

Doughnuts Dusted with Nanopowder? Blech!

David Biello | April, 15, 2013

There are nanosize particles in your food. Does this make you nervous?

Food companies have been interested in using nanotechnology to intensify flavors and make products creamier without added fat. But that has nothing to do with the titanium dioxide nanoparticles, less than 10 nanometers across, that were found recently in the powdered-sugar coating on doughnuts from Dunkin' Donuts and the now defunct Hostess. The microscopic flakes may have ended up there by happenstance—a result of the milling process used on the powdered-sugar mixture. We may have been ingesting them for years.

The environmental health group **As You Sow** found the nanoparticles in samples it sent to an independent laboratory. The tiny particles are worrisome, health advocates argue, because they are so small they can enter cells throughout the human body more readily than larger particles. If the particles are toxic in cells, they could cause trouble. So far no one knows whether these titanium dioxide particles or other nanomaterials in food or food packaging pose a health risk. The European Union requires foods that contain nanomaterials to be labeled, and the U.S. Food and Drug Administration has said it did not have enough information to determine if such products are safe.

Many companies appear not to know if their food contains nanoparticles or may be reluctant to submit to scrutiny. **As You Sow** attempted to survey 2,500 food companies for its report. Only 26 responded, and only two had specific policies regarding nanoparticles. Ten of the companies did not know whether they used nanoparticles, and two admitted to intentionally incorporating them in packaging. “We plan to work with scientists to understand if they will leach into food,” says **As You Sow** chief executive Andrew Behar.

As You Sow is now trying to crowdfund further testing of M&Ms, Pop-Tarts, Trident gum and other comestibles—all likely to employ the same titanium dioxide found in the doughnuts and equally likely to be unintentional. “What are the health implications of nanomaterials that we know are in our food supply?” Behar asks. “How do we set up a system to make sure that they are safe?” **As You Sow** argues that nanoparticles of any kind have no business in food until safety testing is done.