



Summary

We wish to thank the Nell Newman Foundation for your support of our Nanomaterials in Foods initiative. Over the last eight months we've had success in: (1) engaging with several large food companies on their use of nanomaterials and potential for adoption of policies to identify, remove, or avoid nanomaterials in their food product lines, (2) bringing the nanomaterials issue to the attention of all segments of the food industry, and (3) initiating research into the use of nanomaterials in foods targeting children.

Shareholder Resolutions and Engagement

In 2012, we engaged and moved the issue of nanofoods in food and food packaging at several leading companies including Kraft, McDonalds, Pepsi, Walmart, Whole Foods, DuPont, and Yum! Brands (KFC, Taco Bell, A&W). We also added new companies to this list, particularly large food retailers and manufacturers such as Safeway and Campbell's Soup that help shape the direction of the entire industry. Importantly, companies with whom we have worked directly, and have deepened our relationship over the years, have been willing to discuss the use of nanomaterials in food and food packaging and to potentially take steps to address our concerns. Below is some history on where we have taken companies over the last several years to help set a framework for our 2012 work.

We began our work in 2008, filing our first nano shareholder resolutions with Kraft Foods and McDonalds. We withdrew the resolutions in exchange for working together on the issue which we have continued to this day. Following our success in convincing Kraft Foods to issue a 2009 statement on its website that it was not using nanotechnology, in 2011, McDonald's also issued a statement on its website that the company does not support the use of nanotechnology "in any of our food, packaging and toys," given the uncertainty about the technology's potential impacts.

Our work with Pepsi and Whole Foods began in 2009 and, after both companies informed us that they had surveyed their suppliers and were not using nano products, we have continued to contact and monitor the situation with these companies in 2012 to confirm nanotechnology has not been adopted.

In 2010 and again in 2011, As You Sow met with Walmart and raised the issue of nanomaterials. As You Sow has a long track record with Walmart and experience has shown that they do not often discuss an issue until they have researched and addressed the problem internally. Based on our discussions and information from other colleagues, we believe that the company is dealing with this issue even if it is not yet transparent about it. We will meet with Walmart again in the winter of 2012-13 and will keep pushing this issue on the agenda.

In 2011, we began working with DuPont on their nano efforts. In 2007, DuPont and the Environmental Defense Fund established a Nano Risk Framework to better assess health and environmental risk. We approached DuPont to both assess how well they were following their guidelines and to gain more insight into the field by engaging with a nano product manufacturer. We learned that DuPont commercialized UV resistant nano food packaging that did not generate interest and was not distributed. It has also been developing nano composites for trays and pathogen control. The company

described nano food packaging as a minor focus of their larger research into nano materials for other (non-food) applications.

As You Sow also approached Yum! Brands in March 2011 and worked with the company on this issue during several meetings in 2011. We have had success in obtaining critical information on its key suppliers; and received extensive feedback on the Nanomaterials in Food Sourcing Framework (described below) in 2012. As You Sow approached Safeway in 2011 and had the first of two meetings on food safety (BPA and nano) with the company in September 2012, although a specific nano call has not been secured after several attempts.

Response from our Nano Survey (below) led us to begin talks with Campbell's Soup in August 2012 regarding their use and policies on nanomaterials. The company had posted a public policy for its food suppliers and does not currently use nano or expect to use nano in the near future. The company is monitoring health and safety issues and research and development reports on this issue. We expect to expand our meetings with Campbell's in 2013.

Sourcing Framework

In December 2011, we completed and began dissemination of the *Sourcing Framework for Food and Food Packaging Products Containing Nanomaterials*. The Framework was developed with input from, and reviewed by more than a dozen leading food companies, scientific organizations and investor groups. The *Framework* presents best practices from existing scientific, industry, and governmental reports; it guides companies in assessing the safety of nano-enhanced food and food packaging products through a tiered process. The *Framework* was distributed to more than 150 food companies (manufacturers, packaging, distributors, retailers, and fast food), as well as industry trade associations, NGOs, and foundations. The *Framework* received industry, mainstream, and online press coverage.

In 2012, we presented two webinars on the *Framework* in response to requests from the federal Department of Occupational Health and Safety (OSHA), and Practice Green Health, an industry association of medical purchasers.

Nanomaterial Survey

Media reports continue to claim that nanomaterials are prevalent in U.S. food products and packaging, but our initial shareholder meetings paint a very different picture. To better understand the market, we recently issued a survey to 2,500 companies in the food industry – including the 100 largest food processing companies, the largest 50 food distributors, the largest 75 food retailers, top 25 food packaging companies, the top 50 fast food companies, and 187 food supplement companies. The survey asked companies several questions regarding their use of, and policies related to, nano food products in order to: 1) identify the scope of use, interest, concerns, and oversight regarding nanomaterials in food products; 2) publicly disclose the results; and 3) engage selected companies for shareholder meetings and/or resolutions.

The initial response was disappointing so we identified a cross section of companies for follow up and have contacted them via email, phone, and Facebook requests for further information. Although survey response and analyses are ongoing, during this process we have learned that little data continues to be available on nanomaterials in food products and packaging and that, to the extent companies are using nanomaterials, they are unwilling or unable to share that information. Some companies are trying to

better understand the potential safety concerns around nanomaterials and remain unprepared to evaluate the risks and benefits of this new technology on their own. At the end of the year, we will produce an issue brief summarizing the results of the survey and our concerns surrounding the industry's lack of transparency on the issue.

We are preparing to further engage key companies on the issue and will be assessing whether the filing of resolutions with food manufacturers will be necessary to compel more transparency in the industry.

Nano Titanium Dioxide Research

A recent study found that nano titanium dioxide (TiO₂) was being used in food products as a whitener and that children consume more nano titanium dioxide than adults do because sweets like candies, marshmallows, and icing are among the products with the highest levels. To determine whether nanomaterials are present in these foods, As You Sow recently tested Dunkin Donuts and Hostess Cup Cakes for traces of nano TiO₂. We are finding that testing of nanomaterials in food products is not particularly straight forward. Our initial tests were hampered by the TiO₂ sticking to the flour and sugar in the donuts so we worked with the testing laboratories to adopt a new method that burns off the food materials, leaving the TiO₂ intact (as it has a higher melting point than food). This second set of tests is currently proceeding. If we do find nano materials in these food products targeted for children, we would use the opportunity to educate both the public and industry about our concerns regarding the lack of proof of safety of nano materials in food products, including likely seeking media coverage.

Mommy Blog Campaign

In order to further educate the public, As You Sow has been developing a social media strategy for nano that would begin with targeting the three largest "mommy blogs": The Parenting Post (400,000), BlogHer (360,000), and Simple Mom (146,000). Given the continued consumer outrage over GMOs and BPA in bottles and cans, we think this target audience could help pre-empt industry's adoption of nano products before it becomes common place. This would likely be a collaborative campaign with As You Sow identifying key products or companies and providing information to grassroots groups to lead a public campaign. We have begun developing this strategy with GMOs and will continue tailoring it for nanomaterials.

Conclusion

With the help of the Nell Newman Foundation, over the next year, we will continue our efforts to protect consumers from the use of untested and unregulated nanomaterials in food and food packaging. As You Sow will build on our previous years' momentum, using the information gained from As You Sow's Nanomaterials Survey, the industries' response to *As You Sow's Framework for Food and Food Packaging Products Containing Nanomaterials*, and the results of our previous outreach to food companies. We will educate the food industry about the potential risks associated with using nanomaterials in foods and food packaging without having adequate proof of safety, including the risk of consumer backlash. We will also work to remedy the current lack of transparency regarding the issue.