ARE AMERICAN CONSUMERS READY FOR FOOD NANOTECHNOLOGY?

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Background and Aims: Nanoscale materials have been used for decades and already appear in more than 1000 consumer products. Within the agriculture and food sectors, the adoption of nanoscale technologies is expected to have significant impacts on farmers and food. The current research was designed to examine the American public's perceptions of food-based nanotechnology, and to determine the parameters of public acceptance.
Methods: Data were collected by an Internet survey research firm during the month of April, 2010. A nationally representative sample of 1210 American adults enrolled in the company's existing online panel responded to the 20-minute survey (66% completion rate).
Results: Consistent with earlier surveys, reported familiarity with nanotechnology was very low. Initial levels [REV11]of acceptance of nanotechnology were also very low. For example, on an 11 point scale, where 0 represented "strongly disagree" and 10 was "strongly agree," the mean rating for "I would eat foods labeled as containing nanotechnology" was 2.5, and 74% of respondents gave the statement a rating of 4 or lower. However, the survey findings also indicate that a number of features of the product significantly affect Americans' expressed level of approval of nanotechnology in food products. These include: the specific product benefits (food safety and health benefits were the highest ranked), the congruence between product type and benefit type (health benefits were preferred in healthy foods rather than the same benefits in less healthy foods), the specific nanotech materials used (plant-based nanotechnology was preferred), and where the nanotech materials are located (nanotech packaging is preferred over having nanomaterials in the product or applied to the outside of the food).
Conclusions: The findings indicate that while overall acceptance of nanotech foods may be low, certain applications of nanotechnology to food products are seen as more acceptable than others.