

Standard 1.5.3 Irradiation of food

Note 1 This instrument is a standard under the *Food Standards Australia New Zealand Act 1991* (Cth). The standards together make up the *Australia New Zealand Food Standards Code*. See also section 1.1.1—3.

Note 2 The provisions of the Code that apply in New Zealand are incorporated in, or adopted under, the *Food Act 2014* (NZ). See also section 1.1.1—3.

Note 3 Paragraphs 1.1.1—10(5)(d) and (6)(h) provide that a food for sale must not consist of, or have as an ingredient or a component, a food that has been irradiated, unless expressly permitted by this Code. Division 2 of this Standard contains the relevant permissions.

Subsection 1.1.1—14(2) provides that, if this Code sets requirements for record-keeping in relation to food, those requirements must be complied with. Division 3 contains such requirements.

Division 1 Preliminary

1.5.3—1 Name

This Standard is *Australia New Zealand Food Standards Code – Standard 1.5.3 – Irradiation of food*.

Note Commencement:
This Standard commences on 1 March 2016, being the date specified as the commencement date in notices in the *Gazette* and the *New Zealand Gazette* under section 92 of the *Food Standards Australia New Zealand Act 1991* (Cth). See also section 93 of that Act.

1.5.3—2 Definitions

Note In this Code (see section 1.1.2—2):

irradiation, in relation to food, means subjecting the food to ionising radiation, other than ionising radiation imparted to food by measuring or inspection instruments, and **irradiate** and **irradiated** have corresponding meanings.

Division 2 Irradiation of food

1.5.3—3 Irradiation of fresh fruit and vegetables

(1) Fresh fruit and fresh vegetables may be irradiated for the purpose of pest disinfestation for a phytosanitary objective, if the absorbed dose is:

- (a) no lower than 150 Gy; and
- (b) no higher than 1 kGy.

(2) In this section:

fruit includes (but is not limited to) a fruit described in Schedule 22; and

vegetables includes (but is not limited to):

- (a) sweet corns as described in Schedule 22; and
- (b) a vegetable described in Schedule 22.

(3) Despite subsection (2), any of the following is not a fruit or a vegetable for the purposes of this section: dried pulses; legumes; nuts; or seeds.

1.5.3—4 Irradiation of herbs and spices

(1) Herbs and spices may be irradiated for the purpose of controlling sprouting and pest disinfestation, including the control of weeds, if the absorbed dose is no higher than 6 kGy.

(2) Herbs and spices may be irradiated for the purpose of bacterial decontamination, if the absorbed dose is:

- (a) no lower than 2 kGy; and
- (b) no higher than 30 kGy.

(3) In this section:

herbs and spices includes (but is not limited to):

- (a) a herb or a spice described in Schedule 22; and
- (b) chives.

1.5.3—5 Irradiation of plant material for a herbal infusion

- (1) Plant material for a herbal infusion may be irradiated for the purpose of controlling sprouting and pest disinfestation, including the control of weeds, if the absorbed dose is no higher than 6 kGy.
- (2) Plant material for a herbal infusion may be irradiated for the purpose of bacterial decontamination, if the absorbed dose is:
 - (a) no lower than 2 kGy; and
 - (b) no higher than 10 kGy.
- (3) In this section:

plant material for a herbal infusion means fresh, dried or fermented leaves, flowers and other parts of plants used to make beverages, but does not include tea.

1.5.3—6 Re-irradiation of food

Food that has been irradiated may be re-irradiated if any of the following conditions is met:

- (a) the food is prepared from food, including ingredients, that have been irradiated at levels that do not exceed 1 kGy;
- (b) the food contains less than 50 g/kg of irradiated ingredients;
- (c) the required full dose of ionising radiation was applied to the food in divided doses for a specific technological reason.

1.5.3—7 Sources of radiation that may be used

Food may be irradiated in accordance with this Division using any of the following forms of ionising radiation:

- (a) gamma rays from the radionuclide cobalt 60;
- (b) X-rays generated by or from machine sources operated at:
 - (i) an energy level not exceeding 5 megaelectronvolts; or
 - (ii) if the machine source uses tantalum or gold as the target material—an energy level not exceeding 7.5 megaelectronvolts;
- (c) electrons generated by or from machine sources operated at an energy level not exceeding 10 megaelectronvolts.

Division 3 Record-keeping for and labelling of irradiated food

1.5.3—8 Record-keeping

- (1) A person who irradiates food must keep records in relation to:
 - (a) the nature and quality of the food treated; and
 - (b) the *lot identification; and
 - (c) the minimum durable life of the food treated; and
 - (d) the process used; and
 - (e) compliance with the process used; and
 - (f) the minimum and maximum dose absorbed by the food; and
 - (g) an indication whether or not the product has been irradiated previously and if

- so, details of such treatment; and
- (h) the date of *irradiation.
- (2) The records must be kept at the facility where the food was irradiated.
 - (3) The records must be kept for a period of time that exceeds the minimum durable life of the irradiated food by 1 year.

1.5.3—9

Labelling and other information—retail and catering

For the labelling provisions, the information relating to irradiated foods is:

- (a) if the food has been irradiated—a statement to the effect that the food has been treated with ionising radiation; and
- (b) if the food has as an ingredient or *component a food that has been irradiated—a statement to the effect that the ingredient or component has been treated with ionising radiation.

Note 1 The labelling provisions are set out in Standard 1.2.1. Labelling provisions apply to both packaged and unpackaged irradiated foods.

Note 2 For paragraph (b), the statement may be on the statement of ingredients or elsewhere on the label.

Amendment History

The Amendment History provides information about each amendment to the Standard. The information includes commencement or cessation information for relevant amendments.

These amendments are made under section 92 of the *Food Standards Australia New Zealand Act 1991* unless otherwise indicated. Amendments do not have a specific date for cessation unless indicated as such.

About this compilation

This is compilation No. 6 of Standard 1.5.3 as in force on **15 August 2024** (up to Amendment No. 230). It includes any commenced amendment affecting the compilation to that date.

Prepared by Food Standards Australia New Zealand on **15 August 2024**.

Uncommenced amendments or provisions ceasing to have effect

To assist stakeholders, the effect of any uncommenced amendments or provisions which will cease to have effect, may be reflected in the Standard as shaded boxed text with the relevant commencement or cessation date. These amendments will be reflected in a compilation registered on the Federal Register of Legislation including or omitting those amendments and provided in the Amendment History once the date is passed.

The following abbreviations may be used in the table below:

ad = added or inserted
exp = expired or ceased to have effect
rs = repealed and substituted

am = amended
rep = repealed

Standard 1.5.3 was published in the Food Standards Gazette No. FSC96 on 10 April 2015 as part of Amendment 154 (F2015L00406 — 31 March 2015) and has since been amended as follows:

Section affected	A'ment No.	FRL registration Gazette	Commencement (Cessation)	How affected	Description of amendment
table to 1.5.3—3(2)	157	F2015L01374 1 Sept 2015 FSC99 3 Sept 2015	1 March 2016	ad	Permissions for certain fruits and vegetables previously included in the Code as part of A1092.
table to 1.5.3—3(2)	166	F2017L00025 5 Jan 2017 FSC108 12 Jan 2017	12 Jan 2017	ad	Permissions for blueberries and raspberries.
table to 1.5.3—4(3)	190	F2020L00024 15 Jan 2020 FSC131 17 Jan 2020	17 January 2020	am	Permissions for irradiated herbs and spices
1.5.3—3	201	F2021L00983 14 Jul 2021 FSC142 22 July 2021	22 July 2021	am	Permissions for fresh fruit and vegetables
1.5.3—3(2)	211	F2022L01118 26 Aug 2022 FSC151 1 Sep 2022	1 September 2022	am	Definition of 'vegetables'
1.5.3—4(3)	211	F2022L01118 26 Aug 2022 FSC151 1 Sep 2022	1 September 2022	am	Definition of 'herbs and spices'

Section affected	A'ment No.	FRL registration Gazette	Commencement (Cessation)	How affected	Description of amendment
1.5.3-7(b)	230	F2024L00986 13 August 2024 FSC 170 15 August 2024	15 August 2024	rs	Repeal the paragraph and substitute