Technical Issues

Legislative Proposal Relating to Formula Products and Foods Intended for Infants and Young Children under the Age of 36 Months in Hong Kong

Technical Meeting with Trade
15 November 2012
Overview

1. Nutritional composition requirements for infant formula
   a) Guidance Upper Levels (GUL)
   b) Additional requirements on selected nutrients

2. Display of nutrition label
   a) Order of listing nutrients
   b) Rounding Rules

3. Tolerance limits
1. Nutritional composition requirements for infant formula
a) Guidance Upper Limits (GUL)

Concerning compositional requirement for infant formula, Codex has established a GUL instead of maximum permitted level for some nutrients. 

GUL:

- For nutrients without sufficient information for a scientific-based risk assessment
- Derived on basis of meeting nutritional requirement and established history of apparent safe use
- Should usually not be exceed unless:
  - higher nutrient levels cannot be avoided due to high or variable contents in constituents of infant formula; or
  - due to technological reasons
a) Guidance Upper Limits (GUL)

- GULs were established for 22 of 33 nutrients considered as essential composition of infant formula by Codex.
- To consider whether and how to establish content requirements for nutrients with only GULs as the upper bound of the content requirement for nutrients without a maximum level established by Codex.
b) Additional requirements on selected nutrients

Apart from the main requirements on minimum and/or maximum nutrient contents, detailed requirements such as the proportion of selected nutrients or their constituents have also been stipulated in the Codex standards, e.g.-

- Lauric and myristic acids combined shall not exceed 20% of total fatty acids
- Trans fatty acids shall not exceed 3% of total fatty acids
- Ratio of linoleic/\(\alpha\)-linolenic acid should be 5:1 to 15:1
- Ratio of calcium/phosphorus should be 1:1 to 2:1
2. Display of nutrition label
a) Order of listing nutrients

Order of declaring nutrition information as required by Codex is as follow-

Infant formula:
   a) Energy, protein, carbohydrate, fat;
   b) Each vitamin, mineral, choline as listed in para 3.1.3 of Codex Stan 72-1981; and any other optional ingredients prescribed by Codex in the same standard

Follow-up formula:
   a) Energy;
   b) Protein, carbohydrate, fat;
   c) Each vitamin, mineral and any optional ingredient as listed in Section 3.3.2 of Codex Stan 156-1987
a) **Order of listing nutrients**

- **Processed cereal-based foods:**
  a) Energy, protein, carbohydrate, fat;
  b) Each vitamin and mineral specified in Codex Stan 074-1981;
  c) Any other nutritional information required by national legislation

- **Canned baby foods:**
  a) Energy, protein, carbohydrate, fat;
  b) Any other nutritional information required by national legislation; each vitamin and mineral added
a) Order of listing nutrients

- Establishing requirement on the order of listing nutrients on the nutrition label may facilitate consumers comprehending the information and comparing products.
- Order of listing is also specified in some jurisdictions (e.g., infant formula in US).
- Comments are sought on this issue.
b) Rounding rules

- Rounding nutrient values is one of the steps in formulating nutrition labels.
- It involves the work of translating the results of nutrient analysis to labelling value of nutrients on food labels.
- Currently there is no internationally recognized rounding rules for nutrition information on food labels (i.e., not specified in relevant Codex standards).
- Rounding rules have been established for general prepackaged foods-- described in the *Technical Guidance Notes on Nutrition Labelling and Nutrition Claims*.
- Comments are sought on this issue.
b) Rounding rules

Existing rounding rules for general prepackaged foods

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Unit</th>
<th>Round to</th>
<th>Definition of “0”² (per 100 g/mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>kcal or kJ</td>
<td>1</td>
<td>≤ 4 kcal or 17 kJ</td>
</tr>
<tr>
<td>Protein</td>
<td>g</td>
<td>0.1</td>
<td>≤ 0.5 g</td>
</tr>
<tr>
<td>Carbohydrates</td>
<td>g</td>
<td>0.1</td>
<td>≤ 0.5 g</td>
</tr>
<tr>
<td>(Available or Total)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total fat</td>
<td>g</td>
<td>0.1</td>
<td>≤ 0.5 g</td>
</tr>
<tr>
<td>Saturated fatty acids</td>
<td>g</td>
<td>0.1</td>
<td>≤ 0.5 g</td>
</tr>
<tr>
<td>Trans fatty acids</td>
<td>g</td>
<td>0.1</td>
<td>&lt; 0.3 g</td>
</tr>
<tr>
<td>Sodium</td>
<td>mg</td>
<td>1</td>
<td>≤ 5 mg</td>
</tr>
<tr>
<td>Sugars</td>
<td>g</td>
<td>0.1</td>
<td>≤ 0.5 g</td>
</tr>
<tr>
<td>Dietary Fibre</td>
<td>g</td>
<td>0.1</td>
<td>≤ 1.0 g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>mg</td>
<td>1</td>
<td>≤ 5 mg</td>
</tr>
</tbody>
</table>

Other nutrients being expressed in gram and milligram can be rounded to the nearest 0.1g and 1mg respectively.
3. Tolerance limits
Tolerance limits for general prepackaged foods

- Under the routine surveillance programme, the Administration verifies the accuracy of nutrient values on nutrition labels.
- Under the current NL Scheme for general prepackaged food, depending on the type of nutrients, the declared values have different tolerance limits.

<table>
<thead>
<tr>
<th>Energy/ Nutrients</th>
<th>Tolerance Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy, Total fat, Saturated fatty acids, Trans fatty acids, Cholesterol, Sodium, Sugars</td>
<td>≤ 120% declared value</td>
</tr>
<tr>
<td>Protein, Polyunsaturated fatty acids, Monounsaturated fatty acids, Carbohydrates, Starch, Dietary fibre, Soluble fibre, Insoluble fibre, individual component of fibre</td>
<td>≥ 80% declared value</td>
</tr>
<tr>
<td>Vitamins and minerals (other than Vitamin A, Vitamin D and added vitamins and minerals)</td>
<td>≥ 80% declared value</td>
</tr>
<tr>
<td>Vitamin A and Vitamin D (including added ones)</td>
<td>80% - 180% declared value</td>
</tr>
<tr>
<td>Added vitamins and minerals (other than Vitamin A and Vitamin D)</td>
<td>≥ declared value</td>
</tr>
</tbody>
</table>
# Overseas examples

- Tolerance limits generally the same as general foods:
  - USA (one way tolerance)
- Different tolerance limits established:
  - Mainland China and Taiwan

<table>
<thead>
<tr>
<th></th>
<th>General foods</th>
<th>Formulae and foods for infants and young children</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mainland China</strong> (one way tolerance)</td>
<td>protein, vitamins, minerals, etc: $\geq 80%$ of labelled value; energy, fat, sodium, sugar: $\leq 120%$ of labelled value)</td>
<td>For energy and all nutrients, actual value $\geq 80%$ of labelled value (draft standard)</td>
</tr>
<tr>
<td><strong>Taiwan</strong> (Specified range approach)</td>
<td>$\pm 20%$</td>
<td>Energy and macronutrients: $\pm 20%$ Vitamins: 80%-180/250/300% (depending on vitamin) Minerals: 80%-150/200% (depending on the mineral)</td>
</tr>
</tbody>
</table>
~ For Discussion ~