

TAINED TOMATOES

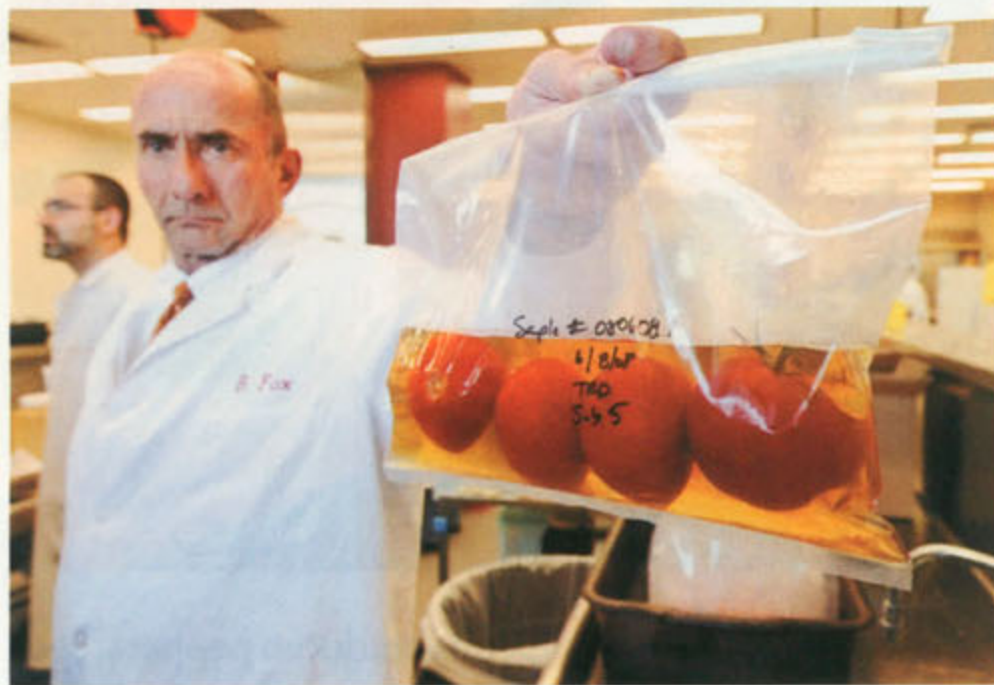
A food-poisoning scare spurs debate

The salmonella outbreak that began in April and was linked to raw tomatoes was the largest of about a dozen such outbreaks since 1990, sickening more than 800 people in 36 states and the District of Columbia as of late June.

The outbreak involved consumers of raw red plum, red Roma or red round tomatoes suspected of carrying the rare "saintpaul" strain of salmonella bacteria. As many as 20,000 cases of illness may have gone unreported, according to the Centers for Disease Control and Prevention. News of the outbreak prompted many consumers, restaurants and markets to shun tomatoes. A Food and Drug Administration (FDA) probe eventually focused on tomatoes grown in Mexico and Florida, though they could have become contaminated almost anywhere from field to market.

Salmonella bacteria normally inhabit the digestive tract of wild and domestic animals; when people ingest the bacteria, symptoms can range from cramps to diarrhea. A common source of produce contamination is runoff waste from livestock and poultry farms. Salmonella that infect a tomato blossom can flourish inside the growing fruit. The bacteria can stick to the skin or seep inside a harvested tomato through the stem scar if the water in which it's rinsed harbors the pathogen and is colder than the fruit itself.

Consumers can't be blamed for feeling alarmed. There has been a rise in outbreaks linked to tainted produce, with 639 between 1990 and 2004, according to the Center for Science in the Public Interest. Some of that increase is due to better monitoring, but industry



The latest salmonella outbreak (the FDA's Mark Roh in June) raised questions about food safety.

watchdogs say it also reflects lax oversight by the FDA, which regulates produce. In June, a Government Accountability Office report

faulted the FDA for not strengthening food-safety programs. The FDA says it doesn't have the people or resources to keep tabs on every farm and shipper. In 2007, the agency launched the Tomato Safety Initiative in Florida and Virginia, areas linked to previous outbreaks.

Big produce growers estimate the outbreak may cost the industry \$100 million. Meanwhile, advocates of locally produced food say the crisis only underscores the dangers of the industrialized food supply. In any event, there's reason to believe this summer's outbreak won't be the last. "Zero risk in an open environment like a field isn't really realistic," says Michelle Smith, a scientist in the FDA's food safety division. **AMANDA BENSEN**

get a sour blast, followed by a burst of sweetness that deposits a complex honey musk on my upper palate.

In recent years, heirloom tomatoes have become a mainstay of gourmet culture, a testament to authenticity and a strike against the complaint, voiced fervently by *Boston Globe* columnist Ellen Goodman, that the everyday tomato "has had its hide toughened" and "has been pushed around, squared, even gassed to death," every year becoming "less of a fruit and more of a metaphor."

But let us not be tomato snobs. Let us acknowledge that the pleasure of the heirloom itself is as much metaphorical as real. The heirloom's huge variety of shapes and colors and flavors offers a reassuring sense of diversity in a cookie-cutter world; backyard cultivation gives the city dweller or suburbanite an almost spiritual connection to an ancestral agrarian past. I'm aware of no evidence that heirlooms make you healthier than hybrid tomatoes. And the cheap, mass-produced processing tomato yields more concentrated nutrients than the fresh-market varieties that are picked green. "There's more antioxidant activity in a tablespoon of paste than a box of fresh tomatoes," says Kanti Rawal of San Leandro, California, who has no reason to exaggerate—he's a breeder of fresh-market varieties. Not only that, antioxidant tomato micronutrients such as lycopene and beta carotene are more easily absorbed when consumed with cooking oil, according to some research. Yes, Virginia, pizza is good for you.

Even in the fresh-market world, not everyone is convinced that heirlooms taste best. "What is good flavor?" says Teresa Bunn, a breeder at Seminis, a seed company owned by Monsanto. "Everyone has a different perception. You can do things to boost sugars and acids, but people want a different balance. It's hard to get people to agree on the same thing." There's also the issue of how appearance and "mouth feel" affect the perception of tomato quality. "If you're blindfolded, an orange tomato may taste good, but a lot of people won't buy an orange tomato," Bunn says. Most eaters mistrust mealy tomatoes, even if they are flavorful. Still, heirloom tomatoes do tend to have more intense flavors, Bunn says. "You can think of a tomato as a factory, with each leaf a worker. Heirlooms have fewer fruit and more factory. On the commercial side, farmers are paid for yield. They want as many fruit as they can get. A lot of times it's perceived that heirlooms are better tasting, but it could be that they just pack more flavor into them. And just because it's an heirloom doesn't mean it's a good tomato." Flavor is in the mouth of the taster. "I can't stand the flavor of Brandywines," says John "Jay" W. Scott, a well-known Florida tomato breeder, voicing apostasy about a choice heirloom variety.

A year ago, I set out to learn how the world's second most popular "vegetable" (the potato is No. 1) had connived its way into the major cuisines of the world. Perhaps more than any other food, tomatoes inspire passion. Whether it's outrage over the "cardboard" supermarket tomato, pride in the recipe that great-grandma brought over from the old