U.S. regulators lack data on health risks of most chemicals

A natural component of crude oil, 2-methylnaphthalene is structurally related to naphthalene, an ingredient in mothballs and toilet-deodorant blocks that is considered a possible human carcinogen by the EPA. Kay Cooksey, a packaging expert at Clemson University, said 2-methylnaphthalene likely ended up in cereal because something went awry in the manufacturing of the foil-lined bags. The foil is attached to the paper bag with an adhesive that is heated, she said. If too much heat is applied or if the composition of the adhesive is incorrect, 2-methylnaphthalene could form, she said.

The chemical "is not supposed to be in food," said Mitchell Cheeseman of the FDA's office of food safety. The agency allows a minute amount of the chemical in food packaging if it is produced as a "contaminant" during the manufacturing process, but it is not supposed to transfer to the food, he said.

Because the FDA does not know anything about the toxicity of 2-methylnaphthalene, the agency set its limit based on what it knows about the toxic effects of similar chemicals, Cheeseman said.

He added that the FDA does not know what caused the Kellogg contamination, how much 2-methylnaphthalene might have migrated into the cereals or if it was the only contaminant. The agency did not perform its own tests on the cereals.

Roberta Wagner of the FDA's Office of Regulatory Affairs said Kellogg destroyed most of the tainted liners before it contacted the agency and announced a recall.

"Basically, Kellogg's investigated the situation before they made the decision to do the recall," Wagner said. "They did their own testing." She said the agency continues to
investigate.

The company submitted a copy of its health risk assessment to the FDA, but neither Kellogg nor the agency would release it.

Cheeseman said it is unusual for contaminants to migrate from packaging into foods.

But others are less certain. "In this case, it had an odor and it had a taste, so it was detected," said David Andrews, a senior scientist at the Environmental Working Group, an advocacy organization. "But there are hundreds of other potential impurities that we can't smell and taste, chemicals that we know very little about and the government knows little about."