Sweeteners, Good, Bad, or Something even Worse.
(Part 8)

These are Low calorie sweeteners - **not** non-calorie sweeteners

Sugar Alcohols

A **sugar alcohol** is a kind of alcohol prepared from sugars. These organic compounds are a class of polyols, also called **polyhydric alcohol**, **polyalcohol**, or **glycitol**. They are white, water-soluble solids that occur naturally and are used widely in the food industry as thickeners and sweeteners. In commercial foodstuffs, sugar alcohols are commonly used in place of table sugar (sucrose), often in combination with high intensity artificial sweeteners to counter the low sweetness of the sugar alcohols. Unlike sugars, sugar alcohols do not contribute to the formation of tooth cavities.

Common Sugar Alcohols

Arabitol,	Erythritol,	Ethylene glycol,	Fucitol,
Galactitol,	Glycerol,	Hydrogenated Starch – Hydrolysate (HSH),	
Iditol,	Inositol,	Isomalt,	Lactitol,
Maltitol,	Maltotetraitol,	Maltotriitol,	Mannitol,
Methanol,	Polyglycitol,	Polydextrose,	Ribitol,
Sorbitol,	Threitol,	Volemitol,	Xylitol,

Of these, xylitol is perhaps the most popular due to its similarity to sucrose in visual appearance and sweetness. Sugar alcohols do not contribute to tooth decay. However, consumption of sugar alcohols does affect blood sugar levels, although less than that of "regular" sugar (sucrose). Sugar alcohols may also cause bloating and diarrhea when consumed in excessive amounts.

Erythritol

Also labeled as:

- Sugar alcohol
- Zerose
- ZSweet

Erythritol is a sugar alcohol (or polyol) that has been approved for use as a food additive in the United States and throughout much of the world. It was discovered in 1848 by British chemist John Stenhouse. It occurs naturally in some fruits and fermented foods. At the industrial level, it is produced from glucose by fermentation with a yeast, *Moniliella pollinis*. It is 60–70% as sweet as table sugar yet it is almost non caloric, does not affect blood sugar, does not cause tooth decay, and is partially absorbed by the body, excreted in urine and feces. It is less likely to cause gastric side effects than other sugar alcohols because of its unique digestion pathway. Under U.S. Food and Drug Administration (FDA) labeling requirements, it has a caloric value of 0.2 kilocalories per gram (95% less than sugar and other carbohydrates), though nutritional labeling varies from country to country. Some countries, such as Japan and the United States, label it as zero-calorie, while European Union regulations currently label it and all other sugar alcohols at 0.24 kcal/g. Because 90% of erythritol is absorbed before it enters the large intestine, it does not normally cause laxative effects, as are often experienced after consumption of other sugar alcohols (such as xylitol and maltitol).

Glycerol

Also labeled as:

- Glycerin
- Glycerine

Glycerol (or **glycerine**, **glycerin**) is a simple polyol (sugar alcohol) compound. It is a colorless, odorless, viscous liquid that is widely used in pharmaceutical formulations. Glycerol has three hydroxyl groups that are responsible for its solubility in water and its hygroscopic nature. The glycerol backbone is central to all lipids known as triglycerides. Glycerol is sweet-tasting and generally considered non-toxic. Glycerol is also utilized in antifreeze and explosives.

Hydrogenated Starch – Hydrolysate (HSH)

All so labeled as:

- Sugar Alcohol

Isomalt

Also labeled as:

- Sugar Alcohol
- ClearCut Isomalt
- Decomalt
- DiabetiSweet (also contains Acesulfame-K)
- Hydrogenated Isomaltulose
- Isomaltitol

Lactitol

All so labeled as:

- Sugar Alcohol

Maltitol

All so labeled as:

- Sugar Alcohol
- Maltitol Syrup
- Maltitol Powder
- Hydrogenated High Maltose Content
- Glucose Syrup
- Hydrogenated Maltose
- Lesys
- MaltiSweet
- SweetPearl

Mannitol

All so labeled as:

- Sugar Alcohol

Sorbitol

All so labeled as:

- Sugar Alcohol
- D-glucitol
- D-glucitol syrup

Xylitol

All so labeled as:

- Sugar Alcohol
- Smart Sweet
- Xylipure
- Xylosweet

Dr. Gerry Graham III
President: LazrPulsr System