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Radiation Fears Cloud Japan's Recovery

By **ANDREW POLLACK**

Add fears of radiation to the long list of troubles threatening Japan's export-led economy.

As Japan struggles to contain radiation leaking from crippled nuclear reactors, many countries, including China, Indonesia, South Korea and Thailand have already started to test food imported from Japan for radiation, and the [European Union](#) has recommended that member countries do so. Manufacturers have also begun sweeping cars waiting for overseas shipment. No reports of significant product contamination have surfaced.

Some sushi restaurants in Asia are reportedly dropping fish from Japan from their menus. In Hong Kong there was a run on baby formula from Japan because mothers feared future supplies would be contaminated or unavailable.

In the United States, the [Food and Drug Administration](#) said Thursday that it was considering increasing the monitoring of imported food and raw ingredients made in Japan, or that had traveled through the country. However, the agency said, "based on current information, there is no risk to the U.S. food supply."

Despite the excellent reputation of Japan's Kobe beef, premium tuna belly sushi or toro and fine sake, food is only a minor part of Japanese exports. The country imports far more food than it exports.

Far greater damage could occur if Japanese automobiles or electronics get contaminated with radiation, or if fear spreads among consumers that they could be exposed to radiation by sitting in a Prius or playing a DVD.

Among the steps that Japanese manufacturers are starting to take to reassure customers are trips to ports in Japan. For example, workers at Nissan, armed with radiation detectors, are testing some of the company's cars waiting to be shipped overseas. On Friday, Carlos Tavares, chairman of Nissan Americas, confirmed the scanning of autos: "It's clear that we

have found nothing, but that doesn't mean we shouldn't do it. We are just doing it to make sure nothing is there."

Radiation experts said there was virtually no chance of major contamination of industrial products, even if the leakage were to worsen. Particles like the ones containing radioactive iodine or cesium escaping from the Fukushima Daiichi power plant can be deposited on products. But given the nature of the manufacturing industries in Japan, there is little danger of contamination reaching harmful levels, the experts said. For one, most manufacturing in Japan happens far from the nuclear plant (and many of the cars and electronics from Japanese companies are actually made outside Japan).

Moreover, manufacturing is usually done indoors. A product would most likely not be contaminated "unless it sits outside for long periods and gets a significant amount of deposits on it," said William F. Morgan, director of radiation biology and biophysics at the Pacific Northwest National Laboratory. Also he noted, most products were in packages, and the radioactive particles would not damage the product inside. If a product is known to have deposited particles, they can be washed off, or a contaminated box could be opened by someone wearing gloves and thrown away.

Manufacturing is likely to be halted in areas with high levels of radiation. "If the levels are high enough, that there would be a concern for a product being shipped, there would be a much greater concern for the people working there," said Jerrold T. Bushberg, director of health physics programs at the [University of California, Davis](#), School of Medicine.

So if the nuclear accident hurts Japan's exports, some experts say, it is more likely to be attributable to disruptions in operations and logistics there, much as the earthquake and tsunami have done, not because the reactor damage is contaminating products. A huge plume of radiation heading toward Tokyo could bring commerce and manufacturing in that area to a halt. A nuclear meltdown at Fukushima could cause Japan to shut other nuclear plants as a precaution, adding to power outages.

Food is a much more pertinent issue for radioactive contamination because crops and animals are often raised outdoors and because they are ingested. Still, some experts say the risk is low to Americans because Japan accounts for only 4 percent of American food imports. And even less of that is food with the highest risk of contamination.

"We are not worried about imports from Japan, and we are not recommending that consumers be concerned," said Caroline Smith DeWaal, director of [food safety](#) at the [Center for Science in the Public Interest](#), a consumer group.

She said that in the five years after the Chernobyl nuclear accident, which was far worse than Japan's radiation problem so far, only 1.4 percent of the food products entering the United States from Eastern Europe exceeded standards for radiation. Much of that was meat and poultry.

Imports of raw beef from Japan, including premium Kobe beef, have been suspended since last April, because of concerns about [foot and mouth disease](#), according to a spokesman for the [United States Department of Agriculture](#). Poultry and egg imports are barred because the Agriculture Department has not determined that Japan has a sufficient inspection system for those products. Dairy products can be contaminated if cows eat grass that radioactive isotopes have fallen on; this was a major source of radiation after the Chernobyl accident. But dairy accounts for only 0.1 percent of food imported from Japan, according to the F.D.A. There is also relatively little fresh produce.

Some seafood does come from Japan. However, much of the fish served in sushi restaurants here does not, and even fish caught by Japanese fleets might not be from waters near Japan.

The F.D.A. said it was taking steps to measure contamination in fish, but added, "The great quantity of water in the Pacific Ocean rapidly and effectively dilutes radioactive material, so fish and seafood are likely to be unaffected."

The United States [Customs and Border Protection](#) already monitors incoming cargo for radiation, part of the response to the Sept. 11 attacks. It said in [a statement](#) this week that it had instructed its field officers to specifically monitor maritime and air traffic from Japan.

"We don't have any dirty bombs or nukes coming through here because of these processes," said Ron Boyd, the chief of police at the Port of Los Angeles. He said he was confident that the procedures would also be able to detect radioactive cargo from Japan.

There are already reports of passengers arriving from Japan setting off radiation detectors at Chicago's O'Hare and at Dallas-Fort Worth airports, but those levels were reported to be very low. Customs and Border Protection said in a statement that no aircraft entering the United States "has tested positive for radiation at harmful levels."

