

FOOD QUALITY SPECIFICATIONS -

FOOD PURCHASED BY FEDERAL GOVERNMENT DEPARTMENTS

Rice

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

FQS-22 - Rice

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-22-01 - Basmati Rice FQS-22-02 - Brown Rice

Applicable Regulations and Resources for Rice

Description

- 1. Rice shall be the hulled or hulled and polished seed of the rice plant and (in the case of hulled and polished seeds) may be coated with magnesium silicate, talc and glucose. Rice is either from one of two species of plant, Asian Rice or African Rice. Asian rice is native to tropical and subtropical southern Asia.
- 2. Rice can be defined by the length of its grain. Rice varieties can be divided into long, medium, and short grain. Table 1 provides a description of these categories. As a rule, the shorter the grain, the more tender it is, and the more it clings together.
- 3. Precooked, parboiled or converted rice means that polished rice has been cooked in water or steam and dried in such a manner as to retain the rice grains in a porous and open-structured condition. It is less prone to becoming sticky or clumped when cooked than white rice.
- 4. Instant rice, available as either white or brown, has been cooked and dehydrated before packaging. It is not as flavourful as conventional rice but is convenient because it cooks in just a few minutes.
- 5. All types of rice can be broken down into two basic categories: whole grain rice and white rice. Whole grain rice has been minimally processed, so that it retains its nutrient rich husk. Whole grain rice is not husked and tends to be more flavourful, aromatic, and colourful. Whole grain rice also has special storage considerations, as it can go rancid if it is kept at room temperature.
- 6. White rice has been processed so that the husk or bran is removed, and in some cases it may be polished to take the germ off as well. White rice requires less cooking, and it has a milder flavour. Rice is known to come in a variety of colours, including: white, brown, black, purple, and red. White rice can remain stored at room temperature for up to one year or longer.

FQS-22-01-01 – Table 1: Rice

Varieties of Rice defined by length of grain	Characteristics
Long Grain Rice	Long grain rice has a long, slender kernel, four to five times longer than its
	width. Cooked grains are separate, light and fluffy.
Medium Grain Rice	Medium grain rice has a shorter, wider kernel (two to three times longer
	than its width) than long grain rice. Cooked grains more moist and tender,
	and have a greater tendency to cling together than long grain and is good for
	making dishes that have a creamier characteristic such as molds, croquettes,
	meat loaves, rice rings, and desserts.

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Varieties of Rice defined by length of grain	Characteristics
Short Grain Rice	Short grain rice has a short, plump, almost round kernel. Cooked grains are soft and cling together. It is not as readily-available, but it can be found in markets specializing in Asian or Caribbean foods. Short-grain rice clings together and is an excellent choice for sushi.

FQS-22-01 - Basmati Rice

7. Basmati Rice is an aromatic variety of long grain rice. It has an "alluring" aroma and flavour. Basmati rice gives Indian dishes their distinctive texture and aroma.

FQS-22-02 - Brown Rice

- 8. Brown rice (or "hulled" or "unmilled" rice) is whole grain rice. It has a mild, nutty flavour, and is chewier and more nutritious than white rice, but goes rancid more quickly because the bran and germ—which are removed to make white rice—contain fats that can spoil. Any rice, including long-grain, short-grain, or glutinous rice, may be eaten as brown rice.
- 9. Unless otherwise specified, long grain brown rice is required.
- 10. Wild rice is not a true rice. The seed comes from a North American grass.
- 11. Rice supplied must be in compliance with:
 - a. the <u>Food and Drugs Act (R.S.C., 1985, c. F-27)</u> and <u>Food and Drug Regulations (C.R.C., c. 870)</u>; and
 - b. comply with food packaging and labelling requirements specified by the <u>Food and Drugs Act</u> (R.S.C., 1985, c. F-27) and <u>Food and Drug Regulations</u> (C.R.C., c. 870), the <u>Consumer Packaging and Labelling Act</u> (R.S.C., 1985, c. C-38), and the <u>Consumer Packaging and Labelling Regulations</u> (C.R.C., c. 417).

12. Rice supplied must:

- a. be in full compliance with the requirements of the <u>Food and Drug Regulations (C.R.C., c. 870)</u>, Division 13;
- b. be in full compliance with all the requirements of the <u>Plant Protection Act (S.C. 1990, c. 22)</u> and the <u>Plant Protection Regulations (SOR/95-212)</u> made under that act;
- c. comply with relevant sections of <u>Canada Grain Regulations (C.R.C., c. 889)</u> and <u>Canada Grain Act</u> (R.S.C., 1985, c. G-10);
- d. meet all the requirements as outlined in <u>Codex Alimentarius General Principles of Food Hygiene</u>;
- e. come from a facility that meets HACCP criteria as outlined in the Annex to <u>Codex Alimentarius</u> General Principles of Food Hygiene;
- f. meet all the requirements as outlined in Codex Alimentarius General Standard for Rice; and/or
- g. be the equivalent of U.S. No. 1 as per the guidelines in <u>USDA United States Standards for Rice</u>;
- h. be in full compliance with relevant sections of the <u>USDA United States Standards for Rice</u>;
- i. be of the type specified according to Table 2;
- j. be of the pack size specified;
- k. be a colour typical of the product;
- l. not be adulterated;¹
- m. not be contaminated;²

within the meaning of sections B.01.046 and B.01.047 and Division 15 of Part B of the Food and Drug Regulations

² 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 Canadian Environment Protection Act, the Food and Drugs Act or the Pest Control Products

- n. be sound, clean and free from foreign material, odour and insect infestation;
- o. be free from foreign matter, discolouration or damage caused by insects, worms, disease, decay, mechanical or other means;
- p. be produced/prepared in a manner where;
- q. no stagnant or polluted water is used;
- r. only potable water is used; and
- s. the rice is handled with equipment that is cleaned regularly.
- t. have a moisture content not to exceed 12% for brown and milled rice and 13% for parboiled and precooked rice;
- u. be in a container marked with the size designation; and
- v. be in a container that bears a label marked with the words "Product of" followed by the name of the country of origin.

13. All rice procured outside Canada must:

- a. meet the requirements of the <u>Food and Drugs Act (R.S.C., 1985, c. F-27)</u> and <u>Food and Drug Regulations (C.R.C., c. 870)</u> or its equivalent in the country of origin;
- b. have originated in a country that has a system substantially equivalent to those prescribed by the Canada Grain Regulations (C.R.C., c. 889) and Canada Grain Act (R.S.C., 1985, c. G-10); and /or
- c. meet all the requirements as outlined in USDA United States Standards for Rice; and/or
- d. meet all the requirements as outlined in Codex Alimentarius General Standard for Rice;
- e. meet all the requirements as outlined in <u>Codex Alimentarius General Principles of Food Hygiene</u>; and
- f. come from a facility that meets HACCP criteria as outlined in the Annex to <u>Codex Alimentarius</u> General Principles of Food Hygiene; and
- g. meet all the requirements of applicable local food legislation whenever those requirements are stricter .All rice shall be obtained by sources approved by the applicable local and international laws, regulations, procedures and requirements.
- h. be of the type specified according to Table 2;
- i. be of the pack size specified;
- j. be a colour typical of the product;
- k. not be adulterated;³
- 1. not be contaminated;⁴
- m. be sound, clean and free from foreign material, odour and insect infestation;
- n. be free from foreign matter, discolouration or damage caused by insects, worms, disease, decay, mechanical or other means;
- o. be produce/prepared in a manner where;

Act, or any substance that renders the processed egg inedible.

³ within the meaning of sections B.01.046 and B.01.047 and Division 15 of Part B of the Food and Drug Regulations

⁴ 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 Canadian Environment Protection Act, the Food and Drugs Act or the Pest Control Products Act, or any substance that renders the processed egg inedible.

- (1) no stagnant or polluted water is used;
- (2) only potable water is used; and
- (3) the rice is handled with equipment that is cleaned regularly.
- p. have a moisture content not to exceed 12% for brown and milled rice and 13% for parboiled and precooked rice;
- q. be in a container marked with the size designation; and
- r. be in a container that bears a label marked with the words "Product of" followed by the name of the country of origin.

FQS-22-02-01 – Table 2: Rice

Type of Rice	Characteristics
Regular Milled White Rice	Regular-milled white rice, often referred to as "white" or "polished" rice is the most common an inexpensive form of rice. The outer husk is removed, and the layers of bran are milled until the grain is white.
Sweet or Waxy Rice	Sweet rice is short and plump with a chalky white, opaque kernel. When cooked, sweet rice loses its shape and is very glutinous.
Aromatic Rice (Della, Basmati Rice, Jasmine Rice, Indian Jasmine Rice)	Aromatic rice has a flavour and aroma similar to that of roasted nuts or popcorn. The natural compound that gives aromatic rice the characteristic aroma and flavour is present in all rice, but in the aromatic varieties it is present in much higher concentrations. The most popular domestically grown aromatic rice include: Della, jasmine and basmati. Della rice is a cross between long-grain rice and basmati rice. It is similar to basmati rice, but not as long or slender. It cooks dry, separate and fluffy. Basmati rice is aromatic long grain rice that has a distinctive aroma and flavour similar to that of popcorn or roasted nuts. When cooked, it swells only lengthwise, resulting in long slender grains that are dry, separate and fluffy. Jasmine Rice is aromatic long grain rice that has a distinctive aroma and flavour similar to that of popcorn or roasted nuts. Cooked grains are soft, moist and cling together. Jasmine Rice from Thailand is aromatic rice with a strong aroma and taste that is unique. The texture is sticky. The rice hardens in texture and loses aroma with time. Indian Basmati is grown in the northern Punjab region of India and Pakistan, and commands the highest price of any variety of rice grown in the world. This rice has a firm almost dry texture when properly cooked. The raw kernel is long and slender like long grain, but slightly smaller. The kernels increase
	in length by more than three times when cooked to produce a very long slender cooked grain. The best Indian Basmati has been aged for at least one year to increase firmness of cooked texture and increase the elongation

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Type of Rice	Characteristics
	achieved in cooking.
Arborio Rice	Arborio rice is an Italian a pearly-looking, round, fat short-grain rice. Cooked, the rounded grains are firm and creamy due to the high starch content of this rice variety. It is used to make risotto. What distinguishes it is a higher than normal amount of soluble starch that is released during cooking.
Black Rice	The grain of black rice has a similar amount of fibre to brown rice and has a mild, nutty taste. It has a deep black colour and usually turns deep purple when cooked. Varieties of Black rice include but are not limited to Indonesian black rice and Thai jasmine black rice. Black rice is high in nutritional value and contains 18 amino acids, iron, zinc, copper, carotene, and several important vitamins
Brown Rice	Brown rice is the least processed form of rice and is rice from which only the outer hull has been removed. It still retains the white, starchy interior. Cooked brown rice has a slightly chewy texture and a nut-like flavour. The light brown colour of brown rice is caused by the presence of bran layers
Parboiled Rice (Converted	Parboiled rice is rough rice that has gone through a steam-pressure process
Rice)	before milling. The grain is soaked, steamed, dried, and then milled to remove the outer hull. This process does not cook the rice but merely hardens it so there is less grain breakage during milling. This procedure gelatinizes the starch in the grain, and ensures a firmer, more separate grain.
Precooked Rice (Instant Rice)	White or brown rice that has been completely cooked and dehydrated after milling. This process reduces time required for cooking
Red Rice	Red rice is a special variety of rice that is red in colour. It is generally unhulled or partially hulled rice which has a red husk. When red rice is cooked, the natural red colour in the bran, or hull of the rice, leaches out and dyes the rest of the dish red to pink. Red rice is high in fiber and the flavour is much stronger than that of hulled rice, tasting more nutty and full.
Spanish Rice	This is medium-grain rice that is perfectly suited to making paella. Varieties include include Granza rice , and the highly regarded (but difficult to find) Valencia rice.
Japanese Rice	Japanese rice is short grain rice that becomes sticky when cooked. Most rice is sold as hakumai ("white rice"), with the outer portion of the grains (nuka) polished away.
Calrose Rice	Short grains are soft cooking with slightly sticky texture.
Wild Rice	Wild rice (also called Canada rice, Indian rice, and water oats) is not technically rice. It is the seed of an aquatic grass. Wild Rice is a dried whole

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Type of Rice	Characteristics
	grain; high in protein, amino acid lysine and dietary fiber, and low in fat and does not contain gluten. The grains have a chewy outer sheath with a tender inner grain that has a slightly vegetal taste. The strong flavour of wild rice means that it is most often consumed in a blend with other rice or other grains.

Packaging

- 14. Rice shall be packaged in normal commercial packaging which:
 - a. safeguards the hygienic, nutritional, technological and organoleptic qualities of the food;
 - 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 sacks, these must be clean, sturdy and strongly sewn or sealed;
 - d. be in a container marked with the size designation; and
 - e. be in a container that bears a label marked with the words "Product of" followed by the name of the country of origin.

Storage and Distribution

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

Applicable Regulations and Resources for Rice

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

Food and Drug Regulations (C.R.C., c. 870), Division 13

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 Grain Act (R.S.C., 1985, c. G-10)

Canada Grain Regulations (C.R.C., c. 889)

Codex Alimentarius - General Principles of Food Hygiene

<u>Codex Alimentarius - General Standard for Rice</u>

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

Plant Protection Regulations (SOR/95-212)

USDA - United States Standards for Rice

Federal Food, Drug, and Cosmetic Act (FD&C Act) Chapter IV: Food