



National Toxics Network Inc.

working towards pollution reduction, protection of environmental health and environmental justice for all

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Food Standards Australia New Zealand
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AUSTRALIA

Submission to FSANZ on proposed amendments to Part 3 of the FSANZ *Application Handbook*

The National Toxics Network (NTN) welcomes the recognition by FSANZ of the new toxicity risks associated with nanoparticles of food ingredients previously approved for use in bulk form. We also recognise that it is an important first step for Australia's food safety regulator to require food companies to disclose it when they are using manufactured nanoparticles as food ingredients and additives. However we are concerned that these changes will not keep nanoparticle ingredients out of foods and food packaging, nor will they deliver transparency in either the safety assessment process or nanoparticle content of foods. Specifically, we make the following recommendations:

1. Nanoparticles should be identified as new substances. New safety assessment should be required that is specific to the particular nanoparticle (eg of given size, shape, surface characteristics etc)

In 2004 the United Kingdom's Royal Society recommended that all nanoparticles be treated as new chemicals and subject to rigorous new safety testing before being permitted for commercial use. We are concerned that FSANZ will neither require nanoparticles to be treated as new substances, nor specifically require a new safety assessment that is relevant to the nanoparticle in question. We believe given the doubt about nanoparticle safety that this is absolutely essential.

2. Nanofoods should be assessed as novel foods

Given that FSANZ argues that nanofoods have no history of use, and given the novel health risks associated with nanoparticles and nano processing, all foods that contain manufactured nanoparticle additives, ingredients, nutritive substances, processing aids or contaminants should be assessed as novel foods. The onus must be on applicants to demonstrate that their products are safe before being permitted for commercial use. Given the extremely large knowledge gaps surrounding the health implications and biological behaviour of nanoparticles, we recognise that

in many cases the data necessary to demonstrate safety simply does not currently exist. Where this is the case approval for sale should be withheld.

3. Nanofoods and packaging must be subject to new, nanoparticle appropriate testing

The risk assessment process used by FSANZ for nanoparticle ingredients, additives, nutritive substances, processing aids and contaminants of food or food packaging should be specific to their new risks (eg by requiring full physicochemical characterisation of particles including size, shape, charge, surface properties, solubility, catalytic properties, coatings etc). A nanoparticle-appropriate metric must be used for dose (eg particle surface area or number of particles rather than mass). The process used for risk assessment must be explicitly stated in the *Application Handbook* rather than left to the discretion of FSANZ or the applicant.

4. Manufacturers should have to disclose the use of nanotechnology in food processing, manufacture and packaging

FSANZ must recognise that consumers are now looking for labelling not only for ingredients, but also for preparation instruction, storage information, nutrition information panel and processes used in the manufacture of foods. We currently label other foods according to the processes used, for example organic or kosher foods, and this is also important with respect to nanotechnology.

5. Manufacturers should have to disclose to FSANZ the addition of all additives, nutritive substances, processing aids and contaminants where these are added to food or food packaging in nanoparticle form

The European Food Safety Authority's "Draft Scientific Opinion of the Scientific Committee on the Potential Risks Arising from Nanoscience and Nanotechnologies on Food and Feed Safety" recognises the significant knowledge gaps regarding the behaviour of nanoparticles. EFSA recognises that even where nanoparticles are of soluble substances, given uncertainty regarding their behaviour, the substance should be treated as a nanoparticle, unless it can be proved that it dissolves with no change to its risk profile. FSANZ should take this approach.

6. All nanoparticle ingredients, additives, nutritive substances, processing aids and contaminants in food or food packaging must be clearly labelled to give people a choice about purchasing them

The Royal Society recommended that all nano ingredients should be clearly labelled as consumers have a right to know in order to make an informed choice. We note that the recent Friends of the Earth Australia-commissioned survey of public opinion found that 92% of the Australian public support mandatory labelling of nano ingredients in both food and packaging.

Yours sincerely

JO IMMIG

Co-ordinator