From the Ministry of Agriculture and Rural Affairs and the Ministry of Health

Turkish Food Codex
Communiqué on Edible Casein and Caseinates
(Communiqué No: 2001/22)

Objective

**Article 1** — The objective of this Communiqué is to determine the specifications of casein and caseinates intended for human consumption in order to provide production, preparation, processing, preservation, storing, transportation and marketing under proper technical and hygienic conditions.

Scope

**Article 2** — This Communiqué covers only lactoproteins; casein and caseinates presented for human consumption.

Legal basis

**Article 3** — This Communiqué has been prepared in accordance with "Turkish Food Codex Regulation" published in the Official Gazette, dated 16/11/1997, reiterated No. 23172

Abbreviations

**Article 4** – For the purpose of this Communiqué;

a) Casein means edible casein,
b) Caseinate means edible caseinate.
Definitions

Article 5 — For the purpose of this Communiqué;

a) Casein means the milk protein insoluble in water, acquired by precipitation, washing, drying and grinding of main protein of skimmed milk,

- Edible acid casein means the casein acquired by the utilization of the acids indicated in item “d” of Article 6 in its technology,

- Edible rennet casein means the casein produced by the utilization of kemosene enzyme or other milk coagulating enzymes convenient for human consumption, in its technology,

b) Caseinate means the product acquired by drying caseins, after neutralizing them with processing aids.

Product Specifications

Article 6 — The specifications of the products within the scope of this Communiqué are as follows:

a- Casein and caseinates shall have particular taste and odour.

b- The color of the products covered in this Communiqué may range from white to light cream. The product shall not contain any lumps that are resistant to be compressed between two fingers.

c- No impurity should exist in a 25 gram sample of casein and caseinates taken for impurity analysis.
d- Lactic acid bacteria, whey, lactic acid, hydrochloric acid, sulfuric acid, citric acid, acetic acid and orthophosphoric acid innocuous to human health may be utilized in the production of acid casein, as per technology.

e- Kemosene or other milk coagulating enzymes innocuous to human health may be utilized in the production of rennet casein, as per technology.

f- Processing aids, sodium, potassium, calcium, ammonium and magnesium hydroxides, carbonates, phosphates and citrates innocuous to human health may be utilized in the production of caseinates, as per technology.

g- Caseinates other than calcium caseinates shall be soluble almost completely in distilled water.

h- Other specifications of the products covered in this Communiqué are given in Annex - 1.

Additives

**Article 7** — The amount of the additives utilized in the products covered in this Communiqué must comply with the provisions of “Additives” section of Turkish Food Codex Regulation.

Contaminants

**Article 8** — The amount of the contaminants in products covered in this Communiqué must comply with the provisions of "Contaminants" section of Turkish Food Codex Regulation. Besides, at least 1 mg of lead may exist in a kilogram of casein and caseinates.

Pesticide Residues

**Article 9** — The tolerable pesticide residue limits for the products covered in this Communiqué must comply with the Codes of Application for Pesticide Residue Limits specified in “Pesticide Residues” section of “Turkish Food Codex Regulation”.
Tolerance Levels for Veterinary Drugs

Article 10 – The residue levels for veterinary drugs in the products covered in this Communiqué must comply with those specified in the chapter “Tolerance Levels for Veterinary Drugs” section of Turkish Food Codex Regulation.

Hygiene

Article 11 — The products that fall within the scope of this Communiqué must be produced according to the general provisions specified in “Hygiene” section of Turkish Food Codex Regulation.

Establishment Specifications

Article 12 – Establishments producing the products covered in this Communiqué shall comply with the specifications specified in the chapter “Specifications of Establishments” of Turkish Food Codex Regulation.

Packing, Labeling and Marking

Article 13 — The products covered in this Communiqué must be packaged, labeled and marked according to the general provisions specified in the chapter “Packing and Labeling-Marking” section of Turkish Food Codex Regulation. In addition to these provisions;

- Product name must be given as sodium caseinate, potassium caseinate pursuant to the definitions in Article 5 and the production technology and product specifications given in Article 6.

- In case that the products covered in this Communiqué exist in mixture form, "mixture of ……. " statement must be indicated in degreasing ratio.

- In case of existence of casein and caseinates, type of caseinates must be indicated.
Transportation and Storage

Article 14 — The transportation and storage of the products covered in this Communiqué shall comply with the general provisions in “Transportation and Storage of Foods” section of Turkish Food Codex Regulation.

Sampling and Methods of Analysis

Article 15 — Sampling must be made according to the provisions specified in “Sampling and Methods of Analysis” section of Turkish Food Codex Regulation for the products covered in the Communiqué and samples must be analyzed according to the internationally adopted methods.

Registration and Inspection

Article 16 — The establishments producing, storing, packing and selling the products covered in this Communiqué are obliged to obey the provisions of this Communiqué during registration, authorization, importation, control and inspection. The establishments that do not obey these provisions are subject to legal procedure according to the Decree Law No 560, dated 24/6/1995, on Production, Consumption and Inspection of Foodstuffs.

Inspection

Article 17 — Implementation of the provisions of this Communiqué is inspected by the Ministry of Agriculture and Rural Affairs and the Ministry of Health according to the provisions of the Decree Law No 560, dated 24/6/1995.

Provisional Article 1 — Presently active establishments producing and selling the products covered in this Communiqué are obliged to obey the provisions of this Communiqué within 1 year following its publication.
Enforcement

Article 18 — This Communiqué enters into force on the date of publication.

Execution

Article 19 — The provisions of this Communiqué are executed by the Minister of Agriculture and Rural Affairs and the Minister of Health.
### ANNEX – 1

**Chemical and Physical Specifications of Casein and Caseinates**

<table>
<thead>
<tr>
<th></th>
<th>Acid Casein</th>
<th>Rennet Casein</th>
<th>Caseinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum humidity content</td>
<td>10 % by weight</td>
<td>10 % by weight</td>
<td>8 % by weight</td>
</tr>
<tr>
<td>Minimum content of milk protein as dry matter *</td>
<td>90 % by weight</td>
<td>84 % by weight</td>
<td>--</td>
</tr>
<tr>
<td>Minimum casein content in milk protein</td>
<td>95 % by weight</td>
<td>95 % by weight</td>
<td>88 % by weight</td>
</tr>
<tr>
<td>Maximum milk butter in dry matter</td>
<td>2.25 % by weight</td>
<td>2 % by weight</td>
<td>2 % by weight</td>
</tr>
<tr>
<td>Maximum free acid (ml 0.1 N NaOH / g)</td>
<td>0.27</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Maximum ash content (P₂O₅ inclusive)</td>
<td>Minimum 2.5 % by weight</td>
<td>Minimum 7.5 % by weight</td>
<td>--</td>
</tr>
<tr>
<td>Maximum anhydrite lactose content</td>
<td>1 % by weight</td>
<td>1 % by weight</td>
<td>1% by weight</td>
</tr>
<tr>
<td>Maximum sediment content 25 g / mg (burning particle inclusive)</td>
<td>22.5</td>
<td>22.5</td>
<td>22.5</td>
</tr>
<tr>
<td>pH value</td>
<td>--</td>
<td>--</td>
<td>6 – 8</td>
</tr>
</tbody>
</table>

* Milk Protein: Total nitrogen content determined by Kjeldahl method x 6.38