

# FOOD QUALITY SPECIFICATIONS -

# FOOD PURCHASED BY FEDERAL GOVERNMENT DEPARTMENTS

**Eggs and Egg Products** 

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

# FQS-01 - Eggs and Egg Products

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-01-01 - Fresh Eggs, whole

FQS-01-02 - Frozen Eggs

FQS-01-03 - Liquid Egg

FQS-01-04 - Dried Egg

FQS-01-05 - Egg Products

Applicable Regulations and Resources for [Eggs]

# **Description**

1. "Egg" means a shell egg of the domestic chicken that is unfertilized, commercially produced and intended for human consumption. Such birds are to be obtained from breeding stock that have been subject to control measures to reduce and eliminate the risk of introducing into laying flocks poultry diseases and pathogenic organisms transmissible to humans. This may be difficult to ensure in areas where primary production is conducted in small holdings in both developed and developing countries and where traditional farming is practised. However, any microbiological or other control measures must be sufficient to obtain safe and suitable eggs and egg products.

## Shell Egg (Table egg)

- 2. Shell eggs are utilized in two distinct industries:
  - a. the table egg industry (i.e. eggs which are sold for consumption); and
  - b. processed eggs are eggs, which are broken by special machines at a breaking station then pasteurized before being further processed or packaged (in liquid, frozen, or dried form) or used in the preparation of whole boiled or pickled eggs. These eggs are referred to as "industrial product" or "breaker eggs". Egg products include all, or a portion of, the contents found inside eggs separated from the shell, with or without added ingredients, intended for human consumption. Processed egg products may contain preservatives, flavour or colour additives in accordance with regulations set out in the Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.)), and the Processed Egg Regulations (C.R.C., c. 290).

### FQS-01-01 - Fresh Eggs, whole

- 3. Fresh, whole eggs supplied in Canada must:
  - a. meet all the requirements of the <u>Food and Drugs Act (R.S.C., 1985, c. F-27)</u> and the <u>Food and Drug</u> Regulations (C.R.C., c. 870);
  - b. meet the regulations as set out in the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u>, and the <u>Egg Regulations (C.R.C., c. 284)</u>;
  - c. be Canada Grade A (or equivalent) as determined by candling, and according to <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u>, and the <u>Egg Regulations (C.R.C., c. 284)</u>, or the equivalent;
  - d. have best before dates stamped on the eggs or egg carton;

- e. be delivered in good condition and show no evidence of damage or deterioration at the time of delivery;
- f. be washed, sanitized, graded, sized, packed and marked in registered egg stations (registered with the <u>Canadian Food Inspection Agency (CFIA)</u> IAW the <u>Egg Regulations (C.R.C., c. 284)</u> or equivalent;
- g. be supplied in the size specified according to the size designations as outlined in the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u>, and the <u>Egg Regulations (C.R.C., c. 284)</u>, <u>Schedule III, Egg Size</u>;
- h. meet all the requirements as outlined in the Recommended Code of Practice: <u>Codex Alimentarius General Principles of Food Hygiene</u>; and
- i. come from a facility that meets HACCP criteria as outlined in the Annex to Recommended Code of Practice: <u>Codex Alimentarius General Principles of Food Hygiene</u>.
- 4. Grade A eggs show on candling:
  - a. a reasonably firm albumen;
  - b. an indistinct yolk outline;
  - c. a round yolk that is reasonably well-centered; and
  - d. an air cell that is not in excess of 5 mm in depth.

#### 5. The shell:

- a. has not more than three stain spots, the aggregate area of which does not exceed an area equivalent to 25 mm2 and the shell is otherwise free of dirt and stain;
- b. is normal (or nearly normal) in shape but may have rough areas and ridges other than heavy ridges; and
- c. is not cracked.

#### Size

- 6. The eggs shall be designated as:
  - a. Jumbo, Extra Large, Large, Medium, Small or Pee Wee size; and
  - b. are sized by weight in accordance with the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u>, and the <u>Egg Regulations (C.R.C., c. 284)</u>, <u>Schedule III, Egg Size</u>.
- 7. Acceptable eggs:
  - a. are free from blood spots, taints or any undesirable odours and cracked shells;
  - b. have egg whites that are clear and translucent and free from foreign substances;
  - c. have a yolk that shows no signs of abnormality;
  - d. have a firm white; a small air cell on the wide end; and
  - e. have a yolk that is centered inside the egg.

#### **Packaging**

- 8. Eggs shall be supplied in:
  - a. trays (with or without an over wrap);
  - b. cartons; or

- c. containers made to contain the number of eggs supplied.
- 9. Every container in which graded eggs are packed shall be:
  - a. clean¹ and dry, strong enough to protect the eggs and properly closed, where the container is a case, box or carton;
  - b. free from discolouration, where the container is a case or box; and
  - c. new, where the container is a carton.
- 10. Every container of eggs shall be marked with:
  - a. the words "eggs" and "oeufs";
  - b. the grade name of the eggs;
  - c. the size designation of the eggs;
  - d. the number of eggs in the container;
  - e. the information required on the label of a food under the <u>Food and Drugs Act (R.S.C., 1985, c. F-27)</u>;
  - f. the producer premises code; and
  - g. in the case of a container of pasteurized eggs, and/or eggs produced in Canada, the words:
    - (1) "Pasteurized" and "Pasteurize"; and
    - (2) "Graded Canada A before pasteurization" and "Classé Canada A" before the words "Product of Canada" and "Produit du Canada" or the name of the country of origin.

#### **Storage and Distribution**

- 11. Eggs are to be protected in storage and distribution against external agents and contamination (e.g. direct sunlight, excessive heat, moisture, and external contaminants) and from rapid temperature changes (which could adversely affect the integrity of the product packaging or the safety and suitability of the product). Eggs are to be transported in a manner that will minimize breakage, damage and contamination. The eggs shall be delivered in good condition and show no evidence of damage or deterioration at the time of delivery.
- 12. Fresh Eggs shall be transported in a vehicle that:
  - a. is constructed of material that is free of any noxious constituent;
  - b. is suitable for transporting eggs;
  - c. has inside surfaces that are hard, smooth, which permits easy and thorough cleaning;
  - d. in good condition and clean;
  - e. provides adequate protection for the eggs from contamination;
  - f. is equipped to maintain the eggs in a refrigerated state, including avoiding fluctuations in temperatures that will result in condensation of water on the shell surface; and
  - g. is not being used and has not been used for the conveyance of controlled products (as defined in the Pest Control Products Act (S.C. 2002, c. 28) or any other material, substance or thing that might adulterate or affect the flavour of the eggs.
- 13. Fresh eggs shall:

<sup>&</sup>lt;sup>1</sup> "Clean" means free from dirt, residue of eggs and of all markings, tags and staples previously applied

- a. be maintained at no higher than 4°C;
- b. not have been frozen at any time.
- 14. Eggs purchased outside of Canada must:
  - a. not be adulterated<sup>2</sup>;
  - b. not be contaminated<sup>3</sup>;
  - c. be edible:
  - d. meet all the requirements of the <u>Food and Drugs Act (R.S.C., 1985, c. F-27)</u> and the <u>Food and Drug Regulations (C.R.C., c. 870)</u>;
  - e. 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.))</u>, and the <u>Egg Regulations (C.R.C., c. 284)</u> and meets their requirements; or
  - f. meet all the requirements as outlined in the <u>USDA Grades and Standards for Shell Eggs</u> and/or;
  - g. meet all the requirements as outlined in the <u>Codex Alimentarius Code of Hygienic Practice for Eggs and Egg Products</u>;
  - h. meet all the requirements as outlined in the Recommended Code of Practice: <u>CODEX</u> <u>Alimentarius General Principles of Food Hygiene</u>;
  - i. come from a facility that meets HACCP criteria as outlined in the Annex to the Recommended Code of Practice: CODEX Alimentarius General Principles of Food Hygiene;
  - j. meet the grade designation marked on the container and the requirements established by the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u>, <u>Egg Regulations (C.R.C., c. 284)</u> for eggs of the equivalent Canadian grade or according to <u>USDA Grades and Standards for Shell Eggs</u>; and/or
  - k. meet all the requirements of applicable local food legislation, whenever those requirements are stricter. All eggs shall be obtained by sources approved by the applicable local and international laws, regulations, procedures and lrequirements;
  - l. have been prepared under conditions substantially equivalent to those prescribed by the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u> and the <u>Egg Regulations (C.R.C., c. 284)</u>;
  - m. be in a container marked with the size designation as set out above;
  - n. be in a container that bears a label marked with the words "Product of", followed by the name of the country of origin;
  - o. must be packed and marked in accordance with the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u>, and the <u>Egg Regulations (C.R.C., c. 284)</u>; and
  - p. must be accompanied by inspection documentation (for presentation to an inspector at the point of inspection) that verifies that the requirements set out above have been met.
- 15. Unsafe and/or unacceptable eggs include:

<sup>&</sup>lt;sup>2</sup> within the meaning of sections B.01.046 and B.01.047 and Division 15 of Part B of the *Food and Drug Regulations (C.R.C., c. 870)*.

<sup>&</sup>lt;sup>3</sup> means containing a chemical, drug, food additive, heavy metal, industrial pollutant, ingredient, medicament, microbe, pesticide, poison, toxin, or any other substance not permitted by, or in an amount in excess of, limits prescribed under the <u>Canadian Environmental Protection Act</u>, <u>1999</u> (S.C. <u>1999</u>, <u>c</u>. <u>33</u>), the <u>Food and Drugs Act</u> (R.S.C., <u>1985</u>, <u>c</u>. <u>F-27</u>) or the <u>Pest Control Products Act</u> (S.C. <u>2002</u>, <u>c</u>. <u>28</u>), or any substance that renders the processed egg inedible.

- a. incubator eggs;
- b. broken/leaker eggs;
- c. eggs with bacterial or fungal rots;
- d. eggs contaminated with feces;
- e. fertilized eggs; and
- f. eggs stored for hatching for sufficient time to adversely affect the safety and suitability.

### **Processed Eggs**

- 16. Processed eggs shall meet the regulations as set out in the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u>, and the <u>Processed Egg Regulations (C.R.C., c. 290)</u> and shall be prepared from eggs that:
  - a. are not adulterated;
  - b. are not contaminated;
  - c. are edible:
  - d. are not leakers;
  - e. are free from dirt and other foreign matter;
  - f. are prepared in accordance with regulations as set out in the <u>Canada Agricultural Products Act</u> (R.S.C., 1985, c. 20 (4th Supp.)), and the <u>Processed Egg Regulations</u> (C.R.C., c. 290);
  - g. are prepared in a registered processed egg station;
  - h. are as free from egg shell as reasonable care and diligence in its preparation makes possible;
  - i. are smooth in texture and well blended; and
  - j. test negative for salmonellae and other pathogenic organisms of human health significance, as determined by a method identified in the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u>, and the <u>Processed Egg Regulations (C.R.C., c. 290)</u>.

#### FOS-01-02 - Frozen Eggs

- 17. Frozen egg means whole egg, egg yolk or egg white or albumen in frozen form.
- 18. Frozen egg mix means liquid egg mix in a frozen form.
- 19. Frozen whole egg mix means frozen whole egg that contains salt or a sweetening agent, or both, in an amount not exceeding 12% of the mix by weight.
- 20. Frozen yolk mix means frozen or liquid yolk that contains salt or a sweetening agent, or both, in an amount not exceeding 12% of the mix by weight.
- 21. **Frozen egg white** or albumen means frozen or liquid egg white or albumen that contains salt or a sweetening agent, or both, in an amount not exceeding 12% of the mix by weight.
- 22. Frozen eggs shall:
  - a. be free from any odour or flavour foreign to a normal egg from which the shell has been removed;
  - b. have a coliform count of no more than 10 per gram;
  - c. have a total viable bacteria count of no more than 50,000 per gram; and

- d. contain, in the case of frozen egg or liquid egg, not less than the following amount of egg solids by weight:
  - (1) 24.2% in the case of whole egg, and
  - (2) 43% in the case of egg yolk.

# FQS-01-03 - Liquid Egg

- 23. Liquid egg means whole egg, whole egg mix, egg yolk, egg yolk mix, egg white or albumen in liquid or semi-liquid form. Liquid egg products contain pasteurized egg whites, a small amount of pasteurized yolk and other ingredients. Omega-3 fatty acids (in the form of fish oils) may be added.
- 24. Liquid egg or liquid egg product shall:
  - a. be free from any odour or flavour foreign to a normal egg from which the shell has been removed;
  - b. have a coliform count of no more than 10 per gram;
  - c. have a total viable bacteria count of no more than 50,000 per gram; and
  - d. contain, in the case of frozen egg or liquid egg, not less than the following amount of egg solids by weight:
    - (1) 24.2% in the case of whole egg; and
    - (2) 43% in the case of egg yolk.

#### FQS-01-04 - Dried Egg

- 25. Dried Egg means whole egg, egg yolk or egg white or albumen in dried form.
- 26. Dried Egg or dried egg mix shall:
  - a. be free from any scorched or other odour or flavour foreign to a normal egg from which the shell and water have been removed:
  - b. have a coliform count of no more than 10 per gram;
  - c. have a total viable bacteria count of no more than:
    - (1) 50,000 per gram in the case of whole egg, whole egg mix, yolk and yolk mix; and
    - (2) 10,000 per gram in the case of albumen.
  - d. Contain (in the case of spray-dried albumen, not more than 8% water). In the case of pan-dried albumen, not more than 5% water.

### FQS-01-05 - Egg Products

#### **Description**

- 27. Egg Products include any previously prepared egg products that are intended as ready to heat or heat and serve products. Such products may include Omelets, Breakfast Sandwiches, Hard Boiled Eggs and Pickled Eggs.
- 28. All Egg Products supplied shall meet the specifications as indicated in the <u>Processed Egg Regulations</u> (C.R.C., c. 290) and shall be of the type, size and quantity specified.

## **Packaging**

- 29. Every container of processed egg shall:
  - a. be clean and free from discolouration and objectionable odours;

- b. be strong enough to protect the processed egg;
- c. if made of corrugated fiberboard or imported into Canada, be new;
- d. have a new liner where a liner is used:
- e. contain only processed egg that has the same common name;
- f. be labelled with the information required on a label of a food under the <u>Food and Drugs Act (R.S.C., 1985, c. F-27)</u>;
- g. be marked with an inspection legend; and
- h. be marked with the lot number.

# **Storage and Distribution**

- 30. Processed eggs are to be stored and transported under conditions that will not adversely affect the safety and suitability of the product. Processed eggs are to be protected in storage and distribution against external agents and contamination (e.g. direct sunlight, excessive heat, moisture, external contaminant, etc.) and from rapid temperature changes (which could adversely affect the integrity of the product packaging or the safety and suitability of the product).
- 31. Processed eggs are to be transported in a vehicle that:
  - a. is constructed of material that is free of any noxious constituent;
  - b. is suitable for transporting eggs;
  - c. has inside surfaces that are hard and smooth, which permit easy and thorough cleaning;
  - d. is in good condition and clean;
  - e. provides adequate protection for the eggs from contamination; and
  - f. is equipped to maintain the eggs in a refrigerated or frozen state, including avoiding fluctuations in temperatures.
  - g. Egg products requiring to be "Kept refrigerated":
    - (1) shall be maintained at no higher than 4°C; and
    - (2) shall not have been frozen at any time.
  - h. Egg products requiring to be "Kept frozen":
    - (1) shall be maintained at a frozen state no higher than -12°C; and
    - (2) shall not show evidence of defrosting and/or freezer deterioration.
  - i. have not been used for the conveyance of controlled products (as defined in the <u>Pest Control</u> <u>Products Act (S.C. 2002, c. 28)</u>) or any other material or substance or thing that might adulterate or affect the flavor of the eggs.
- 32. Processed eggs purchased outside of Canada must:
  - a. come from a country that has requirements and standards that are substantially equivalent to those set out in the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u> and <u>Processed Egg Regulations (C.R.C., c. 290)</u> and/or
  - b. come from a country that has a system of inspection for processed eggs and the establishments that prepare processed eggs that is substantially equivalent to that in Canada; and/or

- c. have been prepared under conditions substantially equivalent to those prescribed by the <u>Canada Agricultural Products Act (R.S.C., 1985, c. 20 (4th Supp.))</u>, and the <u>Processed Egg Regulations (C.R.C., c. 290)</u>; and/or
- d. meet all the requirements of applicable local food legislation, whenever those requirements are stricter. All eggs shall be obtained by sources approved by the applicable local and international laws, regulations, procedures and requirements;
- e. come from a facility that meets HACCP criteria as outlined in the Annex to the Recommended Code of Practice: CODEX Alimentarius General Principles of Food Hygiene.
- f. be in a container that bears a label marked with the words "Product of" and "Produit de", followed by the name of the country of origin;
- g. not be adulterated;
- h. not be contaminated;
- i. be edible; and
- j. be accompanied by inspection documentation, for presentation to an inspector at the point of inspection, which verifies that the requirements set out above have been met.

# **Applicable Regulations and Resources for Eggs**

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

Canadian Environmental Protection Act, 1999 (S.C. 1999, c. 33)

Canadian Food Inspection Agency (CFIA)

<u>Codex Alimentarius – Code of Hygienic Practice for Eggs and Egg Products</u>

<u>Codex Alimentarius - General Principles of Food Hygiene</u>

Egg Regulations (C.R.C., c. 284)

Egg Regulations (C.R.C., c. 284), Schedule III, Egg Size

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

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

Pest Control Products Act (S.C. 2002, c. 28)

Processed Egg Regulations (C.R.C., c. 290)

USDA Grades and Standards for Shell Eggs