Senate Community Affairs Committee

ANSWERS TO ESTIMATES QUESTIONS ON NOTICE

HEALTH PORTFOLIO

Budget Estimates 2017–2018, 29 & 30 May 2017

Ref No: SQ17-000739

OUTCOME: 2 – Health Access and Support Services

Topic: Nanomaterials in food

Type of Question: Written Question on Notice

Senator: Janet Rice

Question:

The French agency ANSES also reviewed the January 2017 French study (https://www.anses.fr/en/content/titanium-dioxide-nanoparticles-food-additive-e171-biological-effects-need-be-confirmed) and noted that "the study does demonstrate effects that had not been identified so far, specifically potential promoting effects for carcinogenesis. As a result, the Agency highlights the need to conduct the studies required to fully characterise the potential health effects related to ingestion of the food additive E171"

- (a) Is it correct that ANSES didn't identify any limitations to the study that called into question its relevance?
- (b) In light of the absence of data, would FSANZ agree that there is such a need for additional studies?
- (c) If no to b), why not?
- (d) If yes to b), why then did FSANZ conclude no further action is needed in response to this study?
- (e) If yes to b), will FSANZ then require or commission such work?

Answer:

- (a) No. FSANZ has confirmed with ANSES that they found several limitations with the French study including:
 - the comparison between E171 in solution versus E171 in food needs to be considered
 - the biological significance of small changes in cytokines is not characterised
 - the use of only one biomarker (aberrant crypt foci or ACF) which is not predictive of lesion formation
 - the number of animals is well below the number of animals recommended in OECD guidelines.

These limitations were outlined in ANSES paper which at this point has only been published in French. ANSES was also in agreement with the FSANZ analysis of the French study.

ANSES also concluded that their analysis was not sufficient to re-open the titanium dioxide risk assessment completed by EFSA in 2016.

- (b) ANSES has identified some experimental studies that, if conducted properly, would add further to the scientific evidence base for titanium dioxide. In this context, FSANZ would support the French undertaking such additional work.
- (c) Not applicable.
- (d) FSANZ does not believe that the study changes our scientific conclusions with respect to the safety of food-grade titanium dioxide, particularly given its limitations.
- (e) FSANZ does not plan to commission such work but will assess such studies, in the context of the overall weight of scientific evidence, if additional studies are conducted by the French.