

NANOTECHNOLOGY

Nanotechnology is a fast developing research and production area in numerous fields including biotechnology, medicines, cosmetic products and food.

BACKGROUND

The size of nanoparticles is between 1 and 100 nanometers (1 nanometre = 1 billionth of 1 metre). Although people are exposed to naturally occurring nanoparticles, the surge in manufactured nanomaterials increases exposure and raises concerns, as the potential health risks are not known and a high use of animals is expected to evaluate them.

CURRENT SITUATION

Several parts of the European Commission are working on nanomaterials (DG Environment, Growth, Research and Sante), more specifically on a definition and on determining risk assessment and management criteria. At present there are no EU rules for the authorisation of food containing nanoparticles, except related to labelling. Nanomaterials are present in cosmetics however they need to be authorised. The Chemical legislation, REACH will cover nanomaterials. Internationally, the Organisation for Economic Cooperation and Development is studying a sample of 14 nanomaterials and examining various aspects of nanotechnology; including looking at alternative methods in nanotoxicology, through 8 different projects.

OUR OBJECTIVES

- In all circumstances in developing or determining testing procedures for safety of nanomaterials, nonanimal test methods are used.
- The EU to prioritise work to develop, validate and implement essential non-animal test methods, and to avoid animal tests that are inhumane and likely to be misleading.
- In the absence of a battery of appropriate tests covering all the relevant humanhealth related endpoints, the European Commission/ECHA should compile a battery of validated and OECD accepted non-animal test methods.
- Eurogroup suggests a tiered, weight-of-evidence approach that is based on the most relevant non-animal methods

RELATED LINKS

- [European Commission page on nanotechnology](#)
- [Eurogroup submission to EFSA public consultation on risk assessment guidance on nanotechnology \(February 2012\)](#)
- [Eurogroup briefing on nanotechnology \(August 2009\)](#)