

Nanotechnology: What Substances May Be Creeping into Food Products?

Shu Zhang | Jul. 1, 2014

Growing concerns over infinitesimal substances that are finding their way into everyday food and cosmetic products via the growing field of nanotechnology is setting off alarm bells among public health watchdogs, who fret over what ingredients may be creeping into the culinary process.

Those concerns are raising the eyebrows of the U.S. Food and Drug Administration, which has been exploring this burgeoning realm, but the agency appears reluctant to push the panic button. FDA officials recently issued broad guidelines on nanotechnology, but didn't go so far as to establish regulatory definitions of what it is, saying the science hasn't progressed to the point where it can be fully understood.

Agency spokesman Jeff Ventura said the FDA doesn't make "a categorical judgment that nanotechnology is inherently safe or harmful."

The watchdog group **As You Sow** says the FDA needs to go farther, and points out that without a definition for nanotechnology, manufacturers can come up with their own definition of "nanotech-free" products.

"The guidance is simply insufficient," said Danielle Fugere, president of **As You Sow**, based in Oakland, Calif. "It doesn't provide clarity. It doesn't provide a standard to industry,"

Fugere adds: "Companies are saying they don't use nanotechnology because they are defining nanotechnology as the majority of particles are larger than one to one hundred nanometers. When they deny they are using nano, we believe they are."

As You Sow contends Kraft Foods Group Inc. KRFT -0.02% and several other major food firms are also using nanotechnology, Fugere says.

"We identified titanium dioxide as ingredients in their foods," she said, referring to an ingredient used in paint and sunscreen. "What that means is we have also detected titanium dioxide from most of the major manufacturers."

On Kraft's website, the Chicago-based processed food giant says it is "nanotech-free."

"There are some ingredients in our products that may be nano-sized," said Russ Dyer, Kraft spokesman. "But that would be infrequent because they are not intentionally engineered on the nano-scale."

Fugere adds sub-microscopic particles of titanium dioxide have been found in Dunkin' Donuts DNKN goods as well.

As You Sow filed an open letter requesting the board of Dunkin's Brand to publish a report by Nov. 1, on policies regarding public health concerns of nanomaterials in its products or packaging.



One group wonders what substances are creeping into Dunkin' Donuts.
Photo: Shu Zhang/MarketWatch

“We are concerned about liability arising from use of nanotechnology in food products,” the group said in the letter. “Because of their small size, nanoparticles are more likely to enter cells, tissues, and organs where they may interfere with normal cellular function and cause damage and cell death.”

Michelle King, Dunkin’s senior director of global public relations, said the company is “reviewing the Food and Drug Administration’s new guidance on nanomaterials in food products.”

Out of 1,795 nano-enabled products identified by The Project on Emerging Nanotechnologies, backed by The Woodrow Wilson Center, a Washington research institute, 117 were listed under the food and beverage sector.

One nano-enabled product is adhesive for McDonald’s Corp.’s MCD burger containers, the project says, but company spokeswoman Terri Hickey rejects the claim. There is concern that whatever material may be on the containers could creep into the

“At this time McDonald’s does not support using nano-engineered materials in production of any of our food, packaging and toys,” she said. “We will evaluate this position as progress is made in further understanding the potential impact of nanotechnology and nano-engineered materials.”