SNAG T/C 10 July 2017: Hydroxyapatite nanoparticles in infant formula

Today's participants:
Brian Priestly, Maxine McCall, Simon Loveday, Jan Herrmann, Nobheetha Jayasekara, Trevor Webb, Leise Berven, Nick Fletcher, Gill Duffy — Maxine + FoE

Talking Points

- Remind participants about obligation to declare any additional conflicts of interests.

- On 4 May 2017, FSANZ received a media request to respond to the results of an Arizona State University study commissioned by Friends of the Earth Australia. The results provided to FSANZ claimed that nanoscale hydroxyapatite was detected in two products tested. Media coverage of the study appeared in the Fairfax papers on 2 July 2017. FSANZ published a response on its website (attached).

- Prior to the study appearing in the Fairfax media, FSANZ convened two teleconferences with members of the SNAG:

  (1) On 31 May 2017; participants Nobheetha, Maxine, Brian and FSANZ staff.
  We asked for comments on the:
  - Validity of the methods
  - Data indicating whether particles were intentionally engineered.

  In discussion, the advice from SNAG members was that the evidence showed that nanoparticles were present in the samples but not quantitative, and that it was undeterminable whether particles were intentionally engineered and added. It was commented that the particles probably occur naturally or through processing. It was also considered by at least one member that the presence of the particles did not represent a public health and safety risk since the particles were not bio-persistent. The complexity around dissolution in the gut and within the context of a food matrix was noted.

  (2) On 19 June 2017, participants Mike Roberts and FSANZ staff.
  We asked for comments on
  - Validity of the methods
  - Data indicating whether particles were intentionally engineered
  - Public health and safety implications

  FSANZ received similar advice to above: particles present but study was not quantitative, particles were likely to dissolve in gut to calcium and phosphate, the science supporting the possibility that particles are naturally occurring from milk processing or from the calcium source, and that the FOTE study does not demonstrate that the particles pose a risk to public health and safety .

- In addition, FSANZ contacted NMI Asa ("Orsa") Jamting on 18 May 2017 with a specific question about the methodology and the identification of the nanoparticles. She in turn had some discussion with **Jan Herrmann** about these matters. Asa provided a response to our question via email (attached).

- We are now meeting in response to Maxine's email (attached) concerns about how FSANZ publishes it's consultation with the SNAG, namely with regard to the statement that we inserted on the webpage response:

  > *"FSANZ has reviewed the available information and concluded it does not contain any new evidence to suggest these products pose a risk to infant health and safety. This conclusion is supported by experts from our Scientific Nanotechnology Advisory Group."*

Questions for discussion:

(1) Does the statement on the FSANZ website misrepresent the advice that FSANZ obtained from the SNAG?

– took into consideration the advice from a range of organisations SNAG

(2) Should the statement be changed to:

"This conclusion was informed by consultation with experts ~~from our~~ Scientific Nanotechnology Advisory Group."

including

Or

We consulted w members of our SNAG in reaching our conclusion

"FSANZ reviewed the information provided including consultation with independent scientific experts and the Scientific Nanotechnology Advisory Group. FSANZ concluded there was no new evidence to suggest the products posed a risk to infant health and safety."

(3) What is the process that FSANZ should take when reporting publically (i.e. on website) on the outcomes of discussions with the SNAG? Should the Terms of Reference (attached) be amended to reflect this?

NICNAS – Concluded SCCS report not useful re toothpaste.

C

? Not a decision specifically re rating safety

SCCS –
* 3–15% HA of which 3% is nano.

Milk powder ca 0.7% no idea of prop in that.

Brian 2017 Schopf paper → quote <0.1 – <0.4% weight
unclear if that's nano or just all HA.

Consensus
– Methodology of study was sound? No Mike & suggested
– Intentional added or engineered? No evidence