MarketWatch

Dunkin' Donuts to Remove Nanomaterial From Powdered Doughnut Recipe

Trey Williams | Mar. 05, 2015

NEW YORK (MarketWatch) — Dunkin' Donuts announced Thursday that it plans to remove a potentially harmful nanomaterial from its powdered doughnuts.

The San Francisco–based advocacy group As You Sow commissioned an independent study in 2013 that tested 10 types of powdered doughnuts and found a nanoparticle called titanium dioxide in Hostess Donettes and Dunkin' Donuts powdered cake doughnuts.

Dunkin' Donuts DNKN, -0.02% said it is now in the process of removing the nanomaterial after coming under pressure from As You Sow, whose effort included putting a proposal before parent company Dunkin' Brands' shareholders. In accordance with the withdrawal of that shareholder proposal, Dunkin' Donuts has 30 days to provide a time table for the ingredient's removal from its powdered doughnuts.

'[W]e began testing alternative formulations for this product in 2014 and we are in the process of rolling out a solution to the system that does not contain titanium dioxide.'
Karen Raskopf, Dunkin' Brands

Titanium dioxide is used to brighten white substances. Some preliminary studies show that nanomaterials can cause "DNA and chromosomal damage, organ damage, inflammation, brain damage and genital malformations among other harms," according to As You Sow.

[1] This guidance has been prepared by the Office of Food Additive Safety in the Center for Food Safety and Applied Nutrition at the U.S. Food and Drug Administration.
[2] An end user is a person who uses a food substance in the manufacture of a food product, and who may or may not manufacture the food substance.
[3] For the purpose of this document the terms nanometer scale and nanometer range refer to any particle size between 1 nanometer and 1 micrometer.
[4] Nanotechnology allows scientists to work on the scale of molecules to create, explore, and manipulate the biological and material worlds measured in nanometers, one-billionth of a meter. In July of 2007, we issued a report prepared by our Nanotechnology Task Force (Ref. 1).
FDA has not established regulatory definitions of "nanotechnology," "nanomaterial," "nanoscale," or other related terms. In June 2014, FDA issued a guidance for industry titled "Considering Whether an FDA-Regulated Product Involves the Application of Nanotechnology". As described in that guidance, at this time, when considering whether an FDA-regulated product involves the application of nanotechnology, FDA will ask: (1) whether a material or end product is engineered to have at least one external dimension, or an internal or surface structure, in the nanoscale range (approximately 1 nm to 100 nm); and (2) whether a material or end product is engineered to exhibit properties or phenomena, including physical or chemical properties or biological effects, that are attributable to its dimension(s), even if these dimensions fall outside the nanoscale range, up to one micrometer (1,000 nm). The agency will apply these considerations broadly to all FDA-regulated products, including food substances (Ref. 2).

The main reason for deploying nanotechnology in foods is that it gives manufacturers tighter control over what they're producing, touching on such areas as coloration, dimensions and taste. Through nanotechnology, manufacturers are able to manipulate materials down to a billionth of a meter.

"Our concerns are, do doughnuts really need to be wider or brighter, and what's the effect of that?" asked Danielle Fugere, president of As You Sow. "If we don't know what happens to the body yet, then we shouldn't be putting these in our food."

The U.S. Food and Drug Administration doesn't yet have a definition for what constitutes nanomaterial in food, but here is what the FDA has issued guidance to the food industry (see adjacent image).

The FDA has stated that it does not judge products containing nanomaterials involving the application of nanotechnology as benign or harmful.

Dunkin' Brands Chief Communications Officer Karen Raskopf said in a statement that the ingredient used in Dunkin' Donuts' powdered doughnuts "does not meet the definition of 'nanoparticle' as outlined by the FDA guidance." Still, she said, the company began testing alternative formulations last year and is "in the process of rolling out a solution to the system that does not contain titanium dioxide."