28 April 2010

NGO recommendations on nanomaterials in food in view of the ENVI vote on 4 May 2010 on Regulation on Novel foods

Dear Members of the EP Environment, Public Health and Food Safety Committee,

On Tuesday 4 May, you will vote in second reading on the amendments to the Council position on the Regulation on Novel Foods. On behalf of EEB and MIO-ECSDE, two federations of more than 150 environmental NGOs in Europe, we call upon you to take a strong stand for the protection of consumers' health and the environment by supporting the amendments related to nanomaterials tabled by Rapporteur Kartika Liotard, in particular the amendments 13, 73 and 81.

Increasing application of nanotechnology in food, food packaging or food contact Materials

Due to their small size (< 300nm), nanoparticles are more chemically reactive and more bioactive than larger particles. These properties offer new possibilities for food industry applications, such as nutritional additives, stronger flavourings and colourings or antibacterial packaging. A report from 2008 identified a minimum of 104 food products containing nanomaterials worldwide but this number might be in reality much larger, given the current lack of information on the nanomaterial content of food products[1]. Although the penetration of food nano-products in the market penetration is greater in China, Japan and the US, **the presence of nanomaterials in the food chain is expected to increase within the EU**, as indicated by the increasing investment of European industries in research for nanotechnology application in food, food packaging and food contact materials[2].

Risks to human health: apply the precautionary principle to nano in food and food packaging by supporting amendments 13 (recital 7) and 73 (article 8)

There is nowadays increasing evidence of existing risks from nanomaterials to human health and the environment. Due to their small size, nanoparticles have a greater potential to access the human body and enter our cells, tissues and organs. Substances such as nano silver, nano titanium dioxide and nano zinc, which may be used in the food chain, have been identified as highly toxic in a large number of toxicological studies[3].

[1] Friends of the Earth, Out of the laboratory and onto our plates, 2008, available at http://www.foeeurope.org/activities/nanotechnology/Documents/Nano_food_report.pdf
[2] Ibid.
[3] See for instance: H. Bouwmeester et al, Health impact of nanotechnologies in food production, RIKILT – Institute of Food Safety, Wageningen University and Research Centre and RIVM – National Institute for Public Health and the Environment, Bilthoven. September 2007.

Because food is ingested, the use of nanomaterials in the food chain poses a direct threat to consumers' health and hence there is an urgent need for the strict application of the precautionary principle. The risks due to the presence of manufactured nanomaterials in **food packaging** also needs to be addressed in the Novel foods regulation since **there is preliminary evidence that nanomaterials may migrate from packaging into food** and hence increase the risk of nanomaterial ingestion[4].

The European Food Safety Authority (EFSA) has acknowledged that conducting risk assessment of specific nano products is "subject to a high degree of uncertainty" and questioned the adequacy of established toxicological methodologies to test nanomaterials[5].

The European Parliament, in its resolution on regulatory aspects of nanomaterials adopted on 24 March 2009 stated that "nanomaterials should be covered by a multifaceted, differentiated and adaptative body of law based on the **precautionary principle**, the principle of producer responsibility and the polluter-pays principle to ensure the safe production, use and disposal of nanomaterials before the technology is put on the market."

Given the current lack of appropriate safety testing methods for the risk assessment of nanomaterials and echoing the European Parliament in its resolution on regulatory aspects of nanomaterials, we call upon you to ensure that the precautionary principle is applied to all nanotechonologies' applications in food and food packaging and to vote in favour of amendment 13 (recital 7) and amendment 73 (article 8).

Recognise consumers' right to information: support amendment 81 (article 9)

A number of public consultations have shown that public opinion is very much concerned about the level of uncertainty which characterise our understanding of nanotechnologies[6]. It also appears that public concerns are greater when it comes to applications in food. **Citizens want to be informed and able to choose to consume nano-free products.** Previous regulatory experiences in the food sector, such as the case of GMOs, should serve as an example to decision makers when deciding upon highly controversial technology applications in food.

We call upon you to ensure that all ingredients present in the form of nanomaterials are clearly indicated in the list of ingredients and that the names of such ingredients are followed by the word 'nano' in brackets as provided by amendment 81 (article 9).

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[4] Preliminary results of a study carried out in the UK indicate that nanomaterial migration from the two polymer nanocomposites tested (nanoclay-in multilayered PET bottles, and nanosilver-polypropylene composite) may be minimal (Chaudhry 2008)
[5] European Food Safety Authority (EFSA), Scientific Opinion: The Potential Risks Arising from Nanoscience and Nanotechnologies on Food and Feed Safety, February 10 2009.
[6] See conclusions of the NANOPLAT project in: Understanding Public Debate on Nanotechnologies, Options for Framing Public Policy, 2010. http://ec.europa.eu/research/science-society/document_library/pdf_06/understanding-public-debate-on-nanotechnologies_en.pdf