



Advocacy Group to Food Industry: Unveil the Nanotechnology in Your Products!

by Sarah Damian on December 13, 2011

Could an emerging multi-billion dollar industry be flourishing right under consumers' noses and into their mouths? That could very well be the case – for years now in fact – with nanotechnology in food.

As You Sow – a nonprofit organization that aims to increase corporate accountability – points out in its latest report that the potential safety risks of manipulating matter at the molecular scale to create nano-sized products (including nutritional additives, flavorings, colorings, or antibacterial ingredients for food packaging) are still largely unknown. Yet these nanoparticles may already be in a variety of U.S. food products without the public's knowledge, thanks to regulatory loopholes.

Enabling industry secrecy (as usual), the GRAS (Generally Recognized as Safe) designation of substances – self-determined by the food companies themselves – allows these materials to enter the food supply sans FDA approval. **As You Sow** senior strategist Michael Passoff (report coauthor) told Food Safety News:

"Because GRAS notification is voluntary and companies are not required to identify nanomaterials in their GRAS substances, FDA has no way of knowing the full extent to which engineered nanomaterials have entered the U.S. food supply as part of GRAS substances."

So, the government doesn't even know how many of these materials are on the market, and what they are exactly. According to **As You Sow**, the EPA found that about 90 percent of "nanoscale materials that are likely commercially available" were not submitted to its voluntary reporting program.

Surprise, surprise.

What's more disconcerting is the industry's reluctance to even discuss the topic of nanotechnology, despite clearly investing in scientists to develop nanoparticles that increase product shelf life, enhance flavor, etc.

After a 2010 study in the United Kingdom concluded that the industry was being "quite obscure" regarding its use of nanotechnology (in Britain and worldwide), study chairperson Lord John Krebs offered an explanation:

"They got their fingers burnt over the use of GM crops and so they want to keep a low profile on this issue. We believe that they should adopt exactly the opposite approach. If you want to build confidence you should be open rather than secretive."

Consumers deserve to know what they're eating, especially if health risks are involved. In a piece he wrote earlier this year, Passoff explains why more information on nanomaterials is necessary:

"At such a small scale, the chemical and physical properties of these materials change to become much more chemically reactive than their normal-scale counterparts. Their size also makes them more likely to pass through biological membranes, circulate through the body, and enter cells. This combination of increased reactivity and bioavailability of nanoparticles, especially those used in food and agricultural products, pose novel risks to human health and the environment that have yet to be fully studied. These potential risks are also not adequately regulated by agency oversight or included in company disclosure policies."

Even companies on the retail end, including McDonald's, Kraft, and Pepsi, have acknowledged that little information is available on nanotechnology's risks and benefits. Yet research is being played out with little transparency. For its report, **As You Sow** worked with these companies to craft guidelines on how to identify the presence of nanomaterials in products and hold food producers/processors accountable for product safety. Establishing these guidelines is a good start at shedding light on what has been a murky business thus far. Unless (or until) they're instituted industry-wide, however, the public will have to rely on someone from the inside who is willing to blow the whistle on what's really going on behind the scenes.