

**Antony Willott
Clerk to Sub-Committee I
House of Lords Select Committee on Science & Technology
Committee Office
House of Lords
London SW1A 0PW**

13 March 2009

Dear Antony

NANOTECHNOLOGIES AND FOOD

On behalf of the Royal Society of Chemistry [RSC] I am pleased to attach the formal submission to your current inquiry on *Nanotechnologies and Food*.

This RSC evidence follows the questions outlined by Sub-Committee I in its *Call for Evidence*.

However you might find helpful the following excerpts from our submission which seek to highlight the four key areas covered by our evidence. These are:

Classification of Nanoparticles in Food

Novel nanoparticles in food can be divided into soft materials (these are largely consumed) and hard surfaces (non-contact & contact applications such as processing equipment & packaging). Due to the nature of their applications, the impact on human biology is less significant for hard surface materials than soft materials; therefore the risks to human health are likely to be lower for hard surface materials.

Regulatory Framework

In the absence of legislation and an appropriate risk assessment framework, the food industry will be liable for any new hazard. Whilst small companies and academic institutions are researching the potential of this emerging technology, commercial realisation of new products and ingredients is not being carried through to market.

Potential Uses and Contributions

Nanotechnology has many potential contributions to make across the food supply chain. These include noncontact sensors in food processing and packaging, new functional materials, food formulation and improvements in diet, for example increasing the content and bioavailability of micronutrients of food. New materials based on nanotechnology, with increased strength, offer the potential to reduce packaging waste by allowing down gauging of the packaging and improved thermal transfer.

Public Engagement and Consumer Information

People are often suspicious of new technologies because they are concerned that corporate profits may come before public safety. Thus, with the introduction of any new technologies, there must be an early dialogue involving effective communication of the benefits as well as risks to the consumer and/or the environment. There must be a balance of providing the relevant information necessary for consumer choice, and bombarding the consumer with unnecessary detail. However, the balance must be in favour of information being made available to consumers. This information should be presented in a standardised form.

You may be aware that the Society launched a major report on food in the House of Commons on 21 January 2009 entitled *The Vital Ingredient*. This was co-authored by Dr Bhatti. Apart from emailing this evidence to you I shall provide a hard copy together with a copy of the published report which I hope you might find useful for your files.

I hope this is helpful.

With Best Wishes

DR STEPHEN BENN