# **Unclean Food Additives**

## Last update: 11/2021

It has come to our attention that some food producers are using unclean additives in otherwise clean foods. The information below is a collection of data gathered by The Eternal Church of God in relation to those products that do and do not contain unclean versions of these additives. We have not had personal contact with all of the companies that make products containing such items. In addition, the food preparation practices of may change over time. We recommend that you personally contact the company of a product you are concerned with.

## Gelatin

Gelatin is a translucent, colorless, flavorless substance derived from the collagen inside animal skins and bones. It can also be produced from a vegetable source. The most common sources of gelatin are pigs and cattle with swine being the most widely used.

Gelatin is commonly used to make capsules for pharmaceuticals and nutritional supplements, and as a gelling agent in some foods. The foods that commonly use gelatin are yogurt, marshmallows (dried or soft), gummy fruit snacks, gummy candies, some sour creams, and premade refrigerated or frozen Mexican foods such as taquitos, flautas, mini-tacos, and burritos. Some products that may be overlooked containing gelatin are small marshmallows found hot cocoa, Lucky Charms and like cereals. Gelatin is also found in Frosted Mini Wheats and like cereals, as well s premade spinach and artichoke dips.

When examining the list of ingredients on packaged foods, we have found that if the gelatin used in the product does NOT come from swine, it will usually state this is the case. Some examples clean gelatin wording found on food package labels are:

- gelatin (bovine)
- gelatin (beef)
- beef gelatin
- gelatin<sup>K</sup>
- gelatin (from a vegetable source)

Some products may state that the product is free from unclean ingredients by using one of the following symbols.



While many companies will state if the gelatin they use is considered kosher, there are some products that simply list gelatin as an ingredient, but it does not come from swine. The following is a list of companies whose food products that contain gelatin, but it is NOT from pigs. Be aware that their sources of gelatin may change. We suggest contacting the manufacturer directly if there is a concern:

- Heinz
- Delimex

The following is a list of some companies and products that DO contain pork based gelatin. Be aware that their sources of gelatin may change. We suggest contacting the manufacturer directly if there is a concern:

- Campfire marshmallows
- Lucky Charms
- Frosted Mini Wheats
- Don Miguel

We have found a general pattern that if the gelatin used by food manufacturers comes from pigs, that the ingredients will not state the source of this ingredient. However, this is not the rule of thumb. If there is a particular product you are concerned with that does not state the source of the gelatin, we suggest contacting the manufacturer to obtain this information.

### *L*-*Cysteine*

L-Cysteine is used as a process aid for many baked goods. The majority of L-Cysteine was once obtained industrially by hydrolysis of human hair, but in recent years 80% is produced from duck feathers. Due to marketing restraints with kosher and halal, it is now possible to get vegetable or synthetically produced material, albeit at a higher price. Vegetable-based fermentation, or synthetic product, make up approximately 10% of today's market use. While most products using this ingredient are clean, please contact the manufacturer of the product of concern.

## The Cochineal Beetle, Carmine, Lac

The cochineal beetle is a small unclean insect from which crimson-colored dye known as carmine is derived. Carmine is made by grinding up torsos of the insect and combining them with other various ingredients. This coloring may appear in products as red, purple, or sometimes blue. It is used in clothing, and some foods. The FDA passed regulation requiring cochineal, carmine, or coccus cacti to be listed by name on the label. However, it may also appear as E120.

Another substance stemming from the cochineal beetle is as shellac, or lac. It is used in waxes for some citrus fruits, apples and pears. However, lac is produced using secretions from the beetle and does not include actual parts of the insect itself. The cochineal secretes "lac-resin" from its glands onto a host tree. The resin is gathered, crushed, sieved, washed and purified into food grade shellac. It is our judgment that eating lac does not violate God's instructions in Leviticus 11. The secretion does not include any part of the actual insect. This is likened to secretions of the honey bee. Though bees are unclean, the honey they produce is clean for food.

## Glycerol

Glycerol may appear in some foods and beverages. Raw materials used to make glycerol include animal fats, such as beef tallow, and vegetable oils, such as coconut and soybean. It may also be the byproduct of biodiesel. In some cases it is derived from pigs. There is no FDA requirement for stating the source of glycerol in any particular product. Please contact the manufacturer of the product of concern.

## Castoreum

Castoreum is the exudate from the castor sacs of the mature North American beaver and the European beaver. It is a yellowish secretion of the castor sac in combination with the beaver's urine, used during scent marking of its territory. In the United States, these sacs are used in a few food products and often referenced simply as a "natural flavoring." Though its use is not common, it may be found in foods and beverages with a vanilla, raspberry, or strawberry flavoring.

Though we recommend contacting the manufacturer of the product of concern, do not expect them to give you a straight answer. After all, admitting to using the sacs located near the anus of beavers in food products would do considerable damage to their sales. The Vegetarian Resource Group contacted five manufacturers of vanilla flavoring to ask if they used castoreum. All five manufacturers said no, that castoreum is not used today in any form of vanilla for human use. However, there is an estimated 300 pound used annually in the United States. While this may be a relatively small amount, somebody, somewhere in America is putting it in their products.

## Enzymes

Enzymes are used as a clotting agent in the cheese vat to facilitate the separation of curd and whey. The process of converting milk into cheese is dependent on the use of enzymes and their use is included in all forms of cheese including powdered cheese seasonings. In addition, all cheese flavored breads, snacks and crackers contain these enzymes. While some products utilize microbial rennet derived from the growth of pure cultures of bacteria or mold, others use calf (bovine), kid goat, lamb or pig (porcine) rennet.

Below is a list of companies that we have contacted and their response to the use of enzymes in their cheese products.

- Don Miguel uses microbial fungus enzyme that does not contain enzymes of animal origin.
- Kraft uses a fungus, bacteria, cow, sheep or goat source of enzyme.
- Tillamook uses microbial/vegetable or the traditional rennet from bovine (cow).
- Schreiber Foods/Albertsons utilizes microbial based enzymes and bovine calf rennet.
- Organic Valley uses microbial enzymes derived from a fungus or a lipase enzyme derived from bovine calves, kid goats or lambs
- Nabisco utilizes microbial rennet which is derived from the growth of pure cultures of bacteria or mold and from animal sources. Though not all, some of these sources are from pigs. Please see below letter for more information.
- Frito Lay DOES utilize pork enzymes in SOME of their cheese seasonings. For a list of products they produce that do NOT use porcine, please visit the following web page;

http://www.fritolay.com/nutrition/special-dietary-needs/us-products-made-without-pork-(porcine)-enzymes.htm

- Sunshine/Kellogg has yet to respond to our inquiries regarding their use of enzymes.
- Keebler uses enzymes that are not animal based.
- Boulder Canyon Natural foods use microbial enzymes (non-animal based).
- Saputo Cheeses do not use porcine.

Below is a letter from Nabisco regarding enzymes used in their cheese products.

"RENNET is a complex (or grouping) of enzymes produced in any mammalian stomach to digest the mother's milk, and is often used in the production of cheese. Rennet contains many enzymes that coagulate milk, causing it to separate into solids (curds) and liquid (whey). RENNET is animal-sourced.

#### CHYMOSIN/RENNIN

The active enzyme in RENNET is called chymosin or rennin.

CHYMOSIN (rennin) may be obtained from RENNET, an animal source, but it may also be obtained from several other microbial or vegetable sources.

There are also other important enzymes in RENNET, such as pepsin and lipase.

#### LIPASE

Is an animal sourced enzyme which develops the flavor of mild to older flavored cheeses. If the word "lipase" appears in the ingredient line of a Kraft product then it will be of animal origin.

#### MICROBIAL ENZYME

Is an enzyme produced by a pure culture of microorganisms (such as molds and yeast) There are many sources of enzymes, ranging from plants, fungi, and microbial sources, that can substitute for animal rennet and are suitable for consumption by vegetarians.

SHARP & EXTRA SHARP CHEDDAR CHEESES contain animal derived enzymes sourced from calf, kid, and lamb. These enzymes assist in flavor and texture development. The enzyme used is NOT a pork enzyme. The process of converting milk into cheese is dependent on coagulating through the use of this enzyme. Our enzymes are purchased from a reputable supplier

GRATED ROMANO: Our Grated Romano cheeses do contain an enzyme which is of animal source.

KRAFT NATURAL SWISS & KRAFT GRATED PARMESAN - Kraft Natural Swiss and Kraft Grated Parmesan utilize microbial rennet which is NOT made with enzymes extracted from animal tissue - grated parmesan may contain lipase (from animal source). Please check ingredient line on the product packaging.

#### KRAFT SINGLES

We use enzymes in the cheese making process to make our cheese from milk. The milk ingredient is stated on the package in our ingredient line.

These enzymes are sourced from both microbial fermentations and animal sources. The animal sources are cow, sheep and goat.

#### VELVEETA

The enzymes in Velveeta loaf may come from two sources; (1) isolated from microbial fermentations, and, (2) isolated from animal sources (cow, lamb, goat, but not from pork).

#### DELI DELUXE

The enzymes in Deli Deluxe cheese can come from two sources (1) isolated from microbial fermentations (2) isolated from animal sources (cow, lamb, goat, but not from pork)."

Kim McMiller Associate Director, Consumer Relations (1/20/2012)