ABN: 67 104 140 918
[redacted]

March 15, 2024

A1263 Irradiation – we oppose any increase of maximum energy for x-ray exposures

Recommendations

GeneEthics opposes the proposed changes and recommends that:

1. Australia's regulation of fruit and vegetable irradiation continue to conform with the Codex Alimentarius standards on the maximum energy used and the proposed change be rejected;
2. FSANZ ensure that the irradiation of fresh fruits and vegetables is solely for the fruit fly control approved in A1193, and not for any other purpose;
3. Compliance with the labelling of irradiated fruits and vegetables is strictly enforced and that they not be presented to shoppers as 'fresh'.

Our case:

1. The Codex Alimentarius remains the agreed standard for the world's food supply. Though a few countries have unilaterally increased the permitted energy used in food irradiation to 7.5MeV, in previous trials the increased energy was not applied to fruits and vegetables as Steritech proposes.

   GeneEthics therefore opposes any change to the standard until there is a consensus on the allowable dose, agreed to by all the countries that are parties to the Codex.

2. The executive summary of Supporting doc 1, the Risk and Technical assessment, seeks to justify the revised energy level as it claims: "Increases in the efficiency of X-ray generation increase the treatment efficiency and rate of throughput of irradiating food for both phytosanitary treatment to control pests and sanitary treatment for food quality and safety purposes."

   No evidence or references are given about the claimed efficiencies and extra profits for the owners and operators of the X-ray plants. Until such evidence is forthcoming the application must be rejected.

   The only legitimate use of irradiation under approval A1193 was pest control. Yet the irradiation process appears to be used also for the unauthorised purposes of "sanitary treatment for food quality and safety purposes." Cleaning up the quality of food that is unfit for consumption is strictly disallowed so we want to know what is going on here. GeneEthics requests strict monitoring and enforcement of the plant's approval to ensure that only fruit fly larvae de-infestation is allowed, and the publication of reports on the evidence of authorised use only.

3. Many claims are made without supporting evidence.

   GeneEthics does not believe that: “consumers would continue to be informed where a particular food is irradiated. Therefore consumers would have a choice to consume or not consume any impacted products.” This promise is meaningless unless the labelling provisions are monitored and enforced. Despite 1,000 tonnes of produce being irradiate pa for domestic consumption, we have seen no evidence of labelling, though it is required on the food or at the point of sale.

   No independent evidence is provided for many generic and similar claims that: “there is no change to the absorbed dose”. One source (US FDA 2004) defines safe as “a reasonable certainty in the minds of competent scientists that the substance is not harmful under the intended conditions of use." That is unsatisfactory and is derives from a claim in another paper. Also, these experiments were on frozen meat and other substances, not fruit and vegetables.

   Also, SD1 says: “Rays pass through the food without heating it up to any great extent.” Such an unsubstantiated and inexact claim cannot be accepted unchallenged. When shoppers buy fruit and veges as ‘fresh’, their expectation that the produce has not been precooked must be honoured. Not fully informing and seriously misleading food shoppers is against the law so this failure to disclose would be a serious breach of consumer laws.

   Another suspect claim is that: “It is noted that the Codex standard was initially issued in 1983. It is only more recently that higher energy sources for generating X-rays have become commercially available to irradiate food.” Yet the US FDA 2004 reference cited states: “The increased penetration of 7.5 MeV versus 5 MeV x rays will allow for the irradiation of larger packages.” That is exactly what Steritech is now applying for, 20 years later.

   Also: “The Applicant estimated that the induced radioactivity for a person consuming 40 kg per year of irradiated food that had been irradiated 24 hours prior to consumption using a dose of 1 kGy of 7.5 MeV. The estimated inducted radioactivity was 0.006% of the dose from nonirradiated food, and 0.001% from all natural sources of radiation exposure.”[1] Such claims are meaningless unless backed up with credible evidence. Citing estimates does not satisfy the requirement for the top quality, independent, scientific evidence that is essential to substantiate the claims made in the application and in the FSANZ documents.

Conclusion

With all their deficiencies, equivocations, and inaccuracies, the application and the FSANZ documents are not credible and require to be justified, clarified, and fixed. Meanwhile, GeneEthics calls for application A1261 to be rejected.

Oh yes? Where? When?

[1] FSANZ supporting document 1 – Risk and technical assessment, P6.