

Standard 1.3.1

Food Additives

Purpose

A food additive is any substance not normally consumed as a food in itself and not normally used as an ingredient of food, but which is intentionally added to a food to achieve one or more of the technological functions specified in Schedule 5. It or its by-products may remain in the food. Processing aids are distinguished from food additives (see Standard 1.3.3) and vitamins and minerals added to food for nutritional purposes (see Standard 1.3.2).

This standard regulates the use of food additives in the production and processing of food. A food additive may only be present in food where expressly permitted in this standard. Additives can only be added to food in order to achieve an identified technological function according to Good Manufacturing Practice.

Standard 1.3.4 prescribes standards for the identity and purity of food additives.

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Schedule 1 -Permitted uses of food additives by food type

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Schedule 3 Colours permitted to GMP in processed foods specified in Schedule 1

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Schedule 5 Technological functions which may be performed by food additives

Clauses

1 Definitions

In this standard -

technological function means a function set out in Schedule 5.

maximum permitted limit means the maximum amount of additive which may be present in the food as set out in relation to that food in Schedule 1.

processed food means food which has undergone any treatment resulting in a substantial change in the original state of the food.

Editorial note:

This definition of 'processed food' is used to determine some additive permissions.

Processes such as dividing, parting, severing, boning, mincing, skinning, paring, peeling, grinding, cutting, cleaning, trimming, deep-freezing or freezing, milling or husking, packing or unpacking are not considered to result in a substantial change to the original state of the food.

bread means the food made by baking a dough prepared from a single cereal or a mixed cereal flour, with or without yeast, fat, salt and water. Bread may also contain sugars and any products derived from cereals and legumes.

Editorial note

The definition of bread is included in this Standard to assist in the interpretation of item 7.1 of Schedule 1.

2 General prohibition on the use of additives

Unless expressly permitted in this Standard, food additives must not be added to food.

3 Permitted use of additives

The additives listed in Schedules 1,2,3 and 4 may be added to a food or class of food to perform technological functions provided that:

- (a) the use complies with any restrictions on use listed in Schedule 1; and
- (b) the proportion of the additive does not exceed the maximum level necessary to achieve one or more technological functions under conditions of Good Manufacturing Practice (GMP).

Editorial Note

The Codex Alimentarius Commission Procedural Manual sets out the following relevant criteria for use in assessing compliance with Good Manufacturing Practice:

- (a) the quantity of additive added to food shall be limited to the lowest possible level necessary to accomplish its desired effect;
- (b) the quantity of the additive that becomes a component of food as a result of its use in the manufacture, processing or packaging of a food and which is not intended to accomplish any physical, or other technical effect in the finished food itself, is reduced to the extent reasonably possible; and
- (c) the additive is prepared and handled in the same way as a food ingredient.

The use of a quality descriptor (eg natural, pure, traditional etc) may further qualify the interpretation of GMP for a specific food by imposing further limitations on the use of additives in those products. When such quality descriptors are used, additives would generally not be permitted in accordance

with clause 3(b) except where their use could be demonstrated to be essential or unavoidable in the preparation of the product.

4 Requirements for use of intense sweeteners

Save where otherwise expressly stated in Schedule 1 and notwithstanding any specific limit specified in a Schedule to this Standard, intense sweeteners may only be added to food as a flavour enhancer, or in an amount necessary to replace the sweetness normally provided by sugars.

Editorial Note:

In general, the use of intense sweeteners is limited to:

1. foods meeting the definition of 'reduced joule' or 'low joule';
2. "no added sugars" food eg artificially sweetened canned fruit without added sugar; or
3. specific foods in which the use of the sweetener is in addition to sugar rather than as an alternative eg chewing gum, brewed soft drink (these foods are listed in Schedule 1 on a case-by-case basis).

Conditions relating to the use of reduced/low joule and no added sugar claims can be found in Division 7 of Standard 1.2.1 or in ANZFA's Code of Practice on Nutrient Claims in Food Labels and in Advertisements (Commonwealth of Australia, AGPS 1995).

5 Maximum permitted levels of additives

(1) Where a maximum level for an additive in a food is prescribed, unless otherwise stated, the level refers to the maximum amount which may be present in the food as sold or, where there are directions for preparation, when prepared for consumption according to label directions.

(2) For the purposes of this standard:

annatto and annatto extracts shall be calculated as bixin.

benzoic acid and its salts shall be calculated as benzoic acid.

cyclamate shall be calculated as cyclohexyl-sulphamic acid.

propionic acid and its salts shall be calculated as propionic acid.

sorbic acid and its salts shall be calculated as sorbic acid.

sulphur dioxide, sulphites including bisulphites and metabisulphites shall be calculated as sulphur dioxide.

6 Additives performing the same function

(1) Where two or more additives may be added to a food for the purpose of achieving the same technological function, those additives may be used singly or in combination.

(2) Where two or more additives are used in combination to achieve the same technological function, the sum of the fractions obtained by dividing the amount of each

food additive used by the maximum amount permitted for that food additive must not exceed 1.

Example

A food can have a maximum amount of 40 mg/kg of preservative X and 20 mg/kg of preservative Y. Some of the permitted combinations of the two preservatives are:

Preservative X	Fraction for Preservative X	Preservative Y	Fraction for Preservative Y	Sum of Fractions
40 mg/kg	1	nil	0	1
30 mg/kg	0.75	5 mg/kg	0.25	1
20 mg/kg	0.5	10 mg/kg	0.5	1
10 mg/kg	0.25	15 mg/kg	0.75	1
nil	0	20 mg/kg	1	1

7 Carry-over of additives

Other than by direct addition, an additive may be present in any food as a result of carry-over from an ingredient, provided that the level of the additive in the final food is no greater than would be introduced by the use of the ingredient under proper technological conditions and good manufacturing practice.

Editorial Notes

In clause 7, the ingredient can itself be a food additive.

The additive must be permitted to be present in the ingredient and must not be present in any greater quantity than permitted.

8 Food for use in manufacturing

A food intended for use in the manufacture of another food may contain any or all of the additives in a quantity permitted in the final food.

9 The addition of a garnish to food

The addition of a garnish to a food does not render that food a mixed food for the purposes of this Standard.

Editorial Note

Examples of the addition of a garnish to a food include lemon slice to fish or pepper to steak to make pepper steak.

10 Colours and their aluminium and calcium lakes

A reference to a colour listed in Schedules 1, 3 and 4 of this Standard includes a reference to the aluminium and calcium lakes prepared from that colour.