

Answers to Your Questions....

1. Explain the word chocolate.

A group of substances derived from the cacao beans. They are as follows: bitter, bittersweet, sweet, and milk chocolate. Chocolate is made by roasting the cacao pods; after roasting, the pods are removed leaving the nibs (seeds); the nibs are ground and pressed; the pressing removes much of the fat, better known as cocoa butter; the remaining product is cocoa powder. The differences in the above 4 classifications of chocolate is the % of fat, sugar and milk solids that are added to the cocoa powder. Milk chocolate is the only one that contains milk solids.

2. Can we assume that if the label does not say milk chocolate that it is ok?

No, since the above 4 categories are all "chocolate" you need to clarify which form it is in in the product in question. If the label says cocoa, then it would be acceptable.

3. Explain natural and artificial flavoring.

There are more than two thousand flavorings added to foods, of which approximately five hundred are natural and the rest synthetic. This is the largest category of additives. Lemon and orange are examples of natural flavorings, while benzaldehyde and methyl salicylate are examples from the laboratory. Milk and its' by products may be used as a natural flavoring.

In foods, artificial follows the standard meaning: a substance not duplicated in nature. Artificial flavorings are ok on the galactose-restricted diet.

4. Explain the differences between soy sauces.

Soy sauces are either fermented or non fermented. Fermented soy sauce is transparent with a light color and balanced flavor and aroma. Non fermented soy sauce is often opaque and has a more harsh flavor and pronounced chemical aroma (according to Kikkoman...the maker of one of the fermented products!) The fermenting process releases the bound galactose. There is no way to tell if the soy sauce in a product is fermented other than calling the company. There is 170 mg of galactose per 100 gm of soy sauce (about 1/2 cup) or 7 mg per tsp. (24 tsp in 1/2 cup).

5. Hydrolyzed protein is unacceptable because it may be made from casein or whey. Why is hydrolyzed vegetable protein acceptable? Is hydrolyzed soy protein acceptable?

Casein and whey are more apt to contain significant amounts of galactose than any vegetable protein. Remember, that even though some vegetables contain free galactose, it is a fraction of that found in milk...therefore, after extracting protein from vegetables, you more than likely have a product with zero galactose content. The same goes for soy protein. The labeling laws are requiring that a company reveal the source of protein.

6. Please explain the difference(s) between lactate, lactic acid and lactylate.

Lactate and lactic acid are the same thing. They are the product of the metabolism of glucose and glycogen. While they may be derived by fermenting whey, the chemical structure has nothing to do with lactose or galactose. The best I can do as far as lactylate is to comment that it is most often found in food as sodium stearol lactylate and is used as an emulsifier. Lactylate Stearate is a dough conditioner. Again, the chemical structures of these compounds are not the same as lactose or galactose.

7. Please explain what a dough conditioner is.

Dough conditioners are used to improve the texture, appearance and shelf life of bread. They strengthen the gluten and starch in the dough. The addition of dough conditioners helps to ensure rounded, well-shaped, light loaves. The most common dough conditioners are sodium stearoyl 2 lactylate, calcium stearoyl lactate, barley malt, ethoxylated and succinylated monoglycerides, and polysorbate 60. **These are all ok on the galactose-restricted diet.** The dough conditioners may, however, contain milk derivatives. Unless the ingredients are given in (), you will not know if it is appropriate.

8. What is the difference between monosodium glutamate and disodium glutamate?

Mono means one sodium and di means two sodium molecules attached to the glutamate. The only time to avoid monosodium glutamate is when it contains lactose as an extender. I cannot find much information on disodium glutamate. I do not know if lactose is used as an extender with this chemical. Since you do not find it on the grocery shelves as you would MSG, I doubt it. This needs more research.

9. Please explain what pareve means and the different labeling of pareve products.

In the Kosher dietary laws, meat and dairy products cannot be consumed in the same meal. Pareve (or Parve) is the Yiddish word meaning neutral. Foods with this designation are neutral foods, i.e. they contain neither meat nor milk and can be eaten with either meal. They are ok on the galactose-restricted diet. A food may be kosher and still contain dairy. These foods are labeled with a D, usually following the symbol of the kosher supervising organization (K and OU are the most popular symbols). A "DE" along with the symbol means the food was produced on "dairy equipment" but has no intentional dairy added. An "M" means it is a meat product. Food made on dairy equipment may not be ok for those with milk allergy, but would be ok for the galactose-restricted diet.

10. Is there a list of galactose levels in fruits and vegetables?

Yes. You will receive a version of this list today

11. Is there a list of companies and their addresses and toll free numbers?

Not to my knowledge. The web is a good place to start looking . Phone #'s are often on the packaging.

12. What is Carrageenan?

Carrageenan is a gum. Gums are sticky substances obtained from plants. They are complex compounds derived from carbohydrates and are tasteless and odorless. They are used as emulsifiers, stabilizers and thickeners in foods and medicines. Gums contain galactose in the bound form. It is not known if bound galactose is "freed" in the digestive process. Carrageenan is derived from Irish Moss.

These questions and answers were prepared for the Galactosemia Support Group Meeting held on May 12, 2001.

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