat. Spoilage is caused by the practically unavoidable infection of plants by bacteria and fungi, which are borne by the animal/plant itself, by the people who eat them. Food can be kept edible for a much longer time – though not indefinitely – if proper processing, and if appropriate food safety, food preservation and food storage procedures

Indeed, many preservatives are tailor-made so that the decomposition process is slowed. The science behind food preservation is rather simple. The production of nutrients that are required by the bacteria and fungus to live and reproduce is a simple chemical reaction. Preservatives act so as to slow the rate at which this reaction occurs. Whereas a normal decomposition reaction may occur in one to two weeks, the preservatives can act to extend the onset of bacteria two three or four weeks. Thus, the rate at which these essential nutrients are being produced is slowed so as to ensure that only minimal fungus will appear on our food. The goal of all preservatives is to decrease the rate of chemical reactions so that we can keep food fresher for a longer period of time.

But preservatives alone may not be responsible for the fungus-resisting powers of a Happy Meal. Marion Nestle, chairwoman of New York University's food studies program, told us over e-mail that McDonald's would have to use "really a lot of" sodium propionate to prevent bacterial or mold growth.

McDonald's French fries, for example, which have repeatedly proven their hardiness to spoilage, contain citric acid as a preservative. But a bigger factor might be the fat content of the fries. About 50 percent of the total 250 calories contained in a small order of fries come from fat. "Anything that is high in fat will be low in moisture," says Barry Swanson, a professor at the Washington State University department of food science. And low moisture means less room for mold to grow. They're crisper and thinner than regular fries, which means that they're exposed to greater heat per surface area, killing pathogens and reducing water content. McDonald's fries are also coated in a nice, thick layer of salt, something we've been using as a natural preservative for the last 2,500 years.

The beef patty is also high in fat — varying between 37 and 54 percent of the total caloric content — and has been cooked at a high temperature. "It's also very thin, which once again means high heat per surface area," says Sean O'Keefe, a professor of food science at Virginia Tech. Davies noted that over time, her patty just shrank and hardened, losing whatever moisture it once contained.

A regular McDonald's sesame-seed bun contains calcium propionate and sodium propionate — both preservatives. But the list of ingredients — down to the preservatives — is actually no different from what you'd find on the packaging of your average loaf of supermarket white bread. Wonder Light Enriched Buns, for example, are also loaded with calcium propionate. While neither list mentions quantities, it's reasonable to assume that both are under the FDA-approved limit.

Ultimately, says O'Keefe, the McDonald's haters have gotten their science wrong. "The ingredients are similar to anything you'd see in processed fast

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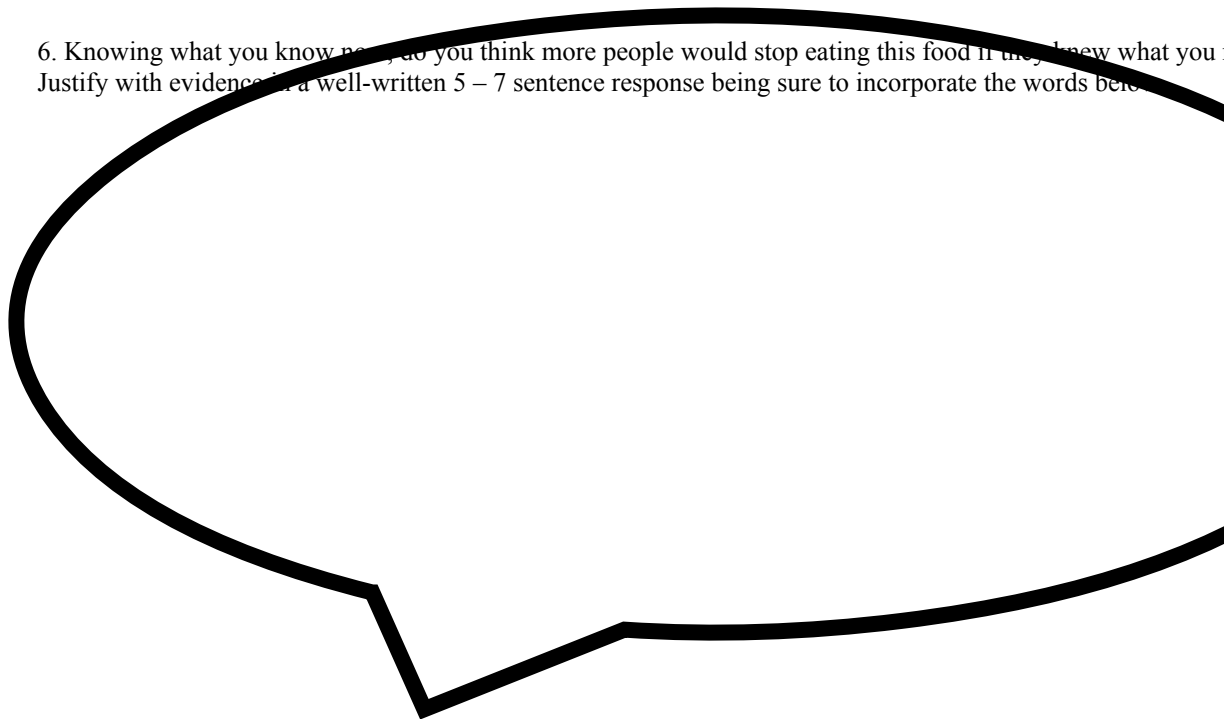
food,” he says. For better or for worse, McDonald’s is no more a chemical laboratory of secret compounds designed to embalm us from the inside than any other processed food maker. A Happy Meal manages to stay unspoiled because it is fatty, salty and practically empty of nutrients — which, really, are all good reasons to avoid it anyway.

Sources:

<http://www.guardian.co.uk/books/2001/apr/07/features.weekend>

[http://www.salon.com/2010/09/01/burger\\_that\\_wont\\_rot/](http://www.salon.com/2010/09/01/burger_that_wont_rot/)

6. Knowing what you know now, do you think more people would stop eating this food if they knew what you know? Justify with evidence in a well-written 5 – 7 sentence response being sure to incorporate the words below.



Question	Evidence!	
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Terms to Use in Final Question:

Explanation and Answer

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- Therefore
- Preservative
- Decompose

	<b>Page #</b>	<b>Para #</b>	
1. What do you think are the “complex interplay of social, economic and technological forces” they describe?			
2. What are some of the problems that you predict from cooking fries in beef product (i.e. beef tallow)?			
3. Hypothesize about why the patties are not decaying.			
4. How is the process of molding related to Nestle’s argument on McDonalds?			
5. Hypothesize which is healthier: a McDonald’s or normal bread? <b>Justify with evidence!</b>			
6. Knowing what you know now, do you think more people would stop eating this food if they knew what you now know? Justify with evidence in a well-written 5 – 7 sentence response being sure to incorporate the words below.			