Food Act No. 26 of 1980

REGULATIONS made by the Minister of Health in consultation with the Food Advisory Committee in terms of section 32 of the Food Act No. 26 of 1980.

Colombo Minister of Healthcare & Nutrition

................2007

Regulations

1. These regulations may be cited as the Food (Sugar and Sugar Products) Regulations – 2007, and shall come into operation from.....................2007.

2. **BROWN SUGAR** means the product obtained by partial refinement of raw sugar and intended for direct human consumption without further processing.

Brown sugar shall conform to the following specifications:

(a) Polarization - not less than 99.0°S
(b) Loss on drying (3 hours at 105°C) - not more than 0.5% m/m
(c) Invert sugar - not more than 0.3% m/m
(d) Colour - not more than 1500 ICUMSA units

3. **PLANTATION WHITE SUGAR (MILL WHITE SUGAR)** means the crystalline product obtained from sugarcane or sugar beet

Plantation white sugar shall conform to the following specifications:

(a) Polarization - not less than 99.5° S
(b) Loss on drying (3 hours at 105°C) - not more than 0.1% m/m
(c) Invert sugar - not more than 0.1% m/m
(d) Colour - not more than 500 ICUMSA units
(e) Sulphur dioxide - not more than 70mg/kg
5. **WHITE SUGAR** means the white crystalline product obtained by the refining of Plantation white sugar.

Refined white sugar shall conform to the following specifications:

(a) Polarization - not less than 99.7° S
(b) Loss on drying (3 hours at 105°C) - not more than 0.5 % m/m
(c) Invert sugar - not more than 0.04% m/m
(d) Colour - not more than 60 ICUMSA units
(e) Sulphur dioxide - not more than 20mg/kg

6. **ICING SUGAR (POWDERED SUGAR)** means the finely pulverized white sugar with or without the addition of anti-caking agent or edible starch.

(i) That part of the white sugar, other than the anti-caking agent or edible starch, shall conform to the following specifications:

(a) Polarization - not less than 99.7° S
(b) Loss on drying (3 hours at 105°C) - not more than 0.1% m/m
(c) Invert sugar - not more than 0.04% m/m
(d) Colour - not more than 60 ICUMSA units

(ii) Icing sugar shall not contain:

   (a) more than 5.0% m/m starch
   (b) more than 1.5% m/m anti-caking agent

(iii) The following anti-caking agents may be used in icing sugar, singly or in combination, provided starch is not present -

   - Calcium phosphate, tri basic,
   - Magnesium carbonate,
   - Silicates of calcium and magnesium,
   - Sodium, calcium, aluminum silicate

7. **DEXTROSE (GLUCOSE), ANHYDROUS** is the purified and crystalline D-Glucose without water of crystallization.

(i) Dextrose (anhydrous) shall contain:

   (a) not less than 99.5% m/m glucose on dry basis; and
   (b) not less than 90.0% m/m total solids.

(ii) Dextrose (anhydrous) shall not contain more than 0.25% m/m sulphated ash on dry basis.
8. **DEXTROSE (GLUCOSE) MONOHYDRATE** is the purified and crystalline D-Glucose containing one molecule of water, of crystallization.

(i) Dextrose monohydrate shall contain-

(a) not less than 99.5% m/m D-glucose on dry basis, and
(b) not less than 99.0% m/m total solids.

(ii) Dextrose monohydrate shall not contain more than 0.25% m/m sulphated ash on dry basis

9. **FRUCTOSE** shall be the purified and crystallized D-fructose.

Fructose shall

(i) contain not less than 95% of D-Fructose
(ii) have a specific rotation between from minus 89° to minus 93°
(iii) not yield more than 0.1% m/m of sulphated ash

10. **GLUCOSE SYRUP** shall be the product resulting from the controlled hydrolysis of wholesome starch and shall consist of reducing sugar and water.

(i) Glucose syrup shall contain -

(a) not less than 70% m/m total solids;
(b) not less than 20% m/m reducing sugars expressed as dextrose on dry basis.

(ii) Glucose syrup shall not contain-

(a) more than 1.0% m/m sulphated ash on dry basis;
(b) more than 40 mg/kg of sulphur dioxide; and
(c) more than 400 mg/kg of sulphur dioxide for manufacturing sugar confectionery.

10. **RAW SUGAR** (not intended for direct human consumption) is the crystalline product obtained from sugar cane, sugar beet and includes the refined product obtained from jaggery.

(i) Raw sugar shall contain not less than 96.5% m/m sucrose;

(ii) Raw sugar shall not contain-
11. “X” TREACLE shall be the product obtained exclusively by boiling down to a syrup, the clean, filtered, unfermented sap exuded by the inflorescence of the named palm i.e. kitul palm (*Caryotaureus L*), coconut palm (*Cocos nucifera L*), or palmyrah palm (*Borassus flabellifer*). The name of the palm shall be inserted at (X)

(i) Treacle shall not contain -

(a) more than 30.0% m/m moisture;
(b) more than 1.5% m/m total ash;
(c) more than 0.15% m/m acid insoluble ash;
(d) more than 0.5% m/m matter insoluble in water;
(e) more than 0.5% acidity expressed as acetic acid; and
(f) any added sugars

(ii) Treacle shall contain not less than 65.0% m/m total sugars expressed as invert sugar.

12. (X) JAGGERY shall be the product obtained exclusively by boiling down to a hard crystalline form the sap exuded by the inflorescence of the named palm i.e kitul (*Caryota urens*), coconut palm (*Cocos nucifera L*) or palmyrah palm (*Borassus flabellifer*). The name of the palm shall be inserted at (X)

(i) “X” Jaggery shall not contain-

(a) more than 10.0% m/m moisture,
(b) more than 3.5% m/m total ash,
(c) more than 0.5% m/m acid insoluble ash,
(d) more than 2.0% m/m matter insoluble in water, and
(e) more than 13.0% m/m invert sugar,
(f) any added sugar, glucose, invert sugar or any other sugars

(ii) “X” Jaggery shall contain not less than 70% m/m total sugars expressed as reducing sugars.

13. SUGAR CANE JAGGERY shall be the product obtained by boiling down to a hard crystalline form the juice pressed out of sugar cane stalks (*Saccharum sp*).
(i) Sugar cane jaggery shall not contain-

(a) more than 10.0 % m/m moisture;
(b) more than 3.5% m/m total ash;
(c) more than 0.5% m/m acid insoluble ash;
(d) more than 2.0% m/m extraneous matter insoluble in water; and
(e) more than 13.0% m/m invert sugar.

(ii) Sugar cane jaggery shall contain-

(a) not less than 60.0% m/m sucrose; and
(b) not less than 90.0% m/m total sugars expressed as invert sugars

14. GOLDEN SYRUP shall be the syrup obtained by inversion of sugar. “GOLDEN SYRUP”

(i) Golden syrup shall not contain-

(a) more than 25.0% m/m moisture,
(b) more than 2.5% m/m total ash, and
(c) more than 70 mg/kg of sulphur dioxide.

(ii) Golden syrup shall contain not less than 72.0% m/m total sugars expressed as invert sugar

15. MOLASSES shall be the mother liquor left after the recovery of sugar in the crystallization process. It is a dark coloured, viscous, syrupy liquid having a characteristic odour. “MOLASSES”

Molasses shall contain –

(a) not less than 45.0% m/m of total sugar; and
(b) have a Total Soluble Solids content of 85° Brix at 20° C

16. HONEY shall be the product derived entirely from the nectar of flowers and other sweet exudations of plants by the work of bees. “HONEY”

(i) Honey shall not contain-

(a) more than 20.0% m/m moisture;
(b) more than 5.0% m/m sucrose;
(c) more than 0.6% m/m ash
(d) more than 40mg per kg hydroxy methyl furfural (HMF) and
(e) any added sugars, glucose syrup, artificial invert sugar and any food additive.
(ii) Honey shall contain not less than 65.0% m/m reducing sugars expressed as invert sugar

17. **TOFFEES** shall be the hard boiled sugar confectioneries made out of sugar, liquid glucose, edible fat, water with or without malt or malt syrup, jaggery, treacle, honey milk, gelatin, edible starches, chocolate, cocoa powder, coffee, citric acid, cream of tartar, tartaric acid, fruits and fruit products, nuts, spices, menthol, oil of peppermint, oil of eucalyptus, oil of aniseed, permitted antioxidants, emulsifiers, permitted colouring matter, salt (sodium chloride), protein isolates, soy flour, ground flour and vitamins.

(i) Toffees shall not contain-

   (a) more than 8.0% m/m moisture for centre filled products and 6.0% m/m for plain and modified products,
   (b) more than 2.5% m/m sulphated ash,
   (c) more than 0.2% acid insoluble ash, and
   (d) more than 65.0% m/m sucrose.

(ii) Toffees shall contain-

   (e) not less than 10.0% m/m reducing sugars expressed as dextrose; and
   (f) not less than 4.0% m/m fat.

(iii) Labelling

   (a) The word "butter" or a synonym shall not be used in the description of the toffee unless the product contains not less than 4.0% m/m butter fat. In the case of toffees containing fruits and nuts, the butter fat content shall be calculated on the mass of sugar confectionery part excluding fruits and nuts.
   (b) The word "milk" shall not be used in the description of toffees unless the product contains not less than 8.0% m/m milk solids non-fat. In the case of toffees containing fruits and nuts, milk solids non-fat content shall be calculated on the mass of the sugar confectionery part excluding fruits and nuts.

18. **LOZENGES** shall be the hard boiled or compressed sugar confectioneries mainly made out of pulverized sugar or icing sugar with certain binding materials (edible gelatine, edible gums, liquid glucose or dextrins), suitable flavours, permitted colouring matters with or without cocoa powder, coffee,
jaggery, treacle, salt, acidulants, sodium bicarbonate, dextrose, protein isolates, milk products, nuts, honey, invert sugar, malt, vitamins, permitted antioxidants, emulsifiers and permitted colours.

(i) Lozenges shall not contain
   (a) more than 3.0% m/m moisture,
   (b) more than 1.0% m/m sulphated ash, and
   (c) more than 0.2% m/m acid insoluble ash.

19. **HARD-BOILED SWEETS** shall be the sugar confectioneries made out of a combination of sugar and liquid glucose or sugar alone with or without the addition of chocolate, cocoa powder, cocoa butter, coffee, salt, ground nut flour, fruits or fruit products, nuts, edible fats, gelatine, honey, jaggery, treacle, malt, milk, edible starches, acidulants, cream of tartar, invert sugar, spices, soya flour, vitamins, protein isolates, antioxidants, emulsifiers, flavours, spices and permitted colouring matter which is boiled and super-cooled.

(i) Hard-boiled sweets shall not contain -

(a) more than 6.0% m/m moisture for plain and modified confectioneries,
(b) more than 8.0% m/m moisture for centre filled hard boiled confectioneries,
(c) more than 1.5% m/m sulphated ash, and
(d) more than 0.2% m/m acid insoluble ash.

(ii) Hard-boiled sweets shall contain not less than 8.0% m/m reducing sugars

0. **MARSHMALLOWS** shall be gelatine based sugar confectionery prepared by adding soaked gelatine in water to a heated sugar syrup and subjecting it to aeration. It may contain soya protein, egg albumin, permitted colouring matter and flavours, citric acid, tartaric acid and sodium bicarbonate.

i) Marshmallows shall not contain

(a) more than 20.0% m/m moisture;
(b) more than 1.0% m/m sulphated ash; and
(c) more than 0.2% m/m acid insoluble ash.

(ii) Marshmallows shall contain not less than 70.0% m/m total sugars expressed as sucrose.
21. **JUJUBES** shall be gelatine based sugar confectionery prepared by adding soaked gelatine in water to a heated sugar syrup (liquid glucose or dextrose) without subjecting it to aeration. It may contain soya protein, egg albumin, permitted colouring matter and flavours, citric acid, tartaric acid and sodium bicarbonate.

(i) Jujubes shall not contain-

   (a) more than 15.0% m/m moisture;
   (b) more than 1.0% m/m sulphated ash; and
   (c) more than 0.2% m/m acid insoluble ash.

(ii) Jujubes shall contain

   (a) not less than 10.0% m/m reducing sugars expressed as dextrose; and
   (b) not less than 65% m/m total sugars expressed as sucrose.

22. **ICE LOLLIES (ICE PALAM, FRUIT ICE, WATER ICE)** shall be the frozen ice product which may contain sugar syrup, fruit, fruit juice, cocoa, citric acid, permitted colouring matter and flavours. Ice lollies may contain permitted stabilizers and or emulsifiers not exceeding 1%, singly or in combination.

   (i) Ice lollies shall not contain any artificial sweeteners;

   (ii) Ice lollies shall contain not less than 10.0% m/m sugars expressed as sucrose.

23. **ICE CANDY (POPSICLE)** shall be the frozen ice product which may contain fruit juices, fruit, cocoa, nuts, citric acid, permitted colouring matter, and flavours. Ice candy may contain permitted stabilizers and or emulsifiers not exceeding 1%, singly or in combination.

   (a) Ice candy shall not contain any artificial sweeteners.

   (b) Ice candy shall contain not less than 10.0% m/m sugars expressed as sucrose.

24. **JELLY CRYSTALS** means a product prepared from gelatine, white sugar and or glucose, food acids, flavouring agents and with or without the addition of permitted colouring matter.

   (i) Jelly crystals shall not contain –
(a) more than 3.0% m/m moisture;
(b) more than 0.5% total ash; and
(c) any extraneous matter.

(ii) Jelly crystals shall contain -

(a) not less than 80.0% m/m total sugars, calculated as sucrose,
(b) not less than 8.0% m/m gelatine, and
(c) not less than 1.0% m/m acid calculated as citric acid.

25. CHEWING GUM AND BUBBLE GUM shall be products prepared from natural or synthetic, non-toxic chewing gum base, or bubble gum base, cane sugar and liquid glucose (corn syrup) with or without glycerine, malt, milk powder, chocolate, coffee, food grade gelatin, permitted flavours, permitted colours, permitted anti-oxidants, permitted preservatives, permitted emulsifiers, sorbitol, lubricants, such as starch, tallow, stearic acid, icing sugar, food grade paraffin wax or liquid paraffins or other food grade mineral oil, potable water, food grade acidulants, food-grade nutrients like vitamins, minerals and proteins, food grade titanium dioxide (maximum 1% m/m), calcium carbonate, magnesium carbonate and phosphated starch.

The following sources of gum base may be used:

Gum arabic, Khair, Jhingan (Jeal), Ghatti, Chiku (Sapota), natural rubber latex, synthetic rubber latex, glycerol ester of wood rosin, glycerol ester of gum rosin, synthetic resin, glycerol ester of partially hydrogenated gum or wood rosin, natural resin, polyvinyl acetate and food grade agar.

It shall be free from dirt, adulterants and harmful ingredients.

It shall also conform to the following standards, namely:-

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<tr>
<th>CHEWING GUM</th>
<th>BUBBLE GUM</th>
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<tbody>
<tr>
<td>i) Gum – not less than 12.5% m/m</td>
<td>Not less than 14.0% m/m</td>
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<td>ii) Moisture – not more than 3.5% m/m</td>
<td>Not more than 11.5% m/m</td>
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<td>iii) Sulphated ash – not more than 9.5% m/m</td>
<td>Not more than 11.5% m/m</td>
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<tr>
<td>iv) Acid insoluble ash – not more than 2.0% m/m</td>
<td>Not more than 3.5% m/m</td>
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<td>v) Reducing sugars – not less than 4.5% m/m</td>
<td>Not less than 5.5% m/m (calculated as dextrose)</td>
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<td>vi) Sucrose – not more than 70.0% m/m</td>
<td>Not more than 60.0% m/m</td>
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Provided that it may contain not more than 250 mg per kg Butylated hydroxy anisole (BHA) as antioxidant.

Provided further that, if artificial sweetener has been added as permitted in Food (Sweeteners) Regulations – 2003, it shall be declared on the label.
Provided also that, if any artificial sweetener is added in the product as sweeteners, the parameters, namely, reducing sugars and sucrose prescribed in the table above shall not be applicable to such product.