

CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture
Organization of
the United Nations



World Health
Organization

E-mail: codex@fao.org - www.codexalimentarius.org

STANDARD FOR SPECIAL DIETARY FOODS WITH LOW-SODIUM CONTENT (INCLUDING SALT SUBSTITUTES)

CXS 53-1981*

Adopted in 1981. Amended in 1983, 2019.

* Formerly CAC/RS 53-1971.

1. SCOPE

- 1.1 This standard applies to foods which are represented directly or indirectly or by implication, as intended for special dietary uses by reason of their low sodium content. It also applies to salt substitutes with low sodium content.
- 1.2 The standard contains only provisions which are specific to the sodium content of foods intended for special dietary uses and to salt substitutes. It does not refer to other aspects of the composition of such foods including the use of food additives, except salt substitutes.

2. DESCRIPTION

2.1 Definition

Special dietary foods with low sodium content are foods whose special dietary value results from the reduction, restriction, or removal of sodium.

2.2 Subsidiary Definitions

Low sodium and **Very low sodium** foods are foods conforming to the respective provisions regarding maximum sodium content prescribed in sub-sections 3.1.1 and 3.1.2 of this standard.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Special Dietary Foods with Low Sodium Content (Excluding Salt Substitutes As Such)

- 3.1.1 A special dietary food with **low sodium** content is a food which has been processed without the addition of sodium salts, and the sodium content of which is not more than one half of that of the comparable normal product as consumed, and the sodium content of which is not more than 120 mg/100 g of the final product as normally consumed.
- 3.1.2 A special dietary food with **very low sodium** content is a food which has been processed without the addition of sodium salts, and the sodium content of which is not more than one half of that of the comparable normal product as consumed, and the sodium content of which is not more than 40 mg/100 g of the final product as normally consumed.
- 3.1.3 The addition of salt substitutes conforming to sub-section 3.2 to a special dietary food with low sodium content is permitted and shall be limited by good manufacturing practice.

3.2 Salt Substitutes

3.2.1 The composition of salt substitutes shall be as follows:

- | | |
|---|--|
| (a) Potassium sulphate, potassium, calcium or ammonium salts of adipic, glutamic, carbonic, succinic, lactic, tartaric, citric, acetic, hydrochloric or orthophosphoric acids, and/or | } Not limited, except that P not to exceed 4% m/m and NH ₄ ⁺ 3% m/m of the salt substitute mixture |
| (b) Magnesium salts of adipic, glutamic, carbonic, citric, succinic, acetic, tartaric, lactic, hydrochloric or orthophosphoric acids, mixed with other Mg-free salt substitutes as listed in 3.2.1 (a), (c) and 3.2.1 (d), and/or | } Mg ⁺⁺ to be not more than 20% m/m of the total of the cations K ⁺ , Ca ⁺⁺ and NH ₄ ⁺ present in the salt substitute mixture and P not to exceed 4% m/m of the salt substitute mixture |
| (c) Choline salts of acetic, carbonic, lactic, tartaric, citric or hydrochloric acids, mixed with other choline-free salt substitutes as listed in 3.2.1 (a), 3.2.1(b) and 3.2.1(d), and/or | } The choline content not to exceed 3% m/m of the salt substitute mixture |
| (d) Free adipic, glutamic, citric, lactic or malic acids | } Not limited |

3.2.2 Salt substitutes may contain:

- (a) Colloidal silica or calcium silicate: not more than 1% m/m of the salt substitute mixture, individually or in combination.
- (b) Diluents: safe and suitable nutritive foods as normally consumed (e.g. sugars, cereal flour).

3.2.3 The addition of iodine-containing compounds to salt substitutes shall be in conformity with the national legislation of the country where the product is sold.

3.2.4 The sodium content of salt substitutes shall be not more than 120 mg/100 g of the salt substitute mixture.

4. LABELLING**4.1 Special Dietary Foods with Low Sodium Content (Excluding Salt Substitutes As Such)**

In addition to any labelling provisions applying to the particular food concerned, the following specific provisions for the labelling of special dietary foods with low sodium content shall apply:

- 4.1.1** The label shall bear the description "low sodium" or "very low sodium" in accordance with sub-sections 3.1.1 and 3.1.2 of this standard.
- 4.1.2** The sodium content shall be declared on the label to the nearest multiple of 5 mg per 100 g and, in addition per a specified serving of the food as normally consumed.
- 4.1.3** The average carbohydrate, protein and fat content in 100 g of the product as normally consumed, as well as the calorie (or kilojoule) value shall be declared on the label.
- 4.1.4** The addition of the salt substitutes listed in paragraph 3.2 of this standard shall be declared on the label.
- 4.1.5** When a salt substitute, composed entirely or partially of a potassium salt, has been added, the total amount of potassium, expressed as mg cation per 100 g of the food as normally consumed, shall be declared on the label.
- 4.1.6** The date of minimum durability (preceded by the words "best before") shall be declared by the day, month and year in uncoded numerical sequence except that for products with a shelf-life of more than three months, the month and the year will suffice. The month may be indicated by letters in those countries where such use will not confuse the consumer. In the case of products requiring a declaration of month and year only, and the shelf-life of the product is valid to the end of a given year, the expression "end (stated year)" may be used as an alternative.
- 4.1.7** In addition to the date, any special conditions for the storage of the food shall be indicated if the validity of the date depends thereon.

Where practicable, storage instructions shall be in close proximity to the date marking.

4.2 Salt Substitutes

In addition to Sections 2, 3, 4.3 to 4.5 and 8 of the *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985) the following provisions shall apply:

- 4.2.1** The name of the product shall be "low sodium salt substitute" or "low sodium dietetic salt".
- 4.2.2** A complete list of ingredients shall be declared on the label. The amount of the cations (i.e. sodium, potassium, calcium, magnesium, ammonium and choline)/100 g m/m in the salt substitute mixture shall also be declared on the label.

5. METHODS OF ANALYSIS AND SAMPLING

For checking the compliance with this Standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling* (CXS 234-1999) relevant to the provisions in this Standard shall be used.