Delicious but Deadly
The True Story of Killer Foods
Christopher Meunier never got sick. So when he came down with a nasty stomach bug in November 2008, Christopher's doctor was sure that he would recover quickly. But he didn't get better.

Christopher, then 7 years old, got worse—a lot worse. The day after Thanksgiving, his fever spiked at 103 degrees. He vomited black sludge. His diarrhea was bloody. "It hurts so bad I want to die!" he screamed.

Christopher's parents rushed him to Vermont Children's Hospital, where doctors scrambled to help. "He had blood and mucus pouring out of his body," his mom, Gabrielle, recalls.

Nobody knew what was wrong. Was it a terrible form of flu? A rare disease? For three days, Christopher's illness showed no sign of dissipating. His doctors were stumped. Then, finally, the answer came. Lab tests showed that Christopher had horrible food poisoning.

More specifically, his digestive system had been ravaged by salmonella, a pathogen that grows on food. Roughly 2,500 types of salmonella exist, and every year, these bacteria sicken an estimated 1.4 million people. Most get well in a few days, but some, like Christopher, become gravely ill. In the U.S., more than 400 people per year die from salmonella poisoning.

As doctors struggled to save Christopher's life, they had no idea that people all over the country were being infected with the same type of salmonella. Something deadly was lurking on America's supermarket shelves—and nobody had any idea where it was coming from.

**BACTERIA WITHOUT BORDERS**

Food poisoning has been a problem since our ice age ancestors fried up woolly mammoth chops for dinner. During the Revolutionary War, hundreds of soldiers died after eating spoiled food. Ben Franklin was once sick for weeks from eating a hunk of rotten cheese. But back then, if someone got sick from a glass of milk, it was easy to figure out where that milk came from—the family cow or the farm down the road.

Today, however, finding the source of food poisoning can be dizzyingly difficult, thanks to factory

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**THE DIRTY HALF-DOZEN**

Yes, some foods are riskier than others. But you don't have to stop eating them—you just need to know how to protect yourself.

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**1. LEAFY GREENS**

Vegetables like lettuce, spinach, and kale can be contaminated by manure, rinsed with dirty water, or handled with grimy hands before you buy them. But don't freak out—just make sure you always keep leafy greens cold and dry in the fridge (bacteria thrives in warm, moist environments) and wash them before you put them in your salad.
farming and our global grocery network. Think about it. Your dinner last night probably contained foods from all over the world—spinach from Mexico, hamburger meat from California, tomato sauce from Italy. (One study in Ireland found that 53 different countries contributed to the ingredients in a single chicken dish at a Dublin restaurant!)

But it’s not just homemade meals or restaurant food that carry a risk. Your favorite snacks—from energy bars to doughnuts—are packed with ingredients that each originate in a different place. So if you have food poisoning, it can be tough to find the cause, which then makes it extremely difficult to halt an outbreak. While health officials are busy tracing what you ate, more and more people might be falling ill.

It wasn’t until January 1993 that America—which has some of the safest food in the world—learned how truly dangerous food poisoning can be. Dozens of children were rushed to Seattle emergency rooms with severe stomach and kidney problems. Within a week, scientists had traced the outbreak to burgers from Jack-in-the-Box (a fast food restaurant) contaminated with the bacteria E. coli, which can be even more toxic than salmonella. About 700 people, mainly kids, became seriously ill during this outbreak. Four died.

The episode transformed the fast-food business. Today, all fast-food hamburgers must be cooked to at least 160 degrees, which kills E. coli. Jack-in-the-Box, whose leaders were horrified by the tragedy, now has one of the best food-safety systems in the country.

The U.S. government also took notice, tightening laws and setting up a system for tracking outbreaks. In fact, for two weeks before Christopher got sick, scientists had been tracing the outbreak. They knew a dangerous salmonella strain was spreading, but they had no idea where it was coming from.

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2. RAW EGGS

Even if the shell is clean and uncracked, bacteria can lurk inside—it gets in there while the egg is still forming. While cooking your eggs properly should kill all germs, you should avoid sneaking cookie dough before you bake it or licking the cake batter off the spoon. While delicious, it could deliver a dose of dangerous salmonella.

3. CHICKEN

Chicken can carry several pathogens that might make you sick, including salmonella and listeria. To stay safe, always wash your hands after handling poultry (that way you won’t contaminate other food you touch), make sure it’s cooked thoroughly before you eat it, and never use the same plate for your chicken pre- and post-cooking.
Salmonella grows on faces, and it can poison hundreds of foods—from tomatoes to ice cream.

Just last year, salmonella in cucumbers, chicken and just a few other foods caused outbreaks across the U.S. and several countries. But the mystery was solved.

Gabrielle didn't know what was on the line. She was involved in a salmonella outbreak, and she didn't know how to solve the mystery.

Like a group of Sherlock Holmes with test tubes and computers, Team Diarrhea, were determined to solve the mystery. 

First, they had to solve the puzzle. They interviewed victims and their families, asking, "What have you eaten?" Where did you eat?" and so on. They were searching for clues. They interviewed victims and their families, asking, "What have you eaten? Where did you eat?" and so on.

Soon, they had an important clue. Using a process called DNA fingerprinting, they determined that the outbreak was caused by the same type of salmonella. This meant that the victims had the same type of salmonella. 

Then, they decided to follow the trail. They started with the last person to eat the contaminated food. 

They found that the last person to eat the contaminated food was a chef. She had prepared the food, and she had washed her hands before serving it. But the next person who ate the food had not washed his hands. So, the outbreak spread.

They were able to solve the mystery. They determined that the outbreak was caused by a chef who had not washed his hands. They were able to stop the outbreak and prevent more cases of salmonella.

This is just one example of how food safety professionals work to protect consumers from foodborne illnesses. They use science, technology, and teamwork to keep us safe.
probably been infected by the same ingredient. But what was it?

Finally, Team D made a major breakthrough. Thirty victims had been at one of three places. Two were nursing homes. One was an elementary school. All three served the same brand of peanut butter: King Nut.

A scientist found an open jar of King Nut at one of the nursing homes. It tested positive for salmonella. But there were still questions. It was possible that a worker at the nursing home had contaminated it. Also, King Nut was sold in only seven states. Like many of the sick people, Christopher had never been near a jar of King Nut.

So, what did King Nut have to do with his illness?

THOUSANDS OF FOODS

The clues were adding up. Soon, the trail led to the tiny town of Blakely, Georgia, home of a plant where King Nut peanut butter was made. At the plant, investigators found salmonella in peanut samples, toxic mold, unclean conditions, dead insects near food, and leaks in the roof.

They were horrified to learn that this one little plant supplied peanut butter and peanut paste to hundreds of companies in the U.S. and Canada. Over the next two months, more than 4,000 foods were removed from store shelves. It was the biggest food recall in U.S. history. The list seemed endless: cookies, brownies, doughnuts, salad dressings, cereals, TV dinners. Americans were urged to clear their kitchens of peanuts.

Each week, more products were put on the danger list. One of those products was Keebler peanut butter crackers—the same crackers Christopher had eaten the day before he got sick. By the time the epidemic ended, nearly 19,000 Americans had been sickened by peanuts processed at that one factory. Nine people died.

Christopher was lucky. After six days in the hospital, he returned home. But it took months before he fully recovered. He suffered from debilitating joint pain called reactive arthritis, a side effect of salmonella poisoning.

5. MELON

When it comes to food poisoning, cantaloupe has been a repeat offender—back-to-back outbreaks in 2011 and 2012 sickened a total of 408 people and killed 36. But no matter what type of melon you eat, you can stay safe by scrubbing its surface like you would a potato. That way, your knife won’t pick up any dangerous bacteria from the skin and transfer it to the fruit’s flesh before you eat it. (Follow this rule for other skinned fruits like oranges and kiwi, too.)

6. FALLEN FOOD

You’ve probably heard of the five-second rule—that is, if you drop your food and pick it up within five seconds, it’s safe to eat. Researchers recently proved that the dryer the food (e.g. pretzels, crackers, nuts) and the faster you get it off the ground, the better. But the amount of ick that will stick depends more on what kind of germs are living on the surface the snack hits when it falls. So don’t risk it.
Christopher's story didn't end there, though. Soon after the outbreak, his mom became a fierce advocate for stronger food-safety laws. She traveled to Washington, D.C., to testify before Congress about what had happened. She pointed out that emergency rooms were not prepared to diagnose and treat food-borne illnesses. She talked about her frustration with agencies that didn't share information or coordinate their efforts.

Thanks to her testimony and the hard work of other victims, lawmakers took action. In January 2011, Congress passed the Food Safety Modernization Act, the first major food-safety legislation since the 1930s. It completely overhauled the system that protects Americans from dangerous food. Factories and farms must be inspected more frequently. Foods must be labeled so that consumers can know exactly where ingredients come from. Government agencies must make it easier to alert people about contaminations.

Experts believed this law could save lives, and in late September 2012, it likely did. That's when a food poisoning outbreak was once again traced to salmonella-tainted peanut butter, and officials were able to move swiftly to recall more than 200 peanut and nut-based products from store shelves. The law also allowed them to quickly shut down the plant where the contaminations had occurred—a message to food manufacturers that safety is being taken more seriously.

As for Christopher? Now 13, he still has a few related health issues, but he is living life to the fullest. He doesn't worry too much about what he eats, either. "I've moved on," he says. But he won't be snacking on peanut butter crackers anytime soon.

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**WHAT'S YOUR FOOD-SAFETY I.Q.?**

One little slipup can send your stomach into a state of turmoil, so test yourself. The results may surprise you!

1. **Which of these foods can you safely stash in your locker till lunch?**
   - PB&J
   - Strawberry yogurt
   - Turkey sandwich
   **ANSWER:** PB&J doesn't need to stay cold, but most lunch foods (yogurt, deli meats, and cheese) can be left at room temperature for only 2 hours before becoming unsafe. You don't need to buy a fancy ice pack—freezing a water bottle or juice box works great!

2. **Yum! Your family got Chinese takeout for dinner last night. How long do the leftovers stay safe to eat?**
   - 3 days
   - 5 days
   - 1 week
   **ANSWER:** The best time frame for leftovers is no more than 3 days. Stick the food in the fridge ASAP! Otherwise it could enter the temperature danger zone. All stored food needs to be kept cold—below 40F.

3. **True or False: It's cleanup time. Using a sponge is the best way to wipe the courier.**
   - True
   - False
   **ANSWER:** False. Sponges are a breeding ground for bacteria. When cleaning the kitchen, it's better to use paper towels or a reusable cloth that can be thrown in the wash. If you do use a sponge, kill germs by sticking it in the microwave for 1 minute.