

medium-sized egg is equivalent to 0.41 ounce of whole egg solids.

[42 FR 14400, Mar. 15, 1977, as amended at 47 FR 11826, Mar. 19, 1982; 49 FR 10096, Mar. 19, 1984; 54 FR 24894, June 12, 1989; 63 FR 14035, Mar. 24, 1998]

**§ 136.180 Whole wheat bread, rolls, and buns.**

(a) Each of the foods whole wheat bread, graham bread, entire wheat bread, whole wheat rolls, graham rolls, entire wheat rolls, whole wheat buns, graham buns, and entire wheat buns conforms to the definition and standard of identity and is subject to the label statement of ingredients prescribed for bread, rolls and buns by § 136.110, except that:

(1) The dough is made from the optional ingredient whole wheat flour, bromated whole wheat flour, or a combination of these. No flour, bromated flour, or phosphated flour is used. The potassium bromate in any bromated whole wheat flour used is deemed to be an additional optional ingredient in the whole wheat bread, whole wheat rolls, or whole wheat buns.

(2) The limitation prescribed by § 136.110(c)(6) on the quantity and composition of milk and/or other dairy products does not apply.

(b) The name of the food is "whole wheat bread", "graham bread", "entire wheat bread", "whole wheat rolls", "graham rolls", "entire wheat rolls", "whole wheat buns", "graham buns", "entire wheat buns", as applicable.

**PART 137—CEREAL FLOURS AND RELATED PRODUCTS**

**Subpart A [Reserved]**

**Subpart B—Requirements for Specific Standardized Cereal Flours and Related Products**

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137.200	Whole wheat flour.

137.205	Bromated whole wheat flour.
137.211	White corn flour.
137.215	Yellow corn flour.
137.220	Durum flour.
137.225	Whole durum flour.
137.250	White corn meal.
137.255	Bolted white corn meal.
137.260	Enriched corn meals.
137.265	Degerminated white corn meal.
137.270	Self-rising white corn meal.
137.275	Yellow corn meal.
137.280	Bolted yellow corn meal.
137.285	Degerminated yellow corn meal.
137.290	Self-rising yellow corn meal.
137.300	Farina.
137.305	Enriched farina.
137.320	Semolina.
137.350	Enriched rice.

AUTHORITY: 21 U.S.C. 321, 341, 343, 348, 371, 379e.

SOURCE: 42 FR 14402, Mar. 15, 1977, unless otherwise noted.

EDITORIAL NOTE: Nomenclature changes to part 137 appear at 63 FR 14035, Mar. 24, 1998.

**Subpart A [Reserved]**

**Subpart B—Requirements for Specific Standardized Cereal Flours and Related Products**

**§ 137.105 Flour.**

(a) Flour, white flour, wheat flour, plain flour, is the food prepared by grinding and bolting cleaned wheat, other than durum wheat and red durum wheat. To compensate for any natural deficiency of enzymes, malted wheat, malted wheat flour, malted barley flour, or any combination of two or more of these, may be used; but the quantity of malted barley flour so used is not more than 0.75 percent. Harmless preparations of  $\alpha$ -amylase obtained from *Aspergillus oryzae*, alone or in a safe and suitable carrier, may be used. When tested for granulation as prescribed in paragraph (c)(4) of this section, not less than 98 percent of the flour passes through a cloth having openings not larger than those of woven wire cloth designated "212  $\mu$ m (No. 70)" complying with the specifications for such cloth set forth in "Official Methods of Analysis of the Association of Official Analytical Chemists" (AOAC), 13th Ed. (1980), Table 1, "Nominal Dimensions of Standard Test Sieves (U.S.A. Standard Series)," under the heading "Definitions of Terms and

Explanatory Notes,” which is incorporated by reference. Copies may be obtained from the AOAC INTERNATIONAL, 481 North Frederick Ave., suite 500, Gaithersburg, MD 20877, or may be examined at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). The flour is freed from bran coat, or bran coat and germ, to such extent that the percent of ash therein, calculated to a moisture-free basis, is not more than the sum of 1/20 of the percent of protein therein, calculated to a moisture-free basis, plus 0.35. Its moisture content is not more than 15 percent. It may contain ascorbic acid in a quantity not to exceed 200 parts per million as a dough conditioner. Unless such addition conceals damage or inferiority or makes the flour appear to be better or of greater value than it is, one or any combination of two or more of the following optional bleaching ingredients may be added in a quantity not more than sufficient for bleaching or, in case such ingredient has an artificial aging effect, in a quantity not more than sufficient for bleaching and such artificial aging effect:

- (1) Oxides of nitrogen.
  - (2) Chlorine.
  - (3) Nitrosyl chloride.
  - (4) Chlorine dioxide.
  - (5) One part by weight of benzoyl peroxide mixed with not more than six parts by weight of one or any mixture of two or more of the following: potassium alum, calcium sulfate, magnesium carbonate, sodium aluminum sulfate, dicalcium phosphate, tricalcium phosphate, starch, calcium carbonate.
  - (6) Acetone peroxides complying with the provisions of § 172.802 of this chapter.
  - (7) Azodicarbonamide (complying with the requirements of § 172.806 of this chapter, including the quantitative limit of not more than 45 parts per million).
- (b)(1) Label declaration. Each of the ingredients used in the food shall be declared on the label as required by the

applicable sections of parts 101 and 130 of this chapter.

(2) When ascorbic acid is added, the label shall bear the statement “Ascorbic acid added as a dough conditioner”. When the optional ingredient  $\alpha$ -amylase obtained from *Aspergillus oryzae* is used, it may alternatively be declared in the list of ingredients as “Fungal  $\alpha$ -amylase,” “Fungal  $\alpha$ -amylase”, “Enzyme”, or “Enzyme added for improved baking”. When any optional bleaching ingredient is used, the label shall bear the word “Bleached”. Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the word “Bleached” shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter; except that where such name is a part of a trademark or brand, other written, printed, or graphic matter, which is also a part of such trademark or brand, may so intervene if the word “Bleached” is in such juxtaposition with such trademark or brand as to be conspicuously related to such name.

(c) For the purposes of this section:

(1) Ash is determined by the method prescribed in the AOAC, 13th Ed. (1980), section 14.006, “Direct Method—Official Final Action,” under the heading “Ash (5),” which is incorporated by reference. The availability of this incorporation by reference is given in paragraph (a) of this section. Ash is calculated to a moisture-free basis by subtracting the percent of moisture in the flour from 100, dividing the remainder into the percent of ash, and multiplying the quotient by 100.

(2) Protein is 5.7 times the nitrogen as determined by the method prescribed in section 2.057, “Improved Kjeldahl Methods for Nitrate-Free Samples (20)—Official Final Action,” AOAC, 13th Ed. (1980), which is incorporated by reference. The availability of this incorporation by reference is given in paragraph (a) of this section. Protein is calculated to a moisture-free basis by subtracting the percent of moisture in the flour from 100, dividing the remainder into the percent of protein, and multiplying the quotient by 100.

(3) Moisture is determined by the method prescribed in the AOAC, 13th Ed. (1980), sections 14.002 and 14.003, "Vacuum Oven Method (2)—Official Final Action," under the heading "Total Solids Moisture, Indirect Method," which is incorporated by reference. The availability of this incorporation by reference is given in paragraph (a) of this section.

(4) Granulation is determined as follows: Use No. 70 sieve complying with the specifications for "Nominal Dimensions of Standard Test Sieves (U.S.A. Standard Series)" prescribed in paragraph (a) of this section. Attach bottom pan to sieve in Ro-Tap sifter (or an equivalent sifter). Place half of a rubber ball or other sieving aid in the sieve. Pour 100 grams of the sample in the sieve and turn on the sifter with knocker. Sift exactly 5 minutes. Weigh the residue on the No. 70 sieve and convert to percentage.

[42 FR 14402, Mar. 15, 1977, as amended at 47 FR 11827, Mar. 19, 1982; 47 FR 24693, June 8, 1982; 47 FR 43363, Oct. 1, 1982; 49 FR 10097, Mar. 19, 1984; 54 FR 24894, June 12, 1989; 58 FR 2877, Jan. 6, 1993]

**§ 137.155 Bromated flour.**

Bromated flour conforms to the definition and standard of identity, and is subject to the requirements for label statement of ingredients, prescribed for flour by § 137.105, except that potassium bromate is added in a quantity not exceeding 50 parts to each million parts of the finished bromated flour, and is added only to flours whose baking qualities are improved by such addition.

[57 FR 2877, Jan. 6, 1993]

**§ 137.160 Enriched bromated flour.**

Enriched bromated flour conforms to the definition and standard of identity, and is subject to the requirements for label statement of ingredients, prescribed for enriched flour by § 137.165, except that potassium bromate is added in a quantity not exceeding 50 parts to each million parts of the finished enriched bromated flour, and is added only to enriched flours whose baking qualities are improved by such addition.

[58 FR 2877, Jan. 6, 1993]

**§ 137.165 Enriched flour.**

Enriched flour conforms to the definition and standard of identity, and is subject to the requirements for label statement of ingredients, prescribed for flour by § 137.105, except that:

(a) It contains in each pound 2.9 milligrams of thiamin, 1.8 milligrams of riboflavin, 24 milligrams of niacin, 0.7 milligrams of folic acid, and 20 milligrams of iron.

(b) It may contain added calcium in such quantity that the total calcium content is 960 milligrams per pound. Enriched flour may be acidified with monocalcium phosphate within the limits prescribed by § 137.175 for phosphated flour, but, if insufficient additional calcium is present to meet the 960 milligram level, no claim may be made on the label for calcium as a nutrient;

(c) The requirement of paragraphs (a) and (b) of this section will be deemed to have been met if reasonable overages of the vitamins and minerals, within the limits of good manufacturing practice, are present to insure that the required levels of the vitamins and minerals are maintained throughout the expected shelf life of the food under customary conditions of distribution and storage. The quantitative content of the following vitamins shall be calculated in terms of the following chemically identifiable reference forms:

Vitamin	Reference form		
	Name	Empirical formula	Molecular weight
Thiamine ...	Thiamine chloride hydrochloride.	C <sub>12</sub> H <sub>17</sub> ClN <sub>4</sub> OS·HCl	337.28
Riboflavin ..	Riboflavin .....	C <sub>17</sub> H <sub>20</sub> N <sub>4</sub> O <sub>6</sub>	376.37
Niacin .....	Niacin .....	C <sub>6</sub> H <sub>5</sub> NO <sub>2</sub>	123.11

(d) It may contain not more than 5 percent by weight of wheat germ or partly defatted wheat germ;

(e) In determining whether the ash content complies with the requirements of this section, ash resulting from any added iron or salts of iron or calcium or wheat germ is excluded in calculating ash content.

(f) All ingredients from which the food is fabricated shall be safe and suitable. The vitamins and minerals added