

Comparison of Ingredient Definitions – How Manufacturers Can Hide Trash in Your Pets Food

REQUIREMENTS	Animal/ Vegetable Oil	Required Fatty Acids	Unsaponifiable Matter	Insoluble Impurities	Fatty Acid Guarantee	Moisture Limit	Rendered	BSE Limits
Yellow Grease	Either	Min 90%	Max 2.5%	Max 0.5%	Yes	Max 1%	Yes	Yes
Used Cooking Oil	Either	Min 90%	Max 1%	No Statement	Yes	Max 1%	No statement	No
Aspic/Gel	Usually Animal	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement
Carriers	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement
Fat	No Statement	“chiefly triglycerides of fatty acids”	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement
Gravy	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement
Grease	Animal	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement
Meal	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement
Oil	No Statement	“chiefly triglycerides of fatty acids”	No Statement	No Statement	No Statement	No Statement	No Statement	No Statement
Animal Fat	Animal	Min 90%	Max 2.5%	Max 1%	Yes	Must be guaranteed, no limit	Yes, or extracted	Yes
Vegetable Fat/ Oil	Vegetable	Min 90%	Max 2%	Max 1%	Yes	Must be guaranteed, no limit	“Extracted”	No
Hydrolyzed Fat/Oil	Either	Min 85%	Max 6%	Max 1%	No Statement	Must be guaranteed, no limit	No Statement	No
Fish Oil	Not clear	No Statement	No Statement	No Statement	No Statement	No Statement	Yes	No

Legally, manufacturers must comply with limitations stated in AAFCO ingredient definitions. If there are no limits, any product can be used and labeled under that ingredient name. If there are limits, any product can be labeled as that ingredient as long as it fits into the parameters of those limitations.

In this case, we are showing that Yellow Grease and Used Cooking Oil fit within the limitations of the ingredient definitions for “aspic,” “gel,” “carrier,” “fat,” “gravy,” “grease,” “meal,” “oil,” “animal fat,” “vegetable fat,” “vegetable oil,” “hydrolyzed animal fat,” “hydrolyzed vegetable oil,” or “Fish Oil.”

In place of the word “animal” or “vegetable” the manufacturer would have to state the specific name of the animal or vegetable unless they do not know the source. E.g. “pork fat,” “canola oil,” “soybean oil,” “chicken fat,” etc.

A product would only state, “animal fat,” or “vegetable oil” if they don’t know what kind of animal or vegetable it’s from, or if there are multiple animals or vegetables that comprise the ingredient.

“No Statement” means that there are no requirements, restrictions or limitations necessitating a specific product be used, or not be used, to be labeled as that ingredient. In other words – [it could be anything](#).

AAFCO OFFICIAL PUBLICATION 2020 DEFINITIONS:

RED = statements that match those in the ingredients' definitions

BLUE = vague wording that leaves room for almost anything to be included in the ingredient

"33.21 **Yellow Grease, Feed Grade**, is the **rendered** product from the tissues of mammals and/or poultry blended with used cooking or frying oil from human food preparation, consisting of **animal and/or vegetable fats or oils**. It must contain, and be **guaranteed for, not less than 90% total fatty acids, not more than 2.5% unsaponifiable matter, and not more than 0.5% insoluble impurities**, and not more than 1% moisture. **Maximum free fatty acids must also be guaranteed**. This product may not include recovered trap grease or material recovered from sanitary sewer sources. If an antioxidant(is) is used, the common name or names must be indicated, followed by the words "used as preservative." If the product contains tallow (from cattle) containing greater than 0.15% insoluble impurities, then it **must be labeled with the BSE caution statement "do not feed to cattle or other ruminants."** (Page 386)

"33.24 **Used Cooking Oil, Feed Grade**, is the product of used cooking or frying oil from human food preparation, **consisting of animal and/or vegetable fats or oils**, collected from commercial human food facilities and then heated to reduce moisture. It must contain, and be **guaranteed for, not less than 90% total fatty acids, not more than 1% unsaponifiable matter, and not more than 1% moisture. Maximum free fatty acids must also be guaranteed**. This product may not include recovered trap grease or material recovered from sanitary sewer sources. If an antioxidant(is) is used, the common name or names must be indicated, followed by the words "used as preservative." (Page 387)

"**Aspic**, a solid or semi-solid dressing produced by mixing a gelling agent(s) with broth or water, **and/or common seasonings or flavor enhancer(s)**. If the aspic or gel is characterized as a meat, poultry, or fish aspic or gel, it must contain an **extract or essence of meat, poultry, or fish** in an amount sufficient to characterize it as such." (page 336)

"**Gel** - See aspic" (Page 341)

"**Carriers** - An **edible material to which ingredients are added to** facilitate uniform incorporation of the latter into feeds. The active particles are absorbed, impregnated or coated into or onto the edible material in such a way as to physically carry the active ingredient." (Page 337)

"**Fat** (part) A **substance** composed chiefly of triglycerides of **fatty acids**, and solid or plastic at room temperature." (Page 340)

"**Gravy**, A **multiple component fluid dressing or topping consisting of a combination of one or more ingredients imparting special characteristics or flavors**. It may be formulated separately and added to another ingredients or combination of ingredients. If the gravy is characterized as a meat, poultry or fish gravy it must contain an **extract or essence of meat, poultry, or fish** in an amount sufficient to characterize it as such." (Page 341)

"**Grease**, **Animal fats** with a titer below 40°C" (Page 341)

"**Meal** (physical form) **An ingredient** which has been **ground or otherwise reduced in particle size**." (Page 342)

"Oil (part) A **substance** composed chiefly of triglycerides of **fatty acids**, and liquid at room temperature." (Page 343)

"33.1 **Animal Fat** is obtained from the **tissues of mammals and/or poultry** in commercial processes of **rendering** or extracting. It consists predominantly of glyceride esters of **fatty acids** and contains no additions of free fatty acids or other materials obtained from fats. It must contain, and be guaranteed for, not less than **90% total fatty acids, not more than 2.5% unsaponifiable matter, and not more than 1% insoluble impurities. Maximum free fatty acids and moisture must also be guaranteed.** If the product bears a name descriptive of its kind or origin, e.g. "beef," "pork," "poultry," it must correspond thereto. Rendered animal fat derived from only pork raw materials can be labeled as white grease. Rendered animal fat derived from only cattle raw materials can be labeled as beef tallow. Tallow containing greater than 0.15% insoluble impurities **must be labeled with the BSE caution statement "do not feed to cattle or other ruminants."** If an antioxidant(is) is used, the common name or names must be indicated, followed by the words "used as preservative." (Page 383)

"33.2 **Vegetable Fat, or Oil** is the product of **vegetable** origin obtained by extracting the oil from seeds or fruits which are commonly **processed for edible purposes.** It consists predominantly of glyceride esters of **fatty acids** and contains no additions of free fatty acids or other materials obtained from fats. It must contain, and be **guaranteed for, not less than 90% total fatty acids, not more than 2% unsaponifiable matter, and not more than 1% insoluble impurities. Maximum free fatty acids and moisture must also be guaranteed.** If the product bears a name descriptive of its kind or origin, i.e., "soybean oil," "cottonseed oil," it must correspond thereto. If an antioxidant(s) is used, the common name or names must be indicated, followed by the words "used as a preservative." (Page 383)

"33.3 **Hydrolyzed _____ Fat, or Oil, Feed Grade** is obtained in the fat processing procedures **commonly used in edible fat processing or soap making.** It consists predominantly of **fatty acids** and must contain, and be **guaranteed for, not less than 85% total fatty acids, not more than 6% unsaponifiable matter, and not more than 1% insoluble impurities.** Maximum moisture must also be guaranteed. Its source must be stated in the product name, i.e., "hydrolyzed animal fat," "hydrolyzed vegetable fat," or "hydrolyzed animal and vegetable fat." If an antioxidant(s) is used, the common name or names must be indicated, followed by the words "used as a preservative." (Page 383)

"51.8 **Fish Oil** is the **oil from rendering whole fish or cannery waste.**" There is no definition for cannery waste. (Page 399)

INGREDIENTS KNOWN TO BE IN YELLOW GREASE AS THEY ARE LISTED IN AAFCO OP 2020

"**Ethoxyquin** - IFN 8-01-841. Regulation 573.380. Chemical Preservative. 0.015% in or on feed (a) it is intended for use only: (1) as a chemical preservative for retarding oxidation of carotene, xanthophylls, and vitamins A and E in animal feed and fish feed, and (2) as an aid in preventing the development of organic peroxides in canned pet food." (page 360)

"**Tertiary butyl hydroquinone (TBHQ)** - IFN 8-04-830. Regulation 582.3109. Chemical Preservative. Total content of preservatives not more than 0.02% of fat or oil content including essential (volatile) oil content of food" (page 362)

Defoaming agents are not listed in the AAFCO book at all.

Though this used cooking grease renderer clearly states the used of Silicone based defoaming agents in their soybean oil that is intended for use in deep fryers: <https://www.mahoneyes.com/services/fresh-oil/>

PDMS (polydimethylsiloxane) appears to be the best anti-foaming agent

<https://en.wikipedia.org/wiki/Polydimethylsiloxane>

It's stated to cause reproductive damage though it appears to be mostly unresearched. Toxicity is low but it also appears there are not really regulations on quantity of use through AAFCO. Particularly because it's put in the product before it's provided to the restaurant - it is then used at high heat (600°F+), discarded, left in the weather, rendered and then used again.

It's added so far back in the process we assume AAFCO didn't see a need to address it.

https://www.spectrumchemical.com/MSDS/A1303_AGHS.pdf

Websites of renderers that we have looked into often provide Canola Oil to their clients which will eventually turn into "yellow grease" and/or "used cooking oil." They state that the Canola Oil is refined, bleached and deodorized (<https://www.mahoneyes.com/services/fresh-oil/>).

Refining of Canola Oil involves Hexane extraction, Steam distillation and Heat bleaching

<https://www.compassionatehealthcareonline.com/made-canola-oil-several-processing-chemical-steps-making-refined-canola-oil/>

<https://www.hsph.harvard.edu/nutritionsource/2015/04/13/ask-the-expert-concerns-about-canola-oil/>