

Nano-in-food—Threat or Opportunity for Organic Food?

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Keywords: nanotechnology, engineered nanoparticles, nanoscale materials, organic agriculture, organic farming, regulation, labeling, IFOAM, standards

Abstract

Nanotechnology is creating engineered particles in the size range of 1 to 100 nanometers. At the nanoscale, materials exhibit novel behaviors. Nine billion dollars is currently invested annually in nano-research, with the explicit intention of rapid commercialization, including food and agriculture applications. Nanotechnology is currently unregulated, and nano-products are not required to be labeled. Health, safety, and ecological aspects are poorly understood, and there have been calls for a moratorium. Two consumer surveys indicate that public awareness of nanotechnology is low; there is concern that the risks exceed the benefits, that food safety is declining along with declining confidence in regulatory authorities. A majority of respondents (65%) are concerned about side effects, and that nano-products should be labeled (71%), and only 7% reported they would purchase nano-food. There is an opportunity, for the organic community to take the initiative to develop standards to exclude engineered nanoparticles from organic products. Such a step will service both the organic community and the otherwise nano-averse consumers—just as GMOs have been excluded previously.

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