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Dear Mr Lim,

**National Enabling Technologies Strategy (nanotechnology and biotechnology)**

Thank you for your invitation to the roundtable on the National Enabling Technologies Strategy. Unfortunately CHOICE was unable to send a representative and instead we would like you to accept this submission in response to the discussion paper.

CHOICE (Australian Consumers' Association) is Australia's leading consumer voice and publisher of Choice Magazine and Choice Online. CHOICE is a not for-profit, non-government, non-party-political organisation established in 1959. CHOICE works to improve the lives of consumers by taking on the issues that matter to them. We arm consumers with the information to make confident choices and campaign for change when markets or regulation fails consumers.

We recognise that new technologies can bring benefits to consumers and the environment. Some nano materials may raise little concern, others could present safety risks because of their new properties. Australian consumers expect a strong and consistent framework for ensuring their safety whilst helping to deliver improvements in things such as health services, food production and everyday consumables.

CHOICE believes that a full review of the regulation for nano and biotechnologies is warranted, because there are so many omissions in the current system. The government should be taking the health and environmental risks associated with nanotechnology seriously and addressing the new regulatory challenges it creates. Better assessment of nano and biotechnologies is required to ensure that they are safe, effective and supported by the community.

High among our concerns in response to the discussion paper are that the current system provides little in the way of safeguards for consumers and our environment. On top of this, rather than fully engaging the community in a discussion about the role for these technologies in Australian, the approach seems to be to 'educate' consumers with biased promotional information selling the technology and its benefits. Our response to these issues follows in more detail.

### **Safety first: No data, No market**

The government must act to protect consumer safety by placing the precautionary principle at the heart of nano and biotechnology regulation and should act swiftly when new evidence comes to light that may raise concerns about the safety of already approved substances.

Safety is paramount – before commercialisation is allowed. It is not sufficient to acknowledge risks (p.4 of the discussion paper). Rather, it is essential that they are identified, assessed and managed.

There should be an evidence basis for the roll-out of nano and biotechnologies, to ensure, that they do not harm consumers or the environment. If there is no data, there should be no market. Lack of evidence of harm is not evidence of safety.

- Strong application of the precautionary principle should be applied to all new technologies and materials. Regulators should review nanomaterials as if they were new substances. All manufactured nanoparticles to be treated as new chemicals and subject to rigorous new safety testing – even those previously used in bulk form. For example, chocolate with nanotitanium dioxide (added to improve its appearance) should not be allowed on the market without undergoing any safety assessment simply because titanium dioxide in its bulk form is a permitted additive.
- The responsibility should be on manufacturers and importers to prove safety, before market access is granted. However, assessments should be based on published, peer-reviewed evidence of safety and efficacy rather than relying heavily on proprietary-generated data.
- There must be independent, thorough, timely and transparent reviews and investigation of all adverse events associated with nano and biotechnologies. Specifically, any voluntary or mandatory withdrawals overseas should trigger a review in Australia. Complaints and concerns raised domestically should also be thoroughly investigated.
- Unsafe and unproven products should be removed or prohibited from the market.
- Producers and manufacturers should be required to report all uses of nano materials to government.
- There must be adequate funding dedicated for independent scientific assessment of these technologies. Excitement about new technology must not lead to sloppy or biased risk assessment processes. Thorough, timely, balanced investigations not only of the potential benefits but the efficacy and potential safety risks of new technologies, are essential.
- Funding priority must be given to public interest science, with funding priorities critically examined regularly, so that strategically Australia is researching and developing technologies that maximise public and environmental utility.

- Responsibility for sign-off of the safety of a nano or biotechnology should lie with an independent body, not a pharmaceutical, cosmetic, agricultural chemical or other company with a vested interest in marketing that product.

### **Meaningful information and community engagement**

The discussion paper implies that the public merely needs to be educated about the merits of nano and biotechnologies. This starting point is unlikely to result in genuine community participation.

The government should be prepared to take on board views of individuals and organisations that do not support the use of these technologies or have concerns about their use. CHOICE understands that a number of organisations present at the consultation forums have proposed an independent advisory panel made up of a range of organisations representing the diversity of stakeholders and their views. Such a panel would oversee the public participation program and public communications. CHOICE supports this proposal.

Detailed and transparent risk assessments must be made publicly available, as should the evidence on which a decision is based.

The public should be entitled to help determine whether and under what conditions these technologies are researched and commercialised.

Consumers have a right to make informed choices about the products they purchase – the processes used to produce them and the ingredients and materials they contain. Consumers must have access to full and reliable information provision, including mandatory labelling of all products derived from nano or biotechnology particle ingredients on the label, particularly foods and cosmetics.

The National Enabling Technology Strategy must establish public interests as its highest priority. Without such an approach there's a very real possibility that items such as nanofoods will legitimately appear on supermarket shelves without having undergone any safety testing – with the potential for serious consequences. The Government has a responsibility to see that community and environmental health and safety are protected. Therefore CHOICE wants the Strategy to result in thorough independent safety assessments of the technologies, accompanied by strong government control over market access, and for consumers to be given the right to avoid particular substances, by requiring full nano-particle and genetically engineered ingredient labelling.

Yours sincerely,

**Kate Norris**

Senior Policy Officer