Safety of nonstick cookware in question

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What's this I hear about new concerns about the safety of nonstick cookware? Before long, we'll be back to roasting over an open fire! -- WW

Nonstick coatings have been back in the news, though the health risks may relate more to the manufacture of the coatings than use of cookware made with it.

In December, the Environmental Protection Agency slapped Teflon manufacturer DuPont with a record $10.25 million penalty for violations related to its handling of the synthetic chemical Perfluorooctanoic acid, which is also called C8, Ammonium Perfluorooctanoate or APFO. It is used in making Teflon, along with other products including waterproof clothing and grease-resistant food packaging such as pizza boxes and microwave popcorn bags.

According to an EPA press release, the violations related to “multiple failures to report information about substantial risk to human health or the environment that DuPont obtained about Perfluorooctanoic acid from as early as 1981 and as recently as 2004.”

This was just the latest in a series of serious problems for DuPont. In 2004, the company agreed to pay $107.6 million to thousands of Ohio and West Virginia residents who claimed that DuPont contaminated their water supplies with C8. A Food and Drug Administration study published in the journal Food Additives and Contaminants suggests that microwave popcorn packages may release Perfluorooctanoic acid into popcorn in much larger quantities than previously believed.

So what about cookware? Perfluorooctanoic acid is used in making Teflon. Teflon does not contain Perfluorooctanoic acid, but, according to the FDA study, nonstick coatings can release it when they're overheated. There have been numerous case reports of deaths of pet birds caused by exposure to fumes from overheated nonstick cookware, so-called “Teflon toxicosis.” DuPont recommends a maximum cooking temperature of 500 degrees, which can be exceeded when an empty pan is preheated for long periods.

Why should you care? The EPA released a draft risk assessment document last year classifying Perfluorooctanoic acid as a “suggested” carcinogen. Its expert advisory board suggested stronger language, calling it a “likely” carcinogen and suggested further research exploring links to breast, liver, testicular and pancreatic cancer.

Although it is a synthetic chemical, it is found in the blood of nearly all Americans. This suggests that we are exposed to Perfluorooctanoic acid through means other than direct industrial contamination. The EPA says one possibility is degradation of telomers such as nonstick coatings. We just don't know.

We should have more data in the next few years. As part of its settlement with the EPA, DuPont has agreed to undertake a $5 million study designed to test the potential of its products to break down to form Perfluorooctanoic acid. Frankly, I would feel better if DuPont gave the money to the EPA to fund an independent study.

A few weeks ago, the EPA asked telomer manufacturers to commit to a stewardship program that would
reduce Perfluorooctanoic acid emissions, as well as product-content levels and precursors by 95 percent by 2010.

What to do in the meantime? On its Web site, DuPont says, "Based on an evaluation of human health and toxicology studies, DuPont concludes that . . . exposure does not pose a cancer risk or any health risk to the general public."

The EPA suggests that we take a wait-and-see approach, because the source of Perfluorooctanoic acid in the environment and the pathways by which people are exposed are as yet unknown.

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