



Human Food Waste By-products Definitions and Label Requirement

Contents

- General Labeling Requirements 3
- Wet Food Processing Waste Feed Ingredient Definition 4
- Recovered Retail Food Feed Ingredient Definition 5
- Restaurant Food Waste Feed Ingredient Definition 6
- Cull Fruits and Vegetables Ingredient Definition 7
- Additional Diversion By-products 8

General Labeling Requirements

- Use of the following ingredients, from mammalian origins, is restricted to non-ruminant feeds unless specifically exempted by 21 CFR 589.2000 (<https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=589>).
- Feeds containing prohibited material must bear the following label statement: **“DO NOT FEED TO CATTLE OR OTHER RUMINANTS.”**
- All labels must meet the requirements set forth in Article 5. Labels section 14991 and 14992 and include a guaranteed analysis.
- Guaranteed Analysis Labeling Shall Include if moisture exceeds 15%:
 - Maximum Percent Moisture,
 - *Note: Wet Food Processing Waste Feed Ingredient only requires Minimum Percent Moisture*
 - Minimum Percent Crude Protein,
 - Minimum Percent Crude Fat,
 - Maximum Percent Crude Fiber.
 - *Note: All guarantees are based on an “As-Fed” Basis.*

Wet Food Processing Waste Feed Ingredient Definition

- Wet Food Processing Waste is composed of **any and all** animal and vegetable products from basic food processing.
 - This may include:
 - Manufacturing or processing waste,
 - cannery residue,
 - production over-run,
 - and otherwise unsaleable material **and is 70% moisture or higher.**
 - The **guaranteed analysis shall include the maximum moisture.** If part of the grease and fat is removed, it must be designated as “Degreased.” If wet food processing waste is comprised of a single ingredient the label shall additionally specify what the product is,
 - e.g. Wet Food Processing Waste - Potato Peels.

Recovered Retail Food Feed¹ Ingredient Definition

- Recovered Retail Food is **human food products safe and suitable for livestock feed** that are collected from:
 - Domestic Holding Facilities
 - Domestic Packing Facilities and,
 - Retail Food Establishments.
 - Permitted recovered retail foods are:
 - Overstocks,
 - Products lacking consumer acceptance and,
 - Products beyond their sell-by dates that include items such as bruised, cut, or overly ripe produce (fruit and vegetables), bakery goods, eggs, and dairy products.
- **Materials excluded from this definition include pet foods and products containing beef, lamb, pork, poultry, fish, or shellfish.**
- Recovered Retail Food Products **must be safe and appropriately labeled** for their intended use. The feed products must:
 - Be free of material harmful to animals and
 - Contain no packaging materials harmful to animals.

Recovered Retail Food Handling and Collection

- Recovered foods shall be collected and intermixed in **secure holding containers to exclude unauthorized addition or trash**, materials harmful to animals, or infestation and adulteration by pests.
- Must **not contain packaging materials** such as:
 - Plastic, glass, metal, string, Styrofoam, cardboard, and similar materials, flowers, potted plants, or potting soil.
- Egg and dairy products (and other products ordinarily held at refrigerator temperature) **must** be kept in cold storage until the scheduled pick-up.
- To minimize spoilage, the recovered retail food shall be **collected at least weekly**, or more frequently if necessary.
- The establishment should have a **sanitation plan in place**, and the containers should be cleaned and sanitized as necessary.
- The collected material may be further processed or delivered as is to an animal feeding facility.
- The product must be handled to preserve its safety and nutritional value.

¹ Adapted from the Association of Feed Control Officials [2021 Official Publication](#)

Restaurant Food Waste² Feed Ingredient Definition

- Restaurant Food Waste is food waste collected from:
 - Restaurants
 - Cafeterias
 - Other food preparation institutes.
- **Processing and/or handling must remove all undesirable constituents** such as: crockery, glass, metal, string, and similar items.
 - **Additionally**, Restaurant Food Waste must include on the Guarantee:
 - Maximum Percentage Moisture
 - If the product is dried by artificial means to less than 12% moisture, then must be designated as “*Dehydrated Restaurant Food Waste*”
 - If part of the grease and fat is removed, it must be designated as “*Degreased Restaurant Food Waste*”

² Adapted from the Association of Feed Control Officials 2021 Official Publication

Cull Fruits and Vegetables Ingredient Definition

- Material rejected as inferior during the process of grading or separating.
 - This includes: **any fruits or vegetables that are left in the field after harvest.**
- The label for these products should include the word “**cull**,” the name of the product, and a statement to the effect of “**not for human consumption**” or “for livestock feed only.”

Additional Diversion By-products

Wet Fruit/Vegetable Pomace/Pulp

- **Wet Apple Pomace** is the sound, wet residue remaining after the removal of cider juice from apples.
- **Wet Beet Pulp** is the residue from sugar beets which have been cleaned and freed from leaves and sand, and from which the sugar has been extracted.
- **Wet Citrus Pulp** is the peel and residue of the inside portions, and occasional cull fruits of the citrus family with or without the extraction of part of the juice and part of the oil of the peel. If a neutralizing agent, e.g. calcium oxide, calcium carbonate, or calcium hydrate is added as an aid in processing, the maximum percentage shall be stated. If it bears a name descriptive of its kind, it shall correspond thereto.

Brewers' Wet Grains

- **Brewers Wet Grains** is the extracted residue resulting from the manufacture of wort from barley malt alone or in mixture with other cereal grains or grain products. The guaranteed analysis shall include the maximum moisture.

Dried Bakery Product

- **Dried Bakery Product** is a mixture of bread, cookies, cake, crackers, flours, and doughs which has been mechanically separated from non-edible materials, artificially dried and ground. If the product contains more than 3.5 percent sodium, the maximum percentage of sodium shall be a part of the name; i.e., Dried Bakery Product with ___ percent sodium.
- **Cereal Food Fines** consists of particles of breakfast cereals obtained as a by-product of their processing.

Whey/Dairy By-products (Liquid)

- **Condensed Whey Permeate** is the product resulting from the removal of proteins from whey permeate. It shall be labeled to show the minimum percent total whey product solids, crude protein and lactose and the maximum percent ash and equivalent crude protein from nonprotein nitrogen.
- **Condensed Delactosed Whey Permeate** is the product resulting from the removal of lactose from whey permeate. It shall be labeled to show the minimum percent total whey product solids, lactose, crude protein and crude fat and the maximum percent ash and equivalent crude protein from nonprotein nitrogen.
- **Dairy Food By-Products** are the products resulting from the collection of solids contained in the washwater from the normal processing and packaging of various

food manufacturing plants. Dairy products are the primary source but non-dairy products may occasionally constitute a minor amount of the total volume. No sanitary sewer waste may be included. This product is to be fed at levels less than 25.0 percent of the animal's total dry matter intake.

- **Condensed Whey-Product** is the product obtained by partially removing water from whey from which a portion of the lactose, protein and/or minerals been removed. The minimum percent solids, crude protein and lactose and the maximum percent of ash shall be guaranteed on the label. It may also be labeled “condensed reduced minerals whey” or “condensed reduced lactose whey”, if appropriate.
- **Whey** is the product obtained as a fluid by separating the coagulum from milk, cream or skimmed milk and from which a portion of the milk fat may have been removed.