

## Nanofoods: Something new to worry about

Posted by Guy Crittenden on December 12, 2011 03:50 PM

I'm 51 years old and have entered the realm my insurance agent about which my insurance agent warned me years ago. He said that in my forties I'd start to know more and more people succumbing to cancer and heart disease and other illnesses, and in my fifties they'd "start dropping off like flies."

I was in my early thirties when he told me this, at the end of some blood samples and tests the insurance company took to qualify me and me (then) business partners who needed life insurance as part of our shareholders' agreement. It seemed very remote at that time, the idea of disease and death. I hadn't really known anyone outside of my grandparents who had died, although my father had MS and would pass away only a couple of years later.

To be honest, I don't know if the "dropping off like flies" comment referred to people in their fifties or sixties, but it doesn't really matter – I have noticed more and more of my acquaintances and people I know indirectly through them succumbing to various maladies, with breast cancer being one of the most common. I know several people who have either died from or survived lung cancer, and prostate cancer.

All of this has me very focused on my own health and fitness and that of my kids, and things like healthy eating; I don't want to wait until I get some kind of diagnosis to start getting enough vitamins and fibre, and so on. Having crossed the age 50 line, I've also got a colonoscopy scheduled for the spring (and please use this reminder to schedule one for yourself if you're over age 50, or younger if cancer runs in your family). My friend Gary Gallon, the environmentalist, died of cancer that started in the colon; he was the picture of good health when he was first diagnosed, and was a champion swimmer in his age group. Feeling healthy, he neglected to get a colonoscopy and succumbed to a cancer that could have perhaps been detected at the polyp stage.

So, I'm doing the usual common sense things like buying vitamin supplements, eating more salad, whole grain cereals, avoiding a lot of fried items, cutting down on fast food, popping wild salmon fish oil capsules and so on. I still have a long way to go in eating better, but it's a start.

However, one thing that really frustrates me is the presence of so many toxic compounds in our diet that are difficult to avoid. Last week I posted a blog entry on "seven food items that should never pass your lips" that included some items about which I'd previously been unaware (in terms of being toxic). The list included potatoes, which I eat all the time in crock pot stews and curries. Apparently one must buy organically-grown potatoes as peeling the skins is not enough – the pesticides etc. used by farmers are absorbed deep into the meat of a potato, and farmers who grow them often won't eat their own product because they see the chemical hazard with their own eyes. (Many grow chemical-free potatoes in separate garden patches for their own families.) That item was a revelation and I felt quite angry, having served regular potatoes to my kids all of their lives. It bothers me that our government isn't doing more to protect us from these kinds of dangers, and that through our taxes we'll be footing the bill for a generation or longer as people contract cancer from such sources. So much for prevention.

Another example from that log post was tomatoes sold in cans, in which toxic compounds may leach from the plastic lining inside cans, which the acidity of the tomatoes dissolves more than other canned vegetables. Lesson: buy tomatoes or tomato sauce sold in glass jars, or make your own from fresh tomatoes.

With all this in mind, I direct readers to the news release that I reproduce below with only some minor stylistic and formatting edits. It's from the shareholder activist group **As You Sow** (a group whose goals and methods I greatly respect) and should awaken us to a whole new threat in the food chain from nanotechnology, which is pretty much an unregulated industry at the moment. This is a topic worth pondering and one to which I will return again in the near future.

## Nanotechnology in Food:

In the Absence of Regulations, Nonprofit Releases New Framework for Companies to Evaluate Safety

**SAN FRANCISCO (December 6, 2011)** -- A first-of-its-kind framework released today offers recommendations to food and food packaging companies on how to identify and evaluate nanomaterials in products. Not only is this technology unregulated and untested for its implications on public health but companies may not even be aware if they are using products made with nanomaterials.

The Sourcing Framework for Food and Food Packaging Products Containing Nanomaterials presents what companies should ask their suppliers regarding the safety of products containing nanomaterials, therefore allowing businesses to make more informed decisions.

Nanotechnology is the science of manipulating matter at the molecular scale to build structures, tools, or products. This emerging science offers many new opportunities for food industry applications, such as nutritional additives, stronger flavorings and colorings, or antibacterial ingredients for food packaging. However, these same properties have also raised safety concerns yet to be fully understood.

"Currently, most food companies do not have processes in place to identify if there are nanomaterials in their products, or to confirm the safety of those products," said Amy Galland, Research Director of **As You Sow** and co-author of the Framework. "We are urging the food industry to utilize the precautionary principle and stay ahead of the regulatory curve on this issue."

In consultation with food companies such as Kraft, McDonald's (which has adopted a "no nano" policy), Whole Foods, Yum! Brands, and Pepsi, the nonprofit organization **As You Sow** developed this practical tool which clearly outlines what companies should ask their suppliers regarding the safety of products containing nanomaterials.

"In the absence of federal regulations, corporations need to evaluate the risks and benefits of sourcing products that use this new technology on their own," says Michael Passoff, Senior Strategist of **As You Sow** and co-author of the Framework. "There is little transparency regarding safety testing or which food products contain nanomaterials. Companies need to start questioning their suppliers on whether or not their products use nanomaterials."

In June 2011, the Food and Drug Administration stated it would evaluate guidance to address nanotechnology. This guidance is not prescriptive and does not advise companies in how to protect their customers from exposure to nanomaterials.

There is also a lack of scientific research about how nanomaterials interact at the molecular and physiological levels, with unknown potential impacts on public health and the environment. Consequently, companies looking to purchase or sell nanofood products or packaging have to take specific steps to protect themselves from financial and reputational risks through a thorough evaluation of the safety of these products, and transparency to address consumer concerns.

Specifically, the Framework:

Provides an introduction to key terms and issues by outlining a definition of nanomaterials; addressing the accessibility of nanoparticles within the human body and current studies which point to potential hazards; tackling the issue of unique properties and related, under-researched toxicity threats; and assessing how federal agencies are determining nanomaterial toxicological profiles.

Describes the current regulatory status and risks including: recent developments on nanomaterials by the Environmental Protection Agency and the Food and Drug Administration; and the emerging concerns due to lack of regulation.

Presents best practices from existing scientific, industry, and governmental frameworks including questions to ask suppliers to increase transparency of their supply chain and priorities for obtaining data related to risk and toxicity factors.

Makes recommendations regarding the information companies should request and receive from suppliers who offer