



FOOD QUALITY SPECIFICATIONS -

FOOD PURCHASED BY FEDERAL GOVERNMENT DEPARTMENTS

Sugar and Preserves

April 1, 2018

The following specifications are used by federal government departments purchasing the items listed below for their departmental food requirements

FQS-27 – Sugar and Preserves

Any items listed in all Food Quality Specification that are **bolded and in brown** are part of the current National Standard Cycle Menu (NSCM) Standing Offer. Other items that are not on the NSCM but are on the Standing Offer may not be listed in **brown**.

FQS-27-01 - SugarFQS-27-02 - Sweeteners (Non-nutritive)FQS-27-03 - MolassesFQS-27-04 - Maple ProductsFQS-27-05 - Maple Syrup SubstituteFQS-27-06 - HoneyFQS-27-07 - Preserves

Applicable Regulations and Resources for Sugar and Preserves

Description

1. **Nutritive Sweeteners**: Sugars, sugar syrups and sugar alcohols are considered to be "nutritive sweeteners" or caloric sweeteners because they all provide energy. **Sweetening agents and sweetening ingredients** include sugars (sucrose, glucose, fructose, lactose, maltose) and other sugar products such as molasses, honey, maple syrup and corn sweeteners (fructose, glucose, high fructose corn syrup).

2. **Preserves** are food made by processing fruit other than apple or rhubarb with a sweetening ingredient and which contains not less than 45 parts by weight of the named fruit for each 55 parts by weight, on the dry basis, of a sweetening ingredient; and 60 per cent water-soluble solids.

3. <u>Processed Products Regulations (C.R.C., c. 291) – Schedule 11</u>.

FQS-27-01 – Sugar

Description

4. Sugar means all monosaccharides and disaccharides and is the food chemically known as sucrose. Sugar shall contain not less than 99.8 per cent sucrose.

- 5. All sugars provided must:
 - a. be in compliance with relevant sections of the Food and Drugs Act (R.S.C., 1985, c. F-27), Food and Drug Regulations (C.R.C., c. 870), and Canadian Food Inspection Agency Act (S.C. 1997, c. 6);
 - b. be in compliance with relevant food packaging and labelling requirements specified by the <u>Food and</u> Drugs Act (R.S.C., 1985, c. F-27), Food and Drug Regulations (C.R.C., c. 870), Consumer Packaging and Labelling Act (R.S.C., 1985, c. C-38), and the <u>Consumer Packaging and Labelling</u> Regulations (C.R.C., c. 417);
 - c. be in compliance with the Food and Drug Regulations (C.R.C., c. 870), Division 18 Sweetening Agents;
 - d. be in compliance with Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.));
 - e. be in compliance with fundamental principles related to Health and Safety listed under <u>Processed</u> <u>Products Regulations (C.R.C., c. 291)</u>;

- f. be in compliance with Pesticide and Pesticide Management Program listed under <u>Agriculture and</u> <u>Agri-Food Canada's Pest Management Centre (PMC)</u> and <u>Health Canada Pest Management</u> <u>Regulatory Agency (PMRA);</u>
- g. be in compliance with all the requirements listed under <u>Plant Protection Act (S.C. 1990, c. 22)</u> and <u>Plant Protection Regulations (SOR/95-212)</u>;
- h. be in compliance with the relevant sections listed under <u>Industry Labelling Tool (replaces the Guide</u> to Food Labelling and Advertising);
- i. come from a facility that meets HACCP criteria as outlined in the Annex to <u>Codex Alimentarius -</u> <u>General Principles of Food Hygiene;</u>
- j. be in compliance with the requirements outlined in <u>Codex Alimentarius General Standard for</u> <u>Sugar</u>, and the <u>Codex Alimentarius - General Standard for Honey</u>; and
- k. meet the specifications as outlined in <u>Table 1</u>.

FQS-27-01-01 - Table 1: Types of Sugars

6. The following types of sugar/sweeteners shall meet the criteria listed above or as applicable other specifications in the FQS-27 series, as well as the characteristics within the subsequent table.

	Characteristics
Sugar Type	[Applies for sugars for human consumption without further processing]
	(synonyms are in round brackets)
Brown Sugar also known as	Shall be obtained from the syrups originating in the sugar refining process.
Brilliant Yellow Sugar, Dark	Can be produced from boiling refinery cane syrups until brown sugar crystals
Brown Sugar, Demerara-	form, or by blending molasses syrup with white sugar crystals. (The
style Sugar, Golden Yellow	differences in colour and flavour between brown sugar depend on the amount
Sugar, Light Yellow Sugar,	of molasses present. Sugar containing more molasses will have stickier
Muscovado Sugar, Plantation	crystals, will be darker in colour and stronger the flavour.) Shall meet the
Raw Sugar, Soft Sugar and	specifications as outlined in the <i>Food and Drug Regulations (C.R.C., c. 870)</i>
Yellow Sugar	<u>Division 18</u> .
Coarse Sugar	Granulated sugar having a larger crystal size. (Highly resistant to colour
	change and breakdown into glucose and fructose at high temperatures.)
Corn Syrup	Syrup made from the starch of maize or corn. It is composed mainly of
	glucose. The term glucose syrup is often used synonymously with corn syrup,
	since glucose syrup is most commonly made from cornstarch.
Demerara-Style Sugar also	Very moist granulated sugar having a heavy molasses coating. Demerara
known as Brown Sugar	Sugar is a coarse golden brown sugar which has large golden crystals which
	are slightly sticky.
Golden Syrup also known as	Table syrup containing sucrose and invert sugar which may be made from
Refiner's Syrup, Refined Sugar	syrup originating in the sugar refining process. Golden Syrup shall meet the
Syrup	specifications as outlined in the <i>Food and Drug Regulations (C.R.C., c. 870)</i>
	Division 18.

	A-83-209-002/FP-Z01
	Characteristics
Sugar Type	[Applies for sugars for human consumption without further processing]
	(synonyms are in round brackets)
Granulated Sugar also known as Refined Sugar, Sucrose, Table Sugar and White Sugar	Made from sugar cane and sugar beet. Granulated Sugar is purified moist sugar, white in colour, and is crystallized sucrose. To be provided in crystal or granule sizes specified, including: Coarse, Medium, Fine, Extra Fine (or Special Fine, Verifine), Ultrafine, Superfine (or Fruit Sugar, Fruit Powder, Powdered Sugar, Instant Dissolving Sugar).
Honey	A sweet yellow to rich amber coloured viscous fluid produced by honey bees and derived from the nectar of blossoms, secretions of living plants, or secretions on living plants. Honey has a sweet, dense flavour varying in taste and colour depending on the consumption of the bees. Meets the specifications as per <u>Food and Drug Regulations (C.R.C., c. 870) Division 18</u> and <u>Honey Regulations (C.R.C., c. 287)</u> .
Icing Sugar also known as Confectioner's Sugar, Fondant Sugar, Fondant Icing Sugar, Powdered Sugar, Pure Icing Sugar, Super Icing Sugar	Finely ground and pulverized granulated sugar (Powdered Sugar) may contain food colour, with a touch of starch, an anti-caking agent, to prevent clumping. Shall meet the specifications outlined in the <i>Food and Drug Regulations</i> (<i>C.R.C., c. 870</i>) <i>Division 18</i> .
Liquid Sugar also known as Liquid Sucrose and Sucrose Syrup	Granulated sugar dissolved in water. Liquid sugar shall be labelled with a statement of the percentage of sugar in the product.
Maple Flavoured Syrup	Syrup made from sugar or a mixture of sugar and corn syrup and artificially coloured or flavoured to simulate maple syrup. It shall be flavoured with imitation or real maple flavour to simulate Canada No. 2 Maple Syrup in flavour and intensity. The colour shall resemble the colour of Canada No 2 Maple Syrup (amber) and the syrup may be artificially coloured. Contains a minimum of 66% sugar solids by mass. Shall be free from fermentation or mold growth when stored in a sealed container at 20 degrees Celsius for one year after delivery and it shall maintain its original quality during that time.
Molasses also known as Table or Fancy Molasses, Refiner's or Blackstrap or Cooking	A dark coloured syrup, a by-product of the sugar cane and sugar beet refining processes.
Molasses	Table molasses or fancy molasses, is lighter in colour and milder in taste. Blackstrap molasses, is made by the third boiling of sugar. It has a distinctly
See also specification $27-03$	sweet but smoky taste with a tangy finish, and is slightly bitterer than other

	A-05-207-002/11-201
	Characteristics
Sugar Type	[Applies for sugars for human consumption without further processing]
	(synonyms are in round brackets)
	forms of molasses. Molasses shall meet the specifications as per <i>Food and Drug Regulations (C.R.C., c. 870) Division 18</i> .
Muscovado Sugar also known as Barbados Sugar and Brown Sugar	Produced at an early stage of the refining process where not all plant pigments and flavours are removed. Muscovado Sugar ranges from light to dark brown and has a strong molasses taste. The dry crystal sugar is made by crystallization of dark syrups (similar to Demerara-style). Crystals are slightly coarser and stickier in texture than regular brown sugar.
Pearl Sugar also known as Decorative Sugar and Sanding Sugar	Lumps of bright crystal refined medium size sugar particles.
Raw Sugar	Sticky brown sugar produced by extracting cane juice from sugar cane, then partially purifying the sugar through boiling, evaporation and re- crystallization. It looks like soft brown sugar but contains impurities that require it to be refined to meet local health standards. Not to be confused with "sugar in the raw", which is a specialty refined sugar.
Superfine Sugar also known as Bar Sugar, Berry Sugar, Castor Sugar, Extra Fine Sugar, Fruit Sugar, Instant Dissolving Sugar and Ultrafine Sugar	Crystal size is the finest of all the types of granulated sugar.
Turbinado style Sugar also known as Plantation Sugar, Sugar in the Raw, or Washed raw sugar	A semi-refined and purified brown specialty sugar with a heavy molasses coating, giving it a golden colour and mild caramel taste. A raw sugar that has been processed (double washed) for human consumption.

Size

7. The usual retail and commercial standard size available in the market applicable to sugar unless otherwise specified.

Packaging

8. Sugar shall be packaged in normal retail and commercial packaging, packing, labelling and marking which:

- a. safeguards the hygienic, nutritional, technological and organoleptic (sensory properties of a product, involving taste, colour, odour and feel) qualities of the sugar; and
- b. includes packaging material made of substances which are safe and suitable for their intended use and does not impart any toxic substance or undesirable odour or flavour to the product.

c. When the product is packaged in bags, plastic pouch, envelope, box, these must be clean, sturdy and tightly sealed. When the product is packaged in sacks, these must be clean, sturdy and strongly sewn or sealed.

Storage and Distribution

9. **Granulated Sugar**: Stored and distributed under dry conditions. (Granulated white sugar has an indefinite shelf life, when stored properly, because there is insufficient moisture to support microbial growth).

10. **Soft sugars**: Soft sugars must be stored in a tightly sealed plastic bag. If it is not stored properly, it will be lumpy and that is not acceptable.

Transportation

11. Consideration must be given to moisture limits related to climate for destinations.

FQS-27-02 - Sweeteners (Non-nutritive)

Description

12. Sweeteners also known as "Artificial Sweeteners" are considered food additives. They are considered non-nutritive sweeteners because they do not provide a significant amount of energy. They may also sometimes be referred to as high-intensity sweeteners, sugar substitutes, sugar replacers, or alternative sweeteners. Additives listed in Table IX of the Food and Drug Regulations (C.R.C., c. 870) Division 16 are considered sweeteners (non-nutritive). Only sugar substitutes listed at Health Canada - Food and Nutrition - Artificial Sweeteners that have been approved for use in Canada, by Health Canada, may be procured. These include acesulfame-potassium, aspartame, polydextrose, sucralose, thaumatin and sugar alcohols (polyols) like sorbitol, isomalt, lactitol, maltitol, mannitol and xylitol. Sugar alcohols (Polyols) and Polydextrose Quick Links provides the list of sugar alcohols approved for use in Canada.

- 13. All sweeteners (non- nutritive) procured in Canada must:
 - a. be in compliance with relevant sections of the Food and Drugs Act (R.S.C., 1985, c. F-27), Food and Drug Regulations (C.R.C., c. 870), and Canadian Food Inspection Agency Act (S.C. 1997, c. 6);
 - b. be in compliance with food packaging and labelling requirements listed under <u>Consumer Packaging</u> and <u>Labelling Act (R.S.C., 1985, c. C-38)</u>, and the <u>Consumer Packaging and Labelling Regulations</u> (C.R.C., c. 417);
 - c. be in compliance with food additive regulations listed under <u>Food and Drug Regulations (C.R.C., c.</u> <u>870) Division 16</u>; and/or
 - d. be in compliance with food additive classes listed under <u>Codex Alimentarius General Standard for</u> <u>Food Additives;</u>
 - e. be in compliance with all the requirements listed under <u>Plant Protection Act (S.C. 1990, c. 22)</u> and <u>Plant Protection Regulations (SOR/95-212)</u>;
 - **f.** come from a facility that meets HACCP criteria as outlined in the Annex to <u>Codex Alimentarius -</u> <u>General Principles of Food Hygiene</u>.

FQS-27-02-01 – Table 1 – Sweeteners (Non-nutritive)

Type of Sweetener	Characteristics
Aspartame: Health Canada - Food and Nutrition - Aspartame Quick Links	Aspartame is a low-calorie artificial sweetener, made by the bonding together of the amino acids aspartic acid and phenylalanine, which are normal constituents of proteins. This bonding forms a dipeptide which is further esterified with methanol. Aspartame is approved for used in table top sweeteners, breakfast cereals, beverages, desserts, chewing gum, fruit spreads, salad dressings, condiments, confectionery products, bakery products. Additional information on the permissible use of Aspartame can be found in Table IX of the <i>Food and Drug Regulations (C.R.C., c. 870) Division 16</i> .
Sugar Alcohols (Polyols) & Polydextrose (hydrogenated starch hydrolysates, isomalt, lactitol, maltitol, maltitol syrup, mannitol, sorbitol, sorbitol syrup, xylitol and erythritol)	Sugar alcohols are a family of sweetening agents also known as "polyols". They occur naturally in small amounts in fruits and vegetables, but for large-scale commercial use they are manufactured from common sugars. <u>Health Canada - Food and Nutrition -</u> <u>Sugar Alcohols (Polyols) and Polydextrose Quick Links</u> provides additional information on the use of sugar alcohols.
Saccharin	Saccharin is a man-made sweetener used in food products in many countries. Concerns have been raised that saccharin could be carcinogenic (cancer-causing). As a result, saccharin was not permitted as a food additive in Canada, although restricted use of saccharin as a table-top sweetener has been allowed. Since that time, further studies have revealed that the carcinogenic effect of saccharin in rats does not have the same effect on humans. Health Canada's scientists have thoroughly reviewed the scientific information available and as a result are considering the Canadian Food and Drug Regulations concerning Saccharin. Until further direction is provided in the Canadian Food and Drug Regulations, Saccharin shall not be procured.
Stevia	Stevia is a sweetener and sugar substitute extracted from the leaves of the plant Stevia rebaudiana. It can have up to 150 times the sweetness of sugar. It is the steviol glycosides that give the stevia its sweet taste. Purified stevia extract is regulated as a food additive in Canada. Health Canada has set the maximum daily limit for stevia at 4 mg/kg body weight per day expressed as steviol content. This is equivalent to 50 mg per kg body weight of stevia leaf, based on a maximum stevoiside content of 20 per cent. Stevia is marketed under a variety of brand names. Most have inert additives which allow these products to be used on a one-for-one equivalent to sugar.
Sucralose	Sucralose is made with sucrose, a no-calorie sweetener that is made from a process that starts with sugar (sucrose). Sucralose is manufactured in a patented multi-step process that starts with sugar and selectively replaces 3 hydrogen-oxygen groups on the sugar molecule with 3 chlorine atoms. Sucralose has been approved by Health Canada and the Food and Drug Administration (FDA). Sucralose is also known by the brand name

Type of Sweetener	Characteristics
	SPLENDA®.

Size

14. The usual retail and commercial standard size available in the market applicable to sweeteners unless otherwise specified.

Packaging

15. Sweeteners (non-nutritive) shall be packaged in normal retail and commercial

packaging, packing, labelling and marking which safeguard the hygienic, nutritional, technological and organoleptic (sensory properties of a product, involving taste, colour, odour and feel) qualities of the food. The packaging material shall be made of substances which are safe and suitable for their intended use and does not impart any toxic substance or undesirable odour or flavour to the product.

Storage and Distribution

16. When stored under dry conditions, sweeteners (non-nutritive) are shelf stable, unless stated otherwise.

FQS-27-03 – Molasses

Description

17. Molasses is a dark coloured syrup, the by-product of sugar cane and sugar beet refining processes. Generally, molasses from refineries requires further processing to meet the food grade standard.

- 18. All molasses products provided must:
 - a. be in compliance with relevant sections of Acts and Regulations listed under <u>Food and Drugs Act</u> (R.S.C., 1985, c. F-27), Food and Drug Regulations (C.R.C., c. 870), and <u>Canada Agricultural</u> Products Act (R.S.C., 1985, c. 20 (4th Supp.)), and <u>Canadian Food Inspection Agency Act (S.C.</u> <u>1997, c. 6</u>);
 - b. be in compliance with the Food and Drug Regulations (C.R.C., c. 870) Division 18;
 - c. be in compliance with fundamental principles related to Health and Safety listed under <u>Canada</u> <u>Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.));</u>
 - d. be in compliance with Pesticide and Pesticide Management Program listed under <u>Agriculture and</u> <u>Agri-Food Canada's Pest Management Centre (PMC)</u> and <u>Health Canada Pest Management</u> <u>Regulatory Agency (PMRA);</u>
 - e. be in compliance with food additive regulations listed under <u>Food and Drug Regulations (C.R.C., c.</u> <u>870) Division 16;</u>
 - f. be in compliance with all the requirements listed under <u>Plant Protection Act (S.C. 1990, c. 22)</u> and <u>Plant Protection Regulations (SOR/95-212)</u>,
 - g. be in compliance with food packaging and labelling requirements listed under <u>Consumer Packaging</u> and <u>Labelling Act (R.S.C., 1985, c. C-38)</u> and <u>Consumer Packaging and Labelling Regulations</u> (C.R.C., c. 417); and/or
 - h. be in compliance with all the requirements listed under <u>Codex Alimentarius General Standard for</u> the Labelling of Prepackaged Foods;
 - i. come from a facility that meets HACCP criteria as outlined in the Annex to <u>Codex Alimentarius -</u> <u>General Principles of Food Hygiene;</u>

- j. be in compliance with all the requirements listed under <u>Codex Alimentarius General Standard for</u> <u>Sugar</u>; and
- k. be in compliance with food additive classes listed under <u>Codex Alimentarius General Standard for</u> <u>Food Additives.</u>

FQS-27-03-01 – Table 1: Molasses

Type of Molasses	Characteristics
Fancy Molasses	Syrup obtained by the evaporation and partial inversion of the clarified or unqualified sugar cane juice from which sugar has not been previously extracted. May contain sulphurous acid or its salts; and shall not contain more than 25 per cent moisture, and 3 per cent sulphated ash.
Table Molasses	The liquid food obtained in the process of manufacturing raw or refined sugar. It may contain sulphurous acid or its salts; shall not contain more than 25 per cent moisture, and 3 per cent sulphated ash.
Refiners' Molasses, Blackstrap Molasses or Cooking Molasses	The residual liquid food obtained in the process of manufacturing raw or refined sugar. The cane juice, or mother liquor, after having been purified, is concentrated into a thick mass. It may contain sulphurous acid or its salts; shall not contain more than 25 per cent moisture, and 12 per cent sulphated ash. Blackstrap molasses is dark and has a robust, somewhat bitter-tart flavour.

Size

19. The usual retail and commercial standard size available in the market applicable to molasses unless otherwise specified

Packaging

20. Molasses shall be packaged in normal retail and commercial packaging (including plastic jugs, pails). Packing, labelling and marking shall safeguard the hygienic, nutritional, technological and organoleptic (sensory properties of a product, involving taste, colour, odour and feel) qualities of the food. Packaging material shall be made of substances which are safe and suitable for their intended use and does not impart any toxic substance or undesirable odour or flavour to the product.

Storage and Distribution

21. 10 to 21°C under reasonably steady conditions of temperature and humidity.

FQS-27-04 – Maple Products

Description

22. Any product obtained exclusively by the concentration of maple sap or maple syrup. Products include maple syrup, maple sugar, soft maple sugar, maple butter and maple taffy. Maple syrup means the syrup obtained by the concentration of maple sap or by the dilution or solution of a maple product, other than maple sap, in potable water.

- 23. Grades and Colour Classes of Maple Syrup:
 - a. Three grades and five colour classes have been established for maple syrup. Colour classes are required for each grade. They are as follows:
 - (1) CANADA No. 1

- i. It is not fermenting.
- ii. it is clear and uniform in colour.
- iii. Its colour class is Extra Light, Light or Medium.
- iv. It has a characteristic maple flavour.
- v. It has a minimum soluble solids content of 66 percent, determined with a refractometer ordensimeter at 20EC.
- (2) CANADA No. 2
 - i. It is not fermenting.
 - ii. It is clear and uniform in colour.
 - iii. Its colour class is Amber.
 - iv. It has a characteristic maple flavour.
 - v. It has a minimum soluble solids content of 66 percent, determined with a refractometer ordensimeter at 20EC.
- (3) CANADA No. 3
 - i. It is not fermenting.
 - ii. Its colour class is Dark.
 - iii. It has a characteristic maple flavour and is free of any objectionable odour or taste with at the most a trace of caramel, buddy or sappy taste.
 - iv. It has a minimum soluble solids content of 66 percent, determined with a refractometer ordensimeter at 20EC.
- (4) **Note**: Extra Light, Light, Medium or Amber maple syrup may be graded Canada No. 3 if there is a trace of caramel, buddy or sappy taste
- 24. Maple products provided must:
 - a. be in compliance with the <u>Food and Drugs Act (R.S.C., 1985, c. F-27)</u> and <u>Food and Drug</u> <u>Regulations (C.R.C., c. 870)</u>;
 - b. be in compliance with relevant sections of Acts and Regulations listed under <u>Canada Agricultural</u> <u>Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u> and <u>Canadian Food Inspection Agency Act (S.C.</u> <u>1997, c. 6)</u>;
 - c. be in compliance with the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u> <u>Maple Products Regulations;</u>
 - d. be of a minimum of Canada No 2 grade (unless otherwise specified) as per the criteria listed in the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.)) Maple Products Regulations</u>-Part 1, and Schedules 1-3;
 - e. be from an establishment with current registration as per the criteria for registration indicated in the Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.)) Maple Products Regulations;
 - f. be packaged and labelled according to the criteria outlined in the <u>Canada Agricultural Products Act</u> (R.S.C., 1985, c. 20 (4th Supp.)) Maple Products Regulations Part 11 and 111;
 - g. come from a facility that meets HACCP criteria as outlined in the Annex to <u>Codex Alimentarius -</u> <u>General Principles of Food Hygiene;</u>

- h. be in compliance with all the requirements listed under <u>Plant Protection Act (S.C. 1990, c. 22)</u> and <u>Plant Protection Regulations (SOR/95-212)</u>; and
- i. be in compliance with Pesticide and Pesticide Management Program listed under <u>Agriculture and</u> <u>Agri-Food Canada's Pest Management Centre (PMC)</u> and <u>Health Canada Pest Management</u> <u>Regulatory Agency (PMRA)</u>;
- j. be in compliance with food additive regulations listed under <u>Food and Drug Regulations (C.R.C., c.</u> <u>870) Division 16</u>; and/or
- k. be in compliance with food additive classes listed under <u>Codex Alimentarius General Standard for</u> <u>Food Additives</u>;
- 1. be in compliance with food packaging and labelling requirements listed under <u>Consumer Packaging</u> and <u>Labelling Act (R.S.C., 1985, c. C-38)</u>, and <u>Consumer Packaging and Labelling Regulations</u> (C.R.C., c. 417);
- m. be in compliance with the relevant sections listed control under <u>Canadian Food Inspection Agency</u> -<u>Guide to Food Labelling and Advertising and Labelling Requirements for Honey Products</u>; and
- n. be in compliance with the Acceptance and registration of products and materials intended for maple syrup production under the <u>Guide for Acceptance and/or Registration of Products and Equipment</u> <u>Intended for Maple Syrup Production</u>.
- 25. All maple syrup procured outside Canada, in addition to the requirements above must:
 - a. be in compliance with relevant sections of Acts and Regulations listed under <u>Agriculture and Agri-Food Canada Acts and Regulations</u>, and <u>Canadian Food Inspection Agency Act (S.C. 1997, c. 6)</u>; and/or
 - b. have originated in a country that has grade requirements and a system substantially equivalent to those prescribed by the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.)) Maple Products Regulations</u> and/or shall only be procured from countries that meet federal acts and regulations governing the importation of food under <u>Canadian Food Inspection Agency Guide to Importing Food Products Commercially</u>; and/or
 - c. be in compliance with <u>Codex Alimentarius Principles for Food Import and Export Certification</u> and <u>Inspection</u>;
 - d. meet all the requirements of applicable local food legislation whenever those requirements are stricter. All maple syrup shall be obtained by sources approved by the applicable local and international laws, regulations, procedures and requirements;
 - e. be in compliance with food additive regulations listed under <u>Food and Drug Regulations (C.R.C., c.</u> <u>870) Division 16</u>, and/or
 - f. be in compliance with food additive classes listed under <u>Codex Alimentarius General Standard for</u> <u>Food Additives;</u>
 - g. be in compliance with Pesticide and Pesticide Management Program listed under <u>Agriculture and</u> <u>Agri-Food Canada's Pest Management Centre (PMC)</u> and <u>Health Canada Pest Management</u> <u>Regulatory Agency (PMRA);</u>
 - h. be in compliance with food packaging and labelling requirements listed under <u>Consumer Packaging</u> and <u>Labelling Act (R.S.C., 1985, c. C-38)</u>, and <u>Consumer Packaging and Labelling Regulations</u> (C.R.C., c. 417);
 - i. be in compliance with the relevant sections listed control under <u>Canadian Food Inspection Agency</u> -<u>Guide to Food Labelling and Advertising and Labelling Requirements for Honey Products;</u>

- j. be in compliance with the Acceptance and registration of products and materials intended for maple syrup production under <u>Guide for Acceptance and/or Registration of Products and Equipment</u> <u>Intended for Maple Syrup Production;</u>
- k. come from a facility that meets HACCP criteria as outlined in the Annex to <u>Codex Alimentarius -</u> <u>General Principles of Food Hygiene;</u> and
- 1. be in compliance with all the requirements listed under <u>Codex Alimentarius General Standard for</u> the Labelling of Prepackaged Foods,

Size

26. The standard container sizes applicable for maple syrup which has been graded according to <u>Canada</u> <u>Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.)) – Maple Products Regulations</u> Schedule V.I. shall be used.

Packaging

27. Maple syrup shall be packed as a condition to application or use of a grade name in respect of that syrup. Maple products shall be packed and labelled as set out in <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20</u> (4th Supp.)) – <u>Maple Products Regulations</u>.

Storage and Distribution

28. Store containers of maple syrup in a cool, dry place: the refrigerator or preferably the freezer.

FQS-27-05 – Maple Syrup Substitute

Description

29. Any product that resembles maple syrup in appearance and is prepared for the same uses as a maple syrup but is not obtained exclusively from maple sap. Maple substitutes and maple flavoured products must be appropriately labelled to avoid confusion with pure maple products (<u>Canadian Maple Products Situation and Trends 2006-2007</u>). A product made from sugar, water, maple flavouring and, for example, with less than 20 % maple syrup added may not be called "Canadian Maple Syrup".

- 30. All maple syrup substitutes procured in Canada must:
 - a. be in compliance with relevant sections of Acts and Regulations listed under <u>Food and Drugs Act</u> (R.S.C., 1985, c. F-27), <u>Food and Drug Regulations (C.R.C., c. 870)</u>, and <u>Canadian Food Inspection</u> <u>Agency Act (S.C. 1997, c. 6)</u>,
 - b. be in compliance with regulations listed under <u>Canada Agricultural Products Act (R.S.C., 1985, c.</u> 20 (4th Supp.)) – Maple Products Regulations;
 - c. be in compliance with food additive regulations listed under <u>Food and Drug Regulations (C.R.C., c.</u> <u>870) Division 16;</u>
 - d. be in compliance with food additive classes listed under <u>Codex Alimentarius General Standard for</u> <u>Food Additives</u>,
 - e. be in compliance with Pesticide and Pesticide Management Program listed under <u>Agriculture and</u> <u>Agri-Food Canada's Pest Management Centre (PMC)</u> and <u>Health Canada Pest Management</u> <u>Regulatory Agency (PMRA)</u>;
 - f. be in compliance with all the requirements listed under <u>Plant Protection Act (S.C. 1990, c. 22)</u> and <u>Plant Protection Regulations (SOR/95-212)</u>;
 - g. be in compliance with food packaging and labelling requirements listed under <u>Consumer Packaging</u> and <u>Labelling Act (R.S.C., 1985, c. C-38)</u>, and <u>Consumer Packaging and Labelling Regulations</u> (C.R.C., c. 417), and/or

- h. be in compliance with all the requirements listed under <u>Codex Alimentarius General Standard for</u> the Labelling of Prepackaged Foods;
- i. be in compliance with the relevant sections listed under <u>Canadian Food Inspection Agency Guide</u> to Food Labelling and Advertising and <u>Labelling Requirements for Honey Products</u>;
- j. come from a facility that meets HACCP criteria as outlined in the Annex to <u>Codex Alimentarius -</u> <u>General Principles of Food Hygiene.</u>

Size

31. The usual retail and commercial standard size available in the market applicable to maple syrup substitute unless otherwise specified.

Packaging

32. Maple syrup substitute shall be packaged in normal retail and commercial packaging, packing, labeling and marking which safeguard the hygienic, nutritional, technological and organoleptic (sensory properties of a product, involving taste, colour, odour and feel) qualities of the food. The packaging material shall be made of substances which are safe and suitable for their intended use and does not impart any toxic substance or undesirable odour or flavour to the product.

Provincial Regulations on Maple Products Substitutes

33. In the province of Quebec and Ontario, the provincial authorities have general regulations on maple and maple products but also on the use of the word "maple" on maple substitutes. For products destined for this market, it may be preferable to contact them as to the acceptability of the use of the word "maple" or maple images on products which do not fall under the Maple Product Regulations.

FQS-27-06 – Honey

Description

34. Honey is a food produced by honey bees and derived from the nectar of blossoms, and the secretions of living plants, or secretions on living plants.

35. Because of its low moisture content and high acidity, bacteria and other harmful organisms cannot live or reproduce in honey, so pasteurization is not done for that purpose. One of the few things that can live in honey is yeast, although if the moisture content is below 18% (as it normally is), the yeast cells cannot reproduce. All nectar (the source for all honey) contains osmophilic yeasts, which can reproduce in higher-moisture content honey and cause fermentation.

36. Pasteurizing honey is done to kill any latent yeast cells that might be present and to remove any chance of fermentation. It is pasteurized by a "flash heating" method, to minimize the amount of time that the honey is exposed to the heat and to reduce the risk of damaging or burning it. The honey is heated very quickly to about 160°F and then rapidly cooled, which will kill the yeast cells without damaging the product.

37. Another side benefit of pasteurizing honey is that it will slow down the granulation process. Pasteurized honey will last longer in its liquid state than unpasteurized honey.

38. All honey provided must:

- a. comply with relevant sections of Acts and Regulations listed under Food and Drugs Act (R.S.C., <u>1985, c. F-27)</u>, Food and Drug Regulations (C.R.C., c. 870), and <u>Canadian Food Inspection Agency</u> Act (S.C. 1997, c. 6);
- b. be pasteurized;
- c. be Canada No 1 grade as per the criteria listed in <u>Honey Regulations (C.R.C., c. 287)</u>, Table 111, Schedule 1;

- d. be in compliance with the regulations listed under <u>Honey Regulations (C.R.C., c. 287)</u>;
- e. be of the type and size specified;
- f. comply with fundamental principles related to Health and Safety listed under <u>Processed Products</u> <u>Regulations (C.R.C., c. 291)</u>;
- g. comply with food additive regulations listed under <u>Food and Drug Regulations (C.R.C., c. 870)</u> <u>Division 16</u>; and/or
- h. comply with food additive classes listed under <u>Codex Alimentarius General Standard for Food</u> <u>Additives;</u>
- i. comply with all the requirements listed under <u>Plant Protection Act (S.C. 1990, c. 22)</u> and <u>Plant</u> <u>Protection Regulations (SOR/95-212)</u>;
- j. comply with Pesticide and Pesticide Management Program listed under <u>Agriculture and Agri-Food</u> <u>Canada's Pest Management Centre (PMC)</u> and <u>Health Canada Pest Management Regulatory Agency</u> (PMRA);
- k. comply with food packaging and labelling requirements listed under <u>Consumer Packaging and</u> <u>Labelling Act (R.S.C., 1985, c. C-38)</u>, and <u>Consumer Packaging and Labelling Regulations (C.R.C.,</u> <u>c. 417)</u>; and/or
- 1. comply with all the requirements listed under <u>Codex Alimentarius General Standard for the</u> <u>Labelling of Prepackaged Foods</u>;
- m. comply with the Labelling Requirements for Honey Products;
- n. come from a facility that meets HACCP criteria as outlined in the Annex to <u>Codex Alimentarius -</u> <u>General Principles of Food Hygiene;</u>
- o. comply with the standard outlined by <u>Codex Alimentarius General Standard for Honey.</u>
- 39. All honey and honey products procured outside Canada must:
 - a. comply with relevant sections of Acts and Regulations listed under <u>Food and Drugs Act (R.S.C.,</u> <u>1985, c. F-27)</u>, <u>Food and Drug Regulations (C.R.C., c. 870)</u>, and <u>Canadian Food Inspection Agency</u> <u>Act (S.C. 1997, c. 6)</u> or equivalent for the country of origin;
 - b. be the equivalent to Canada Grade No 1 honey as per the guidelines in <u>Honey Regulations (C.R.C.,</u> <u>c. 287)</u>, Table 111, Schedule 1 or the grade equivalent for the country of origin; and/or
 - c. comply with the standard outlined by <u>Codex Alimentarius General Standard for Honey;</u>
 - only be procured from countries that meet federal acts and regulations that govern the importation of food under <u>Canadian Food Inspection Agency Guide to Importing Food Products</u> <u>Commercially</u>. Note: The Canadian Food Inspection Agency restricts the importation of honey from countries where the presence of animal diseases poses a threat to Canadian agriculture and health;
 - e. must comply with fundamental principles related to Health and Safety listed under <u>Processed</u> <u>Products Regulations (C.R.C., c. 291);</u>
 - f. comply with regulations listed under <u>Honey Regulations (C.R.C., c. 287)</u>;
 - g. comply with food additive regulations listed under <u>Food and Drug Regulations (C.R.C., c. 870)</u> <u>Division 16</u>; and/or
 - h. comply with food additive classes listed under <u>Codex Alimentarius General Standard for Food</u> <u>Additives</u>

- i. comply with Pesticide and Pesticide Management Program listed under <u>Agriculture and Agri-Food</u> <u>Canada's Pest Management Centre (PMC)</u> and <u>Health Canada Pest Management Regulatory Agency</u> (PMRA),
- j. comply with all the requirements listed under <u>Plant Protection Act (S.C. 1990, c. 22)</u> and <u>Plant</u> <u>Protection Regulations (SOR/95-212)</u>,
- k. comply with food packaging and labelling requirements listed under <u>Consumer Packaging and</u> <u>Labelling Act (R.S.C., 1985, c. C-38)</u>, and <u>Consumer Packaging and Labelling Regulations (C.R.C.,</u> <u>c. 417)</u>; and/or
- 1. comply with all the requirements listed under <u>Codex Alimentarius General Standard for the</u> <u>Labelling of Prepackaged Foods</u>; and/or
- m. comply with Labelling Requirements for Honey Products;
- n. come from a facility that meets HACCP criteria as outlined in the Annex to <u>Codex Alimentarius -</u> <u>General Principles of Food Hygiene;</u>
- o. meet all the requirements of applicable local food legislation whenever those requirements are stricter. All honey shall be obtained by sources approved by the applicable local and international laws, regulations, procedures and requirements;

Size

40. Labelling Requirements for Honey Products.

41. The standard container sizes as applicable for honey which has been graded according to <u>Honey</u> <u>Regulations (C.R.C., c. 287)</u> shall be used.

Packaging

42. Honey shall be packed and labelled as set out in the <u>Honey Regulations (C.R.C., c. 287)</u> –Parts II and III. The <u>Canadian Honey Council</u> - Honey Industry Bulk Container Standards provides guidelines for packaging of domestic honey of more than 5 kgs. Labelling shall include the grade and colour class designation. The container shall be marked with the words "Product of Canada" / "Produit du Canada" or "Canadian Honey" / "Miel canadien". <u>Labelling Requirements for Honey Products</u> provides additional information on labelling of Honey.

43. The colour class designation for domestic and imported honey is required immediately following the Grade designation on the label of all honey that is subject to the Honey Regulations. These classes may not be used on products which do not meet the requirements of the Honey Regulations.

FQS-27-06-01 – Table 1: Honey

Class	Designation on Honey Classifier
White	not darker than White
Golden	darker than White, but not darker than Golden
Amber	darker than Golden, but not darker than Amber
Dark	darker than Amber

Storage

44. Honey should be stored in a dark, dry place, preventing it from absorbing any moisture. Optimal preservation temperature is 4 to 10° C (39 to 50° F).

FQS-27-07 – Preserves

Description

45. Preserves are food made by processing fruit, other than apple or rhubarb, with a sweetening ingredient and containing not less than 45 parts by weight of the fruit for each 55 parts by weight, on the dry basis, of a sweetening ingredient; and 60 per cent water-soluble solids. The ingredients used and the method of preparation will determine the type of preserves. Jams, jellies and marmalades are all examples of different styles of fruit preserves that vary based upon the ingredients used.

- 46. All Preserves provided must:
 - a. be of the size and type specified;
 - b. be in full compliance with relevant sections of Acts and Regulations listed under <u>Food and Drugs</u> Act (R.S.C., 1985, c. F-27), Food and Drug Regulations (C.R.C., c. 870), and <u>Canada Agricultural</u> Products Act (R.S.C., 1985, c. 20 (4th Supp.)), and <u>Canadian Food Inspection Agency Act (S.C.</u> <u>1997, c. 6)</u>;
 - c. be in compliance with <u>Processed Products Regulations (C.R.C., c. 291)- Schedule II;</u>
 - d. be in full compliance with <u>Food and Drug Regulations (C.R.C., c. 870) Division 11 Honey</u>; and/or
 - e. be in compliance with relevant standards listed under <u>Codex Alimentarius General Standard for</u> Jams, Jellies, Marmalades;
 - f. be in compliance with food additive regulations listed under <u>Food and Drug Regulations (C.R.C., c.</u> <u>870) Division 16</u>, and/or
 - g. be in compliance with food additive classes and within each additive class only those food additives listed, or referred to acidity regulators, antifoaming agents, firming agents, preservatives and thickeners listed in Table 3 under Codex Alimentarius General Standard for Food Additives;
 - h. be in compliance with Pesticide and Pesticide Management Program listed under <u>Agriculture and</u> <u>Agri-Food Canada's Pest Management Centre (PMC);</u>
 - i. be in compliance with all the requirements listed under <u>Plant Protection Act (S.C. 1990, c. 22)</u> and <u>Plant Protection Regulations (SOR/95-212)</u>;
 - j. be in compliance with food packaging and labelling requirements listed under <u>Consumer Packaging</u> and Labelling Act (R.S.C., 1985, c. C-38) and <u>Consumer Packaging and Labelling Regulations</u> (C.R.C., c. 417);
 - k. be in compliance with the relevant sections listed under <u>Canadian Food Inspection Agency Guide</u> to Food Labelling and Advertising; and

- come from a facility that meets HACCP criteria as outlined in the Annex to Codex Alimentarius -1. General Principles of Food Hygiene.
- Types of fruit preserves: Codex Alimentarius General Standard for Jams, Jellies, Marmalades. 47.

Products	Description
Jam	Jam is the product made from the whole fruit, pieces of fruit, the unconcentrated and/or concentrated fruit pulp or fruit puree, of one or more kinds of fruit. The fruit is mixed with sweeteners, with or without the addition of water. Jam supplied must meet the specifications as outlined in the <u>Processed Products Regulations (C.R.C., c. 291)-</u> <u>Schedule II</u> and <u>Food and Drug Regulations (C.R.C., c. 870) – Division 11 - Honey.</u>
Jellies	Jellies are the products of a semi solid gelled consistency and are made from the juice and/or aqueous extracts of one or more fruits, mixed with sweeteners, with or without the addition of water. Jellies supplied must meet the specifications as outlined in the <u>Processed Products Regulations (C.R.C., c. 291)- Schedule II</u> and <u>Food and Drug</u> <u>Regulations (C.R.C., c. 870) – Division 11 - Honey.</u>
Citrus Marmalade	Citrus Marmalade is the product made from a single or a mixture of citrus fruits and brought to a suitable consistency. It may be made from one or more of the following ingredients: whole fruit or fruit pieces (which may have all or part of the peel removed), fruit pulp, puree, juice, aqueous extracts and peel and is mixed with sweeteners, with or without the addition of water. Citrus Marmalade supplied must meet the specifications as outlined in the <u>Processed Products Regulations (C.R.C., c. 291)- Schedule II</u> and <u>Food and Drug Regulations (C.R.C., c. 870) – Division 11 - Honey.</u>
Apple Jelly	Apple jelly is the product of a semi solid gelled consistency and is made from the juice and/or aqueous extracts of apples, mixed with sweeteners, with or without the addition of water. Apple jelly supplied must meet the specifications as outlined in the <u>Processed</u> <u>Products Regulations (C.R.C., c. 291)- Schedule II</u> and <u>Food and Drug Regulations</u> (C.R.C., c. 870) – Division 11 - Honey.
Apricot Jam	Apricot jam is the product made from the whole apricot, pieces of apricot, the unconcentrated and/or concentrated fruit pulp or fruit puree, of one or more kinds of fruit. The fruit is mixed with sweeteners, with or without the addition of water. Apricot jam supplied must meet the specifications as out lined in the <u>Processed Products</u> <u>Regulations (C.R.C., c. 291)- Schedule II</u> and <u>Food and Drug Regulations (C.R.C., c. 870) – Division 11 - Honey</u> .
Cranberry Jelly, Jellied Cranberries	Cranberry Jelly or Jellied Cranberries are made by boiling the juice and pulp of cranberries with water and a sweetening ingredient until it acquires a gelatinous consistency. Cranberry Jelly or Jellied Cranberries supplied must meet the specifications as outlined in the <i>Processed Products Regulations (C.R.C., c. 291)</i> - <i>Schedule II</i> and <i>Food and Drug Regulations (C.R.C., c. 870) – Division 11 - Honey.</i>

Cranberries or Cranberry Sauce is made by heat processing cranberries with water and a

FQS-27-07-02 - Table 2: Preserves

Cranberries,

Products	Description
Cranberry Sauce	sweetening ingredient to a suitable consistency. Cranberries or Cranberry Sauce supplied must meet the specifications as outlined in the <u>Processed Products Regulations</u> (<u>C.R.C., c. 291</u>)- <u>Schedule II</u> and <u>Food and Drug Regulations</u> (<u>C.R.C., c. 870</u>) – <u>Division 11 - Honey.</u>
Ginger Marmalade	Ginger Marmalade or ginger jam is the product made from gingerroot and brought to a suitable consistency. It may be made from one or more of the following ingredients: whole ginger pieces (which has all of the peel removed), pulp, puree, juice, and aqueous extracts and is mixed with sweeteners, with or without the addition of water. Ginger Marmalade supplied must meet the specifications as outlined in the <u>Processed Products</u> <u>Regulations (C.R.C., c. 291)- Schedule II</u> and <u>Food and Drug Regulations (C.R.C., c. 870) – Division 11 - Honey</u> .

Size

48. Shall be as specified.

Packaging

49. All Preserves (Jams, Jellies, Marmalades) shall be packaged in normal retail and commercial packaging, packing, labelling and markings and shall comply with the <u>Consumer Packaging and Labelling Act (R.S.C., 1985, c. C-38)</u>, <u>Consumer Packaging and Labelling Regulations (C.R.C., c. 417)</u> and/or the <u>Codex Alimentarius</u> - <u>General Standard for the Labelling of Prepackaged Foods</u>.

Storage and Distribution

50. Preserves should be stored in a cool, dry environment, away from sunlight.

Applicable Regulations and Resources for Sugar and Preserves

Food and Drug Regulations (C.R.C., c. 870)

Food and Drug Regulations (C.R.C., c. 870), Division 16

Food and Drug Regulations (C.R.C., c. 870), Division 18

Food and Drug Regulations (C.R.C., c. 870) -Brown Sugar, Yellow Sugar or Golden Sugar

Food and Drug Regulations (C.R.C., c. 870) - Refined Sugar Syrup, Refiners' Syrup or Golden Syrup

Food and Drug Regulations (C.R.C., c. 870) - Molasses

Food and Drug Regulations (C.R.C., c. 870) – Division 18 - Honey

Food and Drug Regulations (C.R.C., c. 870) – Division 11 - Honey

Food and Drug Regulations (C.R.C., c. 870) – Icing Sugar

Canadian Food Inspection Agency Act (S.C. 1997, c. 6)

Food and Drugs Act (R.S.C., 1985, c. F-27)

Consumer Packaging and Labelling Act (R.S.C., 1985, c. C-38)

Consumer Packaging and Labelling Regulations (C.R.C., c. 417)

Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))

Agriculture and Agri-Food Canada's Pest Management Centre (PMC)

Health Canada Pest Management Regulatory Agency (PMRA)

Plant Protection Act (S.C. 1990, c. 22)

Plant Protection Regulations (SOR/95-212)

Processed Products Regulations (C.R.C., c. 291)

Processed Products Regulations (C.R.C., c. 291)- Schedule II

Agriculture and Agri-Food Canada

Industry Labelling Tool (replaces the Guide to Food Labelling and Advertising)

Codex Alimentarius - General Principles of Food Hygiene

Codex Alimentarius - General Standard for Sugar

Codex Alimentarius - General Standard for Honey

Codex Alimentarius - General Standard for Food Additives

Codex Alimentarius - General Standard for the Labelling of Prepackaged Foods

Codex Alimentarius - General Standard for Jams, Jellies, Marmalades

Codex Alimentarius - Principles for Food Import and Export Certification and Inspection

Honey Regulations (C.R.C., c. 287)

Canadian Sugar Institute - Other Sweeteners

Fruit Preserves from Answers.com

The Sugar Association, INC

Canadian Sugar Institute

Agriculture and Agri - Food Canada – Acts and Regulations

Health Canada - Food and Nutrition - Sugar Substitutes

Health Canada - Food and Nutrition - Sugar Alcohols (Polyols) & Polydextrose used as Sweeteners in foods

Health Canada - Food and Nutrition - Aspartame

Canadian Food Inspection Agency - Guide to Importing Food Products Commercially

Maple Products Regulations (C.R.C., c. 289)

Canadian Food Inspection Agency - Guide to Food Labelling and Advertising

Agriculture and Agri-Food Canada - Canadian Maple Syrup

Canadian Food Inspection Agency - Processed Products - Fruits, Vegetables and Maple Products

Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.)) – Maple Products Regulations

Ontario Maple Syrup Producers' Association

Fédération des producteurs acéricoles du Québec (FPAQ)

Labelling Requirements for Honey Products

Canadian Maple Products Situation and Trends 2006-2007

Canadian Honey Council

Guide for Acceptance and/or Registration of Products and Equipment Intended for Maple Syrup Production Ontario Ministry of Agriculture, Food and Rural Affairs