

**Senate Community Affairs Committee**

**ANSWERS TO ESTIMATES QUESTIONS ON NOTICE**

**HEALTH PORTFOLIO**

**Supplementary Budget Estimates 2016 – 2017, 19 October 2016**

**Ref No:** SQ16-000561

**OUTCOME:** 2 – Health Access and Support Services

**Topic:** Nanomaterials in Food

**Type of Question:** Written Question on Notice

**Senator:** Rice, Janet

**Question:**

This question relates to FSANZ's answers to the written Supplementary Budget Estimates question (SQ15-000778) which were submitted in October 2015.

- a) In part 1) of the question Senator Madigan asked FSANZ whether it would agree its answer to the question at Estimates on 21 October 2015 that there is no evidence to suggest that nano silica is not safe is very different from saying that nano silica is safe for human consumption. FSANZ's answer refers only to food grade silica. Please give a nano specific response.
- b) Part 2) of the question relates to the safety of nano titanium dioxide. FSANZ's answer refers only to titanium dioxide. Please give a nano specific response.
- c) Part 3) of the question relates to nano titanium dioxide and nano silica not simply food grade titanium dioxide and silica. Please identify any studies that FSANZ relies upon to conclude that these substances have no human health impacts.
- d) Please identify any studies indicating that the behaviour of nano titanium dioxide is sufficiently similar to that of conventional scale titanium dioxide to make a finding that the safety of titanium dioxide indicates the safety of nano titanium dioxide.
- e) Please identify any studies indicating that the behaviour of nano silica is sufficiently similar to that of conventional scale silica to make a finding that the safety of silica implies the safety of nano silica.
- f) In FSANZ's response to Part (4) of Senator Madigan's question the agency disagrees with the statement that "not identifying any health effect' is entirely different from a conclusion of safety?" Is this really the agency's position?
  - (i) If yes to (f), how does one make a finding of safety in the absence of data?
- g) In attachment 1, please identify those studies that specifically examine nano titanium dioxide and nano silica.

- h) Part (6) of the question related to nano titanium dioxide and nano silica. Please provide a nano specific response.
- i) Part (7) of the question related to nano titanium dioxide and nano silica. Please provide a nano specific response.
- j) FSANZ failed to answer Part (8) of the question. Please do so.
- k) FSANZ failed to answer Parts (9) and (10) of Senator Madigan's question. Could you please indicate, in relation to the 14 food samples tested by Friends of the Earth, what steps, if any, the manufacturers have taken in order to establish the safety of the food containing nanomaterials?
- l) If FSANZ is not aware of the steps taken, does the agency have the authority to request that data from the manufacturers?
- m) If yes to l), has FSANZ ever requested this information from manufacturers in relation to nanomaterials in food?
- n) If yes to m), please provide details.
- o) In response to Part (11) of Senator Madigan's question, FSANZ indicated it does not plan to review the data upon which manufacturers relied prior to putting those products on the market. Why not?
- p) Has FSANZ ever audited the data held by food manufacturers that is intended to demonstrate the safety of a food product prior to sale?
- q) If yes to (p), please provide details.

**Answer:**

- a) Food Standards Australia New Zealand's (FSANZ) responsibility relates only to developing food standards for materials that will be used in food.

Silicon dioxide for use as a food additive in Australia must be in accordance with the permissions outlined in Standard 1.3.1 – Food additives and Schedule 3 – Identity and purity in the *Australia New Zealand Food Standards Code* (the Code). This additive contains a broad distribution of particle sizes, including some in the nanoscale.

- b) Titanium dioxide for use as a food additive in Australia must be in accordance with the permissions outlined in Standard 1.3.1 – Food additives and Schedule 3 – Identity and purity in the Code. This additive contains a broad distribution of particle sizes, including some in the nanoscale.
- c) In establishing food standards, FSANZ has only considered silicon dioxide and titanium dioxide that comply with the identity and purity requirements outlined in the Code. FSANZ has *not* assessed the safety of a hypothetical specification for all forms of silicon dioxide or titanium dioxide which may have nanoscale dimensions. However, since answering Senate Question SQ15-000778, FSANZ has published a Consultant's report, *Potential Health Risks Associated with Nanotechnologies in Existing Food Additives*, which reviewed the evidence on nanoscale silicon dioxide, titanium dioxide and silver in food.

The Consultant considered *all* of the studies cited in the report, in reaching the conclusion that the weight of evidence did not support claims of significant health risks for food grade materials.

- d) Please refer to the answer to part c) above.
- e) The Consultant considered *all* of the studies cited in the report, in reaching the conclusion that the weight of evidence did not support claims of significant health risks for food grade materials.
- f) FSANZ maintains the same position to this question as that provided in the written response to SQ15-000778. FSANZ does not agree that “‘not identifying any health effect’ is entirely different from a conclusion of safety”.
- g) See response to part e) above.
- h) See response to part d) above.
- i) See response to part d) above.
- j) Australian food laws prohibit the sale in Australia of food that is unsafe or unsuitable.

Applications to amend Standard 1.3.1 require a suite of safety information, including information on particle size and morphology if the particle size influences the toxicity of the additive.

- k) The enforcement of food standards is the responsibility of the State and Territory authorities. FSANZ is not aware of the steps that manufacturers may have taken in relation to the food samples that Friends of the Earth tested.
- l) FSANZ can request information from manufacturers if this is considered appropriate.
- m) FSANZ has conducted a survey of food packaging manufacturers in Australia and New Zealand manufacturers on their use of nanotechnology.
- n) FSANZ designed two surveys for packaging manufacturers and food businesses; the first survey was sent out in 2012 and the second in 2013. The questions did not differ significantly between surveys; the second survey was worded more simply and presented in a more accessible format. For each occasion, approximately 50 surveys were distributed through the Packaging Council of Australia and New Zealand Packaging Council and through the Australian Food and Grocery Council and New Zealand Food and Grocery Council.
- o) FSANZ will review relevant data provided by manufacturers, whenever an application is made to amend the Code.
- p) FSANZ does not have an audit role at food manufacturer’s sites. Audit is a part of the enforcement activity and is carried out by State and Territory food safety authorities.
- q) Not applicable.