



24 December 2020

Tēnā koe,

Application A1193 – Irradiation as a phytosanitary measure for all fresh fruit and vegetables

Thank you for the opportunity to comment on this application. New Zealand Food Safety (NZFS) has the following comments to make:

NZFS supports application A1193 to amend the Food Standard 1.5.3 to include irradiation as a phytosanitary measure for all fresh fruits and vegetables imported for human consumption in Australia and New Zealand. We are satisfied that the proposed irradiation provision is technologically justified and that no public health or safety concerns were identified, including that potential effects on vitamin levels are less than those typically due to processes such as cooking, drying, storage or ripening.

MPI, of which NZFS is a business unit, gives general support for the use of irradiation as a phytosanitary treatment option for all fresh fruits and vegetables under the *International Standards for Phytosanitary Measures (ISPM) 18: Guidelines for the use of irradiation as a phytosanitary measure* and *ISPM 28: Phytosanitary treatments for regulated pests*.

The use of irradiation as a phytosanitary treatment is currently approved and listed as an option for fresh capsicum, grapes, lychee, mango, papaya and tomato imported into New Zealand from Australia. Approval of irradiation as a phytosanitary treatment option for a commodity by FSANZ will not automatically allow access for the commodity to be imported into New Zealand under the Biosecurity Act 1993. MPI requires an import health standard (IHS) to be developed for each commodity prior to importation into New Zealand.

Toxicological assessment

NZFS agrees that the contribution of furans from the irradiation of food is likely to be low compared to the dietary furan exposure from other sources. However, since carcinogenicity is

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probably due to a genotoxic mechanism, levels in food should be kept as low as reasonably achievable.

NZFS notes that while a dietary intake assessment of nutrients was performed, a dietary exposure assessment of furans was not included, which would have been helpful to show that irradiation of food has no impact on the exposure to furans. We also note that the risk assessment could have included New Zealand and Australian data from the New Zealand Furan Exposure Assessment (2017) which was part of the 2012-2017 New Zealand Dietary Furan Programme (<https://www.mpi.govt.nz/dmsdocument/41223-2012-2017-New-Zealand-Dietary-Furan-Programme>).

Nutrition assessment

Although the range of vegetables examined is not comprehensive due to lack of data, NZFS agrees with FSANZ's conclusion that the effect of irradiation on fruit and vegetables will have a minimal impact on nutrient intakes compared to losses due to storage or processing and cooking. Furthermore, only a relatively small proportion of both imported and domestically produced fruit and vegetables in Australia and New Zealand are likely to be treated by irradiation.

Nāku noa, nā

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