CHAPTER 2, STANDARD 4

CANNED CRAB STANDARD

1. INTRODUCTION

This standard for canned crab derives its authority from the Fish Inspection Regulations. It defines minimum acceptability of canned crab for taint, decomposition, unwholesomeness and other requirements, other than weight, as defined in the Fish Inspection Act and Regulations and describes methods for determining that acceptability.

2. SCOPE

This standard applies to canned and/or heat processed crab in hermetically sealed containers and prepared from species of the infra-order Brachyura of the order Decapoda and all species of the family Lithodidae.

This standard does not apply to specialty products where the crab meat constitutes only a part of the edible contents.

Crab must be alive before processing and be prepared from sound, wholesome raw material processed using current good manufacturing practices.

Documents used to determine good manufacturing practice and compliance include:

1) International Code of Practice for Low Acid Canned Food CAC/RCP 23-1979.

2) Metal Can Defects Identification and Classification Manual, Canadian Food Inspection Agency.

3) Codex Alimentarius Sampling Plans for Prepackaged Foods (AQL 6.5) CAC/RM 42-1969.

4) Code of Practice - General Principles of Food Hygiene for Use by the Food Industry in Canada, Health Canada.

3. NOMENCLATURE

a) The name of the product shall be "Crab Meat" and may be preceded or followed by the common or usual name applied to the species and meeting Canadian Regulations.

b) Where a can of crab meat is labelled according to the percentage of leg meat in twin or single face packs, the composition of the leg meat shall be expressed as a percentage of the drained weight.

c) Any presentation other than twin-face leg pack or single-face leg pack must have the style of pack accurately described on the label (eg. Chunk Crab Meat, Salad Crab Meat).

d) Any additional descriptive terms used must accurately reflect the contents of the can.

4. FORMS OF PRODUCT PRESENTATION

4.1 Canned crab meat may be presented as:

a) Twin Face Leg Pack
In which the top and bottom of the contents consist of well-filled and neatly arranged leg meat and the inner portion consists of salad or flaked crab meat.

b) Single Face Leg Pack
In which one end of the contents consists of well-filled and neatly arranged leg meat and the remaining portion of salad or flaked crabmeat.

c) Chunk Pack
In which at least 50% of the contents consists of solid pieces or chunks of crab meat, the remainder being flakes, and is accurately described on the label.

d) Salad Pack
In which the contents consists of flakes, shoulder meat and claw or broken leg meat portions, and is accurately described on the label.

4.2 Other presentations

Any other presentation of the product may be permitted provided that it:

a) is sufficiently distinctive from the forms of presentation set out above; and

b) meets all other Canadian regulatory requirements; and

c) is adequately described on the label and in accordance with all regulatory labelling requirements.

5. SAMPLING

The sampling and tolerance plans at the front of this manual shall be used to determine the acceptability of the lot. The sampling plans dictate the minimum sample size to be taken. If necessary, in the opinion of the inspector, more than the minimum sample size specified may be taken.

5.1 Sampling of lots for the sensory examination of the product shall be in accordance with the FAO/WHO Codex Alimentarius Sampling Plan for Prepackaged Foods (AQL 6.5) (CAC/RM 42-1969) except that a lower acceptance number for decomposition shall be used as indicated in the sampling tables.

The tables specify the minimum number of sample units to be used for the following types of inspections:

a) Level I - Sensory examinations of all products subject to inspection other than lots which are subject to reinspection.

b) Level II - Sensory examinations of all products which are under reinspection.

5.2 Size of Sample Unit

The sample unit shall consist of a can of crab and the entire contents thereof.

6. DESCRIPTION OF DEFECTS

6.1 Taint

A unit will be considered tainted when any of the following conditions are found:

a) Rancid
Odour characterized by the distinct or persistent odour of oxidized oil; or

Flavour characterized by that of oxidized oil which leaves a distinct bitter aftertaste.

b) Abnormal
Distinct and persistent uncharacteristic odours or flavours such as iodine, burnt, acrid or metallic, and not defined as rancid or decomposed; or

Flavour or odour resulting from the improper addition or mixing of ingredients (eg. salt or citric acid).

6.2 Decomposition

A unit will be considered decomposed when any of the following conditions are found:

a) Odour or flavour
Persistent, distinct and uncharacteristic odour or flavour including but not limited to the following:

sickly-sweet, fruity, vegetable, musty, sour, faecal, ammonia, hydrogen sulphide, putrid.

b) Discolouration
Distinct discolouration characterized by a blue, black, orange or yellow colour to the meat.

c) Texture
Breakdown of muscle structure characterized by:

1) muscle structure which is very soft or mushy; and/or
2) muscle fibres, particularly in the legs, which are short and very shredded; and/or
3) muscle structure which is very tough or dry.

6.3 Unwholesome

a) Critical Foreign Material

A lot will be considered defective when any of the following conditions are found:

the presence of any material which has not been derived from crab (and packing media) and which poses a threat to human health (such as glass, etc.); or

distinct and persistent odour or flavour of any material which has not been derived from crab (and packing media) and which poses a threat to human health (such as solvents, fuel oil, etc.).

b) Foreign Material

A unit will be considered defective when the following condition is found:

the presence of any material which has not been derived from

crab (and packing media) but does not pose a threat to human health (such as insect pieces, sand, etc.).

c) Other Defects

A unit will be considered defective when any of the following conditions are found:

1) **Struvite Crystals** (magnesium ammonium phosphate crystals)
Any struvite crystal greater than 5 mm in length.

2) **Sulphide Blackening** (smut)
Staining of the meat in excess of 5% of the drained contents.

3) **Undesirable Parts**
Shell, gills, viscera or cartilage in excess of 2% of the drained contents.

6.4 Style of Presentation

A unit will be considered defective for style of presentation if any of the following conditions occur:

a) it fails to meet the declared percentage of leg meat when examined according to the method outlined in section 7; or

b) in the case of chunk pack, greater than 50% of the contents is flaked, when examined by the method outlined in section 7.

7. EXAMINATION METHODS

7.1 Complete external can examination.

7.2 Open can and complete drained weight determination, according to defined procedures. A drained weight determination should only be conducted on samples which have equilibrated at room temperature for several hours. This will ensure that any gelled brine has liquified. Where parchment paper has been wrapped around the product, care should be taken to ensure product is free to drain properly.

7.3 Carefully remove product, and parchment paper where necessary, from can. Examine can interior for presence of foreign material, sulphide blackening, struvite, and corrosion or other can interior defects.

7.4 Examine liquid and surface of crab for presence of struvite crystals, sulphide blackening, foreign material or undesirable parts.

7.5 Examine each unit for style of presentation as required:

Where percentage of leg meat is declared, collect leg meat separately and determine compliance using the following formula:

$$\frac{\text{Weight of leg meat in unit}}{\text{Declared drained weight of unit}} \times 100 = \% \text{ leg meat}$$

For packs labelled as "chunk", collect chunks (pieces not less than 10 mm in each direction) separately and determine compliance as follows:

$$\frac{\text{Weight of chunks in unit}}{\text{Declared drained weight of unit}} \times 100 = \% \text{ chunk}$$

7.6 Assess odour. Assess flavour and texture as required.

7.7 Record any defect for that unit on the appropriate worksheet.

8. CLASSIFICATION OF "DEFECTIVES"

A sample unit which contains defects as described in section 6 is classified as a "defective".

9. LOT ACCEPTANCE

A lot will be considered unacceptable when:

a) any single instance of critical foreign material occurs; or

b) the total number of sample units found defective for taint, decomposition or unwholesomeness, individually or in combination, exceeds the acceptance number for the sample size designated in the sampling plans; or

c) the total number of sample units found defective for decomposition exceeds the acceptance number shown in parentheses for the sample size designated in the sampling plans; or

d) the total number of sample units found defective for standards of identity (style of presentation), exceeds the acceptance number for the sample size designated in the sampling plans.