National Standards of People’s Republic of China

GB 10770—2010

National Food Safety Standard

Canned complementary foods for infant and young children

Issued on: 2010-03-26

Implemented on: 2011-04-01

Issued by Ministry of Health of the People’s Republic of China
Preface

This standard is adopted according to the part of Codex Stan 73-1981 (修訂：1985，1987，1989) Codex Standard for Canned Baby Food; This standard is non-equivalent with CODEX Stan 73-1981


Comparing with previous six National Standards, major changes are as follows:

—Integrate the above six standards to one, titled as “Canned complementary foods for infant and young children”;

—Revise the clauses in this standards.

The edition status of standards replaced by this standard are as follows:

—GB 10775-1989;
—GB 10776-1989;
—GB 10777-1989;
—GB 10778-1989;
—GB 10779-1989;
—GB 10780-1989.
Canned complementary foods for infant and young children

1. Scope
   This Standard applies to canned complementary foods for child above 6 months

2. Normative reference
   All references quoted into this standard are necessary. As for the dated references, all the amendments or revisions after them are not applicable to this standard. As for the references that are not dated, their most recent editions are applicable to this present national standard.

3. Terms and definition
   3.1 Infants
      persons of 0 ~ 12 months of age
   3.2 Young Children
      persons of 12 ~ 36 months of age
   3.3 Canned Complementary Foods for Infant and Young Children
      foods made through raw materials pretreatment, filling, sealing, sterilization or aseptic filling to achieve commercial sterilization and can be storage in a normal temperature, which are applicable to normal infants of 6 months old and onward.

4. Products classification
   4.1 Mash (Paste) Canned Foods
      Means slurry (paste) canned food for infant and young children which does not need chewing before swallow
   4.2 Grain Canned Foods
      Refer to canned food for infant and young children which contains particles below 5mm. It should ensure that the particle size will not cause baby’s swallow trouble.
   4.3 Juice Canned Foods
      Refer to canned foods for infant and young children in liquid form.

5. Technical Requirements
   5.1 Requirements for Raw Materials
      The raw materials should comply with the relevant safety standard or other related standards; should ensure infant and young children’s safety and meet its nutrition needs. Those materials used should not harm to infant and young children’s nutrition and health.
The processing water which directly contacts with products should be compliance with the requirements of GB 5479.

Raw materials of carcass, poultry and fish should remove bone, squama and thorn which are not suitable for infant and young children; raw materials from plant should remove crude fiber when necessary.

Raw materials of fruits and vegetables or processed products thereof should not be spoiled and be with high quality; raw materials of carcass, poultry and fish and processed products thereof should be used in high quality of fresh or frozen ones.

Raw materials treated by irradiation should not be used.

No hydrogenated vegetable oil is allowed.

No spices is allowed.

5.2 **Sensory requirement:** should meet the requirements listed in table 1

Table 1 Sensory Evaluation Requirements

<table>
<thead>
<tr>
<th>Items</th>
<th>Requirements</th>
<th>Testing method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Should compliance with products own characteristics</td>
<td></td>
</tr>
<tr>
<td>Taste and flavor</td>
<td>Should compliance with products own characteristics</td>
<td>GB/T10786</td>
</tr>
<tr>
<td>Texture</td>
<td>Should compliance with products own characteristics, no visible foreign body, no bone, squama and thorn which are not suitable for infant and young children</td>
<td></td>
</tr>
</tbody>
</table>

5.3 **Physical & chemical requirements:** should meet requirements in table 2

Table 2: Physical requirements

<table>
<thead>
<tr>
<th>Items</th>
<th>Requirements</th>
<th>Testing Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingredients %</td>
<td>≥ 40d</td>
<td>Calculated on recipe</td>
</tr>
<tr>
<td>Protein/(g/100kJ(kcal))</td>
<td>≥ 1.7(7)</td>
<td>GB5009.5</td>
</tr>
<tr>
<td>Fat/(g/100kJ(kcal))</td>
<td>≤ 1.4(6)</td>
<td>GB/T5009.6</td>
</tr>
<tr>
<td>Total Sodium (mg/100g)</td>
<td>200</td>
<td>-</td>
</tr>
</tbody>
</table>

* carcass, poultry, fish or pluck is the only ingredient except water in the product or is the only resource of protein, exclude juice products

* products are produced by carcass, poultry, fish or pluck (or in combination) mixed with fruit or vegetable, exclude juice products

* the products excluded from a and b

* the percentage m/m of the ingredients like carcass, poultry, fish or pluck ect

* the percentage of most abundant ingredient accounted for a of the total mass

* energy calculation refers to GB10769

* only applicable for fruits products
5.4 Contaminants limit: should meet the requirements in table 3

Table 3  Contaminant limits

<table>
<thead>
<tr>
<th>Item</th>
<th>Index</th>
<th>Testing Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead, mg/kg</td>
<td>Aquatic product and liver canned foods for infant and young children ≤</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>Other canned foods for infant and young children ≤</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inorganic-Arsenic, mg/kg</td>
<td>Aquatic product and liver canned foods for infant and young children ≤</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>Other canned foods for infant and young children ≤</td>
<td>0.10</td>
</tr>
<tr>
<td>Mercury, mg/kg</td>
<td>≤</td>
<td>0.02</td>
</tr>
<tr>
<td>Tin a, mg/kg</td>
<td>≤</td>
<td>50</td>
</tr>
<tr>
<td>Nitrate b (based on NaNO₃), mg/kg</td>
<td>≤</td>
<td>200</td>
</tr>
<tr>
<td>Nitrite c (based on NaNO₂), mg/kg</td>
<td>≤</td>
<td>4</td>
</tr>
</tbody>
</table>

a is only limited to the products packed with tin can
b is not applicable for the products which use vegetable and fruits as major raw materials and contains small amount of other ingredients
c is not applicable for Soya based canned foods for infant and young children

5.5 Microorganisms requirements

Microorganisms requirements should be compliance with Commercial Sterilization of Canned Food, tested according to GB/T4789.26; mould in tomato juice product should meet the specification of Table 4.

Table 4  Microorganisms requirements

<table>
<thead>
<tr>
<th>Item</th>
<th>Other Information</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mold / (% visual field)</td>
<td>tomato juice</td>
<td>≤ 40</td>
</tr>
</tbody>
</table>

5.6 Food Additives

5.6.1 Food additives and nutrients fortificator should be in line with relevant safety standards and regulation

5.6.2 Food additives and nutrients fortificator should comply with GB 2760 and GB14880.

6 Others

6.1 labeling should in line with requirements in GB13432. The nutritive value should added the column "content in 100kJ".
6.2 Should have children's ages for the suitable feeding, instruction for preparation and notes for feeding
6.3 The content of puree of fruits and vegetable should be declared for the juice products