

CODEX STANDARD FOR COOKED CURED HAM
CODEX STAN 96-1981 (Rev. 1 - 1991)

1. SCOPE

This standard applies to products designated as "Cooked Ham" packaged in any suitable packaging material as defined in sub-sections 6.4 and 6.5 below.

It does not apply to cooked ham products with compositional characteristics different from those specified. These products shall be designated with a qualifying statement which describes the true nature in such a way that it does not mislead the consumer and that it does not lead to confusion with products covered by this Standard.

2. DESCRIPTION

The product shall be made of meat from the hind leg of a pig - divided transversely from the remainder of the side at a point not further anteriorly than the end of the hip bone. All bones and detached cartilage, tendons and ligaments shall be removed. Skin and fat may or may not be removed.

The meat shall be cured and may be smoked, spiced and/or flavoured.

The heat treatment to which the product has been subjected and the type of cure and packaging shall be sufficient to ensure that the product presents no public health hazard and remains wholesome under the conditions of storage, transport and sale as indicated in Sub-sections 6.4 and 6.5.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Essential Ingredients

- Uncured ham;
- Brine consisting of water and food-grade salt and sodium or potassium nitrite.

3.2 Optional Ingredients

- Sucrose, invert sugar, dextrose (glucose), lactose, maltose, glucose syrup (including corn syrup), honey;
- Spices, seasonings and condiments;
- Water soluble, aromatic hydrolyzed protein;
- Food grade gelatine.

3.3 Essential Quality Factors

3.3.1 Raw material - The ingredients from which the product is prepared shall be of a quality

suitable for human consumption and free from objectionable odours and flavours.

3.3.2 Final product - The product shall be clean and substantially free from staining and contamination from the container. The meat shall be uniformly and thoroughly cured and the product shall be capable of being sliced.

3.4 Meat Content

- Average percentage meat-protein on fat-free basis $\geq 18.0\%$
- Minimum percentage meat-protein on fat-free basis = 16.5%
(absolute minimum)

(For canned products the percentage of meat-protein is calculated on the total content of the can and corrected for gelatine, if added - see Sub-section 8.4).

4. FOOD ADDITIVES

Maximum Ingoing Amount

4.1 Preservatives

- 4.1.1 Nitrite, potassium and/or sodium salts 200 mg/kg total nitrite
expressed as sodium nitrite

Maximum Level Calculated on the Total Net of the Final Product

Content

- 4.1.2 Nitrite, potassium and/or sodium salts 125 mg/kg total nitrite
expressed as sodium nitrite

- 4.1.3 Potassium chloride Limited by Good Manufacturing Practice

4.2 Antioxidants

- 4.2.1 Ascorbic acid and its sodium salt } 500 mg/kg (expressed as ascorbic acid singly or in combination)
- 4.2.2 Iso-ascorbic acid and its sodium salt } 500 mg/kg (expressed as ascorbic acid singly or in combination)

4.3 Flavours

- 4.3.1 Natural flavouring substances and }
nature-identical flavouring substances } Limited by Good
Manufacturing Practice
defined in the Codex Alimentarius }
- 4.3.2 Smoke flavourings as evaluated by } Limited by Good Manufacturing Practice
JECFA }

4.4 Flavour Enhancers

- | | | |
|-------|------------------------|--|
| 4.4.1 | 5'-Guanylate, disodium | } Limited by Good Manufacturing Practice |
| 4.4.2 | 5'-Inosinate, disodium | } Limited by Good Manufacturing Practice |
| 4.4.3 | Monosodium glutamate | } Limited by Good Manufacturing Practice |

4.5 Acidity Regulators

- | | | |
|-------|----------------------|--|
| 4.5.1 | Citrate, sodium salt | Limited by Good Manufacturing Practice |
|-------|----------------------|--|

4.6 Water Retention Agents

- | | | |
|-------|--|--|
| 4.6.1 | Phosphates (naturally present plus added) ¹ | 8000 mg/kg (expressed as P ₂ O ₅) |
| 4.6.2 | Added phosphates (mono-, di- and poly-), sodium and potassium salts ² | 3000 mg/kg (expressed as P ₂ O ₅), singly or in combination |

4.7 Thickeners

- | | | |
|-------|--|--|
| 4.7.1 | Agar | } Limited by Good Manufacturing Practice |
| 4.7.2 | Carrageenan | } Limited by Good Manufacturing Practice |
| 4.7.3 | Alginates, potassium and/or sodium salts | 10 mg/kg |

4.8 Carry-Over

Section 3 of the Principle relating to the Carry-Over of Additives into Food, as set forth in Section 5.2, Volume 1 of the Codex Alimentarius shall apply.

5. CONTAMINANTS

Maximum Level

- | | | |
|-----|-----------|------------------------|
| 5.1 | Lead (Pb) | 0.5 mg/kg ³ |
| 5.2 | Tin (Sn) | |

¹ Natural phosphate (mg/kg P₂O₅) calculated as 250 x % protein.

² Having INS Nos. 339, 340, 450, 451 and 452.

³ Temporarily endorsed.

- 5.2.1 Tin (Sn): For products in tinfoil
containers 200 mg/kg²
- 5.2.2 Tin (Sn): For products in other
containers 50 mg/kg²

6. HYGIENE

6.1 It is recommended that the Recommended International Code of Hygienic Practice for Processed Meat and Poultry Products (Ref. No. CAC/RCP 13-1976 (Rev. 1, 1985)), the Recommended International Code of Hygienic Practice for Fresh Meat (CAC/RCP 11-1976), the Recommended International Code of Practice - General Principles of Food Hygiene (Ref. No. CAC/RCP 1-1969 (Rev. 2, 1985)) and, where applicable, the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. No. CAC/RCP 23-1979 (Rev. 1, 1989)) should apply.

6.2 All meat used in the manufacture of cooked cured ham shall have been subjected to the inspection processes prescribed in the Code of Hygienic Practice for Fresh Meat and the Code for Ante-Mortem and Post-Mortem Inspection of Slaughter Animals and for Ante-Mortem and Post-Mortem Judgement of Slaughter Animals and Meat (CAC/RCP 41-1993). It shall have been passed by an inspector as fit for human consumption. Meat shall not, subsequent to being examined by an inspector, have been exposed to contamination or processed or handled or subjected to the addition of any harmful substance, which renders it unfit for human consumption.

6.3 Raw or semi-processed meat and cooked cured ham shall be handled, stored or transported in an establishment in a manner that will protect the meat and the cooked cured ham from contamination and deterioration.

6.4 Cooked cured ham shall be packed in hermetically sealed containers in compliance with Sub-section 7.4 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods.

6.5 If cooked cured ham is heat treated before packaging it shall be packaged in such a way that contamination is kept to a minimum, so that the product will withstand spoilage and present no public health hazard under the conditions of handling, storage, transport and sale indicated on the label. The containers themselves shall not present any health hazard or permit contamination under normal conditions of handling. They shall be clean, and where applicable, show evidence of vacuum.

6.6 Cooked cured ham shall be thermally processed in compliance with Sub-sections 7.5 and 7.6.1 to 7.6.7 inclusive, of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods.

6.7 The cooling of the thermally processed filled and sealed containers shall be carried out in compliance with Sub-section 4.6.8 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods.

6.8 After thermal processing the fitted, sealed containers shall be handled in compliance with Sub-section 7.7 of the Recommended International Code of Hygienic Practice for Low-Acid and

Acidified Low-Acid Canned Foods.

7. LABELLING

The provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985), the following specific provisions apply:

7.1 The Name of the Food

7.1.1 The name of the food to be declared on the label shall be "Cooked Ham".

7.1.2 The name of the product shall include, as appropriate, the designation:

- "with skin"
- "in/with natural juice"
- "X added" applying to gelatine, agar, alginates or carrageenan
- "smoked"
- "smoking agent added".

7.1.3 A declaration that accurately describes the method of preparation, processing or presentation shall be given so as to appear simultaneously visible with the name of the product if its omission would mislead the consumer.

7.2 Date Marking and Storage Instructions

7.2.1 For shelf-stable products the date of minimum durability shall be declared by the year.

7.2.2 For products which are not shelf-stable, i.e. which may be expected not to keep for at least 18 months in normal conditions of storage and sale, and which are packaged in a container ready for offer to the consumer or for catering purposes, the date of minimum durability shall be declared by day, month and year.

7.2.3 For products which are not shelf-stable and which are packaged in containers not sold directly to the consumer or for catering purposes, adequate storage and distribution instructions shall be declared.

7.3 Labelling of Non-Retail Containers

Information, as appropriate needed for labelling of retail containers is given either on the non-retail containers or in accompanying documents except that the name of the food, date marking and storage instructions, lot identification and the name and address of the manufacturer or packer shall appear on the non-retail container.

However, lot identification, and the name and address of the manufacturer or packer, may be replaced by an identification mark provided that such mark is clearly identifiable with the

accompanying documents.

8. METHODS OF ANALYSIS

See Codex Alimentarius Volume 13.

8.1. Protein

Recommended method: Determination of Nitrogen Content of Meat and Meat Products, ISO Recommendation R 1443.

8.2 Fat

Recommended method: Determination of Total Fat Content of Meat and Meat Products, ISO Recommendation R 1443.

8.3 Nitrite

Recommended method: ISO/DIS 2918.

8.4 Correction for Added Gelatine

For products in which the amount of added gelatine is not known, 0.5% protein should be deducted from the percentage protein expressed on a fat-free basis.

8.5 Lead

According to AOAC (1990, 15th Edition) Lead in Food by General Dithizone Method, 934.07.

8.6 Tin

According to AOAC (1990, 15th Edition), Tin in Canned Foods by Atomic Absorption Spectrophotometric Method, 985.16.