

Tentative Translation

**JAS**  
**1238**

JAPANESE AGRICULTURAL  
STANDARD

---

---

**Chilled meat ball**

Date of Establishment: 1987-9-5

Date of Revision: 2019-10-18

---

---

Ministry of Agriculture, Forestry and Fisheries

Precautions for using English version of JAS

This English translation has been made by the drafting party etc., based on the original text (Japanese version), and has been posted on the website of the Food and Agricultural Materials Inspection Center (FAMIC), Incorporated Administrative Agency, with permission of the publisher of the original text (Ministry of Agriculture, Forestry and Fisheries).

The translation is made in consideration of technical contents, but it is aimed to provide information when using JAS original text, and is not recognized as having the same effects as the original text.

If there is any doubt in the translation, please follow the original.

FAMIC is not responsible for inconvenience by using only the translation.

Food and Agricultural Materials Inspection Center, Incorporated Administrative Agency

<b>Contents</b>	<b>Page</b>
<b>1 Scope.....</b>	<b>1</b>
<b>2 Normative references.....</b>	<b>1</b>
<b>3 Terms and definitions .....</b>	<b>1</b>
<b>4 Quality.....</b>	<b>2</b>
<b>5 Test methods .....</b>	<b>4</b>
<b>5.1 General .....</b>	<b>4</b>
<b>5.2 Crude fat.....</b>	<b>4</b>

## **Foreword**

This Japanese Agricultural Standard has been revised by the Minister of Agriculture, Forestry and Fisheries through deliberations at the Council for the Japanese Agricultural Standards as the result of proposal for revision of Japanese Agricultural Standard submitted by Food and Agricultural Materials Inspection Center, Incorporated Administrative Agency with the original bill being attached, based on the provision of Article 4, paragraph (1) of the Act on Japanese Agricultural Standards as applied mutatis mutandis pursuant to Article 5 of the Act.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The Minister of Agriculture, Forestry and Fisheries and the Council for the Japanese Agricultural Standards are not responsible for identifying any of such patent rights, published patent application or utility model rights.

## Chilled meat ball

### 1 Scope

This document specifies the quality of chilled meat ball.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. The latest edition of the referenced document (including any amendments) applies.

CODEX STAN 192, *General Standard for Food Additives*

JIS R 3503, *Glass apparatus for chemical analysis*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

##### **edible meat**

beef, pork, horse meat, mutton or poultry meat

#### 3.2

##### **offal and edible part**

liver, kidneys, heart, lungs, spleen, stomach, gut, oesophagus, brain, ears, snout, skin, tongue, tail, diaphragm, blood and fat layers

#### 3.3

##### **binder**

substance such as bread crumbs, flour, powdered vegetable proteins, etc. which is to be added to minced *edible meat* (3.1)

#### 3.4

##### **sorts of sugar**

sugar, molasses and sugars

#### 3.5

##### **sauce**

seasoning solution (including those contain solid content of vegetable, etc.) prepared with animal or plant extracts, tomato paste, fruit puree, salt, *sorts of sugar* (3.4), spices, etc.

#### 3.6

##### **chilled meat ball**

either of the following, packed and kept in cold storage within the chilling temperature range:

- a) product prepared by mixing minced *edible meat* (3.1) with or without minced or shredded *offal and edible parts* (3.2) of cattle, pig, horse, sheep or poultry [limited to the mixture of which the amount of offal and edible parts used does not exceed the amount of *edible meat* (3.1) used] or vegetable proteins which have meat-like tissue; kneading with or without chopped vegetables such as onions, *binder* (3.3), seasonings, spices, etc.; forming the kneaded mixture into, for example, ball; deep-frying it with edible

oils and fats, broiling it or steaming it [limited to the products of which the weight percentage of *edible meat* (3.1) in the ingredients and the additives exceeds 50 %, and, the weight percentage of vegetable protein in the ingredients and the additives is 20 % or less];

- b) a) with *sauce* (3.5)

#### 4 Quality

The quality of chilled meat ball shall conform to the quality criteria for each classification of Table 1.

**Table 1 — Quality criteria for each classification of chilled meat ball**

Category	Criteria	
	Superior grade	Normal grade
Quality of the content	The color and luster, flavor and properties being excellent	The color and luster, flavor and properties being good
Ingredients	<p>Only the following ingredients may be used:</p> <ul style="list-style-type: none"> <li>a) <b>edible meat</b>, beef, pork, horse meat, mutton and poultry meat;</li> <li>b) <b>offal and edible part</b>, fat layers of cattle and pig</li> <li>c) <b>edible meat products</b>, bacons and hams;</li> <li>d) <b>binder</b>, bread crumbs, flour, starch, powdered vegetable protein, eggs (including powdered eggs; the same applies hereinafter), milk powder, milk protein and crude gelatine;</li> <li>e) <b>vegetables</b>, vegetables, fruits, mushrooms, seeds and seaweeds;</li> <li>f) <b>edible oils and fats</b>;</li> <li>g) <b>seasonings</b>, sorts of sugar, honey, processed tomato products, salt, <i>miso</i>, <i>shoyu</i>, worcester sauces, brewed vinegar, protein hydrolysate, animal and plant extracts, <i>mirin</i>-like seasonings, fruit juice and fruit beverage, alcoholic beverage, <i>mirin</i>, rice fermented seasonings, etc.;</li> <li>h) <b>dairy products</b>, cheese;</li> <li>i) <b>spices</b>.</li> </ul>	<p>Only the following ingredients may be used:</p> <ul style="list-style-type: none"> <li>a) <b>edible meat</b>, same as the criterion for the superior grade;</li> <li>b) <b>offal and edible part</b>, skin, tongues, diaphragms and fat layers of cattle, pig, horse, sheep, and poultry;</li> <li>c) <b>edible meat products</b>, same as the criterion for the superior grade;</li> <li>d) <b>vegetable protein with meat-like tissue</b>, granular vegetable proteins and fibrous vegetable proteins;</li> <li>e) <b>binder</b>, same as the criterion for the superior grade;</li> <li>f) <b>vegetables</b>, same as the criterion for the superior grade;</li> <li>g) <b>edible oils and fats</b>;</li> <li>h) <b>seasonings</b>, same as the criterion for the superior grade;</li> <li>i) <b>dairy products</b>, same as the criterion for the superior grade;</li> <li>j) <b>spices</b>.</li> </ul>

**Table 1 — Quality criteria for each classification of chilled meat ball (continued)**

Category	Criteria	
	Superior grade	Normal grade
Additives	<p>The additives shall be as follows:</p> <p><b>a)</b> They conform to the provisions of 3.2 of CODEX STAN 192, and the conditions of use conform to the provisions of 3.3 of the document;</p> <p><b>b)</b> The amounts of use are accurately recorded and the record is kept;</p> <p><b>c)</b> Information that the additives conform to the provision of a) is provided to general consumers by one of the following methods; provided, however, that this does not apply to the cases where additives are added to products for business use:</p> <ol style="list-style-type: none"> <li><b>1)</b> methods of making it available for public inspection via the internet;</li> <li><b>2)</b> methods of displaying it on brochures, leaflets and any other publications where it is easily seen by general consumers;</li> <li><b>3)</b> methods of displaying it at a place where it is easily seen by general consumers in stores;</li> <li><b>4)</b> methods of providing it to general consumers at their request, while clearly indicating the contact address on the products.</li> </ol>	
Edible meat	The weight percentage of edible meat in the ingredients and additives (if a chilled meat ball is with sauce, their weight is excluded; the same applies hereinafter) being 70 % or more; however, for those with the weight percentage of eggs and vegetables, etc. in the ingredients and the additives being 10 % or more, the weight percentage of edible meat in the ingredients and the additives being 60 % or more, and the weight percentage of beef or pork in edible meats being 50 % or more	The weight percentage of edible meat in the ingredients and additives being more than 50 %
Vegetable protein with meat-like tissue	Not being included	The weight percentage of vegetable protein with meat-like tissue in the ingredients and the additives being 20 % or less
Binder(excluding eggs)	The weight percentage of binder in the ingredients and the additives being 15 % or less	
Crude fat	The weight percentage of the crude fat in the product (for those with additional sauce added to or mixed with main materials, the sauce being removed) being 25 % or less, when tested by the method specified in 5.2	
Net contents	Conform to the declared weight	

**Table 1 — Quality criteria for each classification of chilled meat ball (continued)**

Category	Criteria	
	Superior grade	Normal grade
Condition of a container or a packaging	Being made of materials with moisture-proofing and enough firmness, and, for those to be heated with being wrapped while cooking, being sealed with heat resistant materials	

## 5 Test methods

### 5.1 General

Reagents and apparatus used for the testing shall be as follows:

- a) **Reagents**, conforming to the standards such as the special grade of the Japanese Industrial Standards.
- b) **Constant temperature drying oven**, capable of adjusting the temperature with a precision in temperature adjustment of within  $\pm 2$  °C, when setting the constant temperature drying oven at 100 °C.
- c) **Desiccator**, specified in JIS R 3503, containing silica gel as a desiccant.
- d) **Soxhlet extractor**, specified in JIS R 3503, or of equivalent or higher quality.

### 5.2 Crude fat

#### 5.2.1 Preparation of sample

Prepare sample (in the case of a meat ball with sauce, the sauce shall be removed with a cloth) by grinding and homogenizing.

#### 5.2.2 Extraction of fat

The extraction of fat shall be as follows:

- a) Dry an extraction flask with a constant temperature drying oven, which is preset at 100 °C for 1 h, put the flask in a desiccator and cool it down to room temperature, repeat a weighing operation and measure the constant weight;
- b) Put 15 g of sodium sulfate into a filter paper thimble, accurately weigh 4 g of the prepared sample into the thimble, and mix and homogenize the sodium sulfate and the sample with a glass rod. Put absorbent cotton in the thimble as if to cover the sample, in which the glass rod remains; dry it with the constant temperature drying oven which is preset at 100 °C for 1 h; and cool it down to room temperature in the desiccator;
- c) Pour approximately 150 mL of diethyl ether into the extraction flask of a); connect the flask to an extraction tube of Soxhlet extractor, which contains the filter paper thimble of b); attach a cooling tube to the extraction tube; adjust the temperature of a constant temperature water bath to have the diethyl ether fall 5 to 6 drops per second, with seeing 55 °C as a rough guide, and extract the fat for 4 h;
- d) Finish the extraction, detach the extraction flask, and remove the diethyl ether. Dry the flask for 1 h with the constant temperature drying oven which is preset at 100 °C, cool it down to room temperature in the desiccator, and weigh the flask.

#### 5.2.3 Calculation

The crude fat content shall be given by the following formula:



$$\text{Crude fat content (\%)} = \frac{W_2 - W_1}{W_0} \times 100$$

where

$W_0$  is the mass of the sample (g);

$W_1$  is the mass of extraction flask before extraction (g);

$W_2$  is the mass of extraction flask after extraction (g).