

HOW SWEET IT IS

Sugar consumption per capita in America has increased many times during this present generation. In 1989 it was reported to have jumped to an all-time high of 126 pounds per person per year. [The following article, written by a non-SDA, appeared in the *Doctor's Health Review* of July 1989.]

Dr. Phillip Lovell of the Los Angeles Times states: "The danger is in the technical manufacture of sugar: it becomes devitalized, demineralized, and robbed of any life giving qualities it once possessed.

"Commercial sugar is made from cane sugar and sugar beets. At the present time beet sugar is more extensively used than cane sugar.

"When beets are received at the sugar factory, the tops and small parts of the neck of the beet are removed. The purpose is to free the beet from mineral matter it contains, as it interferes with the sugar crystallization. Therefore the first robbery of the precious nutrients is accomplished before the beet undergoes any chemical change.

"The beets are then washed. The juice is extracted by what is known as the diffusion method. This consists of cutting the beets in very thin slices and running a stream of water through them. The sugar is dissolved and passes through with the water. When this juice emerges from the beet it is as black as ink. Now comes the first of the devitalizing process.

"Lime or carbon dioxide is added to it to precipitate the impurities found in this inky black beet sugar. The clear juice remains and is then centrifuged: that is, it is whirled around until it separates into two parts — molasses and raw beet sugar.

"The raw beet sugar is then thoroughly heated destroying every particle of organized life-celled substance in it. But even now it must be still further chemically treated. It is still not sufficiently white and ghostly enough.

"Now are added strong chemicals such as acid, calcium phosphate, phosphoric acid, and lime. Then to carry away any suspended protein matter which may remain, blood albumin from the slaughter house is used.

"Also purchased from the slaughter house is bone-black or animal charcoal, which comes from low-grade animals used as a filter to 'purify' this mixture called sugar.

"Thus far the sugar has been thoroughly heated twice. Now it must be thoroughly boiled to separate it from the syrup. You probably think by now it should be ready for consumption. Not yet. The last touch of shimmering whiteness must be added.

"It is then bleached with a strong bleaching agent referred to as blue water. This process holds true with first grade sugar but becomes much worse with low grade sugars. These inferior sugars are extracted from molasses by-products by the action of strong chemicals such as calcium and barium hydroxide. This low grade sugar is what is used in gelatin, jams, jellies, baking and bakery products.

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“Commercial sugar is representative of the ultimate extreme in food degeneration. To just merely state that it is a starvation food is putting it very mildly. The term food is certainly a misnomer. Sugar is the most poisonous and injurious product in our nation’s diet with no exceptions and under every possible condition.

“These facts assume special importance when it is pointed out that more than **sixty-five percent of the animals slaughtered for the markets are swine**. Therefore the slaughterhouse products being used in processing sugar are derivatives of pork.”

This certainly does not help the feelings of the vegetarian who is deliberately trying hard to avoid the use of animal products and especially pork. I would venture to say **the average vegetarian consumes at least one hog a year** by eating sugar products without ever realizing it!

The Pan American Diet Book, by G. W. Remsburg, has the following statement in the chapter on sugars:

“Granulated or white sugar is deficient in organic salts and nutrients because of the process of refining, and when taken into the body breaks down the cells in order to furnish the blood with the necessary alkaline elements to neutralize the carbonic acid which is formed by the oxidation of the carbon of which the sugar is composed. Sugar is almost pure carbon.”

Studies show that sugar interferes with the chemistry of digestion, and is frequently a cause of sour stomach, indigestion, and an acid pH by remaining too long in the stomach. Sugar is also an irritant to the digestive organs and clogs the system. Studies also reveal that sugar frequently causes depression that plagues society today.

If you have any doubts as to the detriments of sugar (sucrose), try leaving it out of your diet for several weeks and see if it makes a difference! You may also notice that you have acquired an addiction and experience some withdrawal symptoms.

Studies show that **‘sugar’ is just as habit forming as any narcotic**; and its use, misuse, and abuse is our nation’s number one disaster. It is no wonder when we consider all the products we consume daily which are loaded with sugar! The average healthy digestive system can digest and eliminate from two to four teaspoons of sugar daily, usually without noticeable problems, (that is if damage is not already present). One 12 ounce cola contains 11 teaspoons of sugar, and that’s aside from the caffeine. It’s the sugar that gives you quick energy, but only for a brief time due to the rise of the blood sugar level. But the body quickly releases a rush of insulin, which rapidly lowers the blood sugar and causes a significant drop in energy and endurance.

It is easy to see why America’s health is in serious trouble. If you want to win the race, offer the cola and candy to your opponent!

I have been asked many times if I had to name one product that is widely used that does the most harm and devastation to the body, what would it be? My answer is always the same, and nutritionists agree (not dietitians) but nutritionists — (those who believe and promote natural health), that of all food, sugar unquestionably is the worst!

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Studies are showing now that many are not even drinking water any more, but rely on coffee, tea, colas, kool-aid, beer, etc. for their liquids. The sugar problem has unquestionably gotten out of hand.

The need of the hour is not more hospitals, surgery, and drugs, but for more information about how to live to be normally well — how to prevent the 90% of prevalent disease. Therefore health education is of first importance as the chief preventative measure.

Good Sugars and Bad Sugars

The term 'sugar' is applied to several types of sweeteners, some of which are excellent foods while others are irritants to the digestive tract while being prepared to go into the blood stream. It is important that we know the difference between the harmful and helpful types.

A 'simple' or 'single' sugar, called a 'monosaccharide' is the simplest form and cannot be further broken down. This is the form in which sugar passes from the small intestine into the blood stream. There are three single-molecule sugars which are used by the cells to produce heat and energy which are natural and good for the body.

Fructose - found in all fruits, natural fruit juices and is good for the body. Easily digested.

Lactose - a constituent of milk.

Glucose - these sugars from the juices of fruits, vegetables, even the starch of seeds, roots, stems and leaves; all vegetables, potatoes, corn, peas; all fruits, bananas, apples, figs, pears, etc...

All natural foods are good for us and are single molecules which are easily broken down by the saliva, pancreatic juice and the intestinal juice to glucose, ready for the blood. (The breakdown of starch is aided by moderate cooking.) During this process of breaking down starch to a single sugar it passes through two other states: dextrin and maltose.

The sugar most commonly used, sucrose, is not natural to the body and is very unfavorable as a food. By being a double molecule, it is like two molecules tied together and to separate these two molecules takes twice the strength of digestive juice. When two single sugar molecules are separated they are natural to the body, but when linked together they irritate any tissue they contact. They cannot be separated by the saliva in the mouth or the gastric juice in the stomach. While they are finally separated in the small intestine and enter the blood as simple natural sugar, their separation is made after considerable delay, and with difficulty; and until they are separated they are strong irritants to the cells of the mucous membranes of the mouth, stomach, duodenum, and small intestine. This irritation often causes serious trouble.

The speed of damage to the body is determined by how much sucrose (common table sugar) is consumed, and by the strength of the digestive enzymes. If you have the practice of drinking with your meals (even water), this dilutes and weakens the enzymes and makes it almost impossible to break down and to eliminate them from the body at any given time. This can easily cause constipation, indigestion and other problems. When the food is not broken down properly, it is delayed in the digestive tract and fermentation sets in. This fermentive bacteria derives its energy from their growth by the partial oxidation of the sugar. The chief

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products of this fermentation are carbon dioxide and alcohol which become detrimental to the body instead of the food being a blessing like it was intended.

If we do not drink any liquid with our meals or thirty minutes before or thirty minutes after we eat, many nagging problems will clear because our digestive enzymes will be strong enough to break our foods down and get it out of the system without delay. This helps to eliminate fermentation.

Studies show that a solution of only 5.7% sugar and water produced reddening of the mucous membrane; with 10% solution the membrane became dark red, and a 20% solution produced pain and distress.

Sugar acts upon the tissues like a chemical substance, such as an acid or caustic. A bit of raw flesh placed in a strong solution of sugar soon becomes shrunken in appearance because of the abstraction of water which the sugar absorbs. Candy, ice cream, pastries, etc., because of the sugar, irritate the mucous membrane of the stomach, and thus causes many degenerating problems.

Not only is sugar an irritant to the digestive tract, but it often becomes a substitute for better foods by satisfying the appetite before the nutritious foods are eaten and so results in the body being nutrient deficient.

Sugar Substitutes

Many who crave sweets realize their harmfulness, or perhaps have already disabled their pancreas and cannot use them. It is good to analyze the food or drink you are using that requires sugar. These foods are usually harmful and should not be consumed anyway.

Those who are not willing to re-educate their appetites turn to sugar substitutes. This is not safe since they are harmful to the digestive tract and should not be used. Many belong to the harmful coal-tar family.

To re-educate spoiled taste buds is easier than many think. It begins by securing a knowledge of what a healthy body consists of. Then follow with a balance diet of tasty foods which becomes very satisfying without the use of sugar. From then on the taste for sweets declines until it ceases to be a source of special temptation; the desire for a healthy body with a strong immune system and boundless energy supersedes giving in to immediate gratification of spoiled taste buds.

If you are ever skeptical of how you can obtain better health, try being your own diagnostician. Just do a quick and simple process of elimination, leave off the harmful products such as too much sugar, salt, fried foods, heavy meats, tea, coffee, beer, etc. [Remember, the author of this article is not SDA!] Keep a written daily record of the change that go on within your body. If you experience headaches, you can check and know exactly how often you are suffering from them. You can tell if it is a withdrawal symptom from an addictive food, such as coffee, or if from stress, or from a new food that is causing the problem. You don't have to guess or try to remember your symptoms, you have it all written down.

The changes are amazing! When you start leaving off bad foods and add the nutrient-filled foods, things begin to happen. Within a few weeks you will start noticing the differences:

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Weight problems clear up;
Skin problems clear up;
Restful sleep occurs;
Constipation clears;
Fewer or no headaches occur;
Greater energy levels develops, etc.

And all because you left off the harmful foods and ate more nutritious natural foods.

(Fruits, nuts, grains, sprouts, seeds, and vegetables.) [The above article entitled "SUGAR, Our Nation's Unnatural Disaster" by Sandi Mitchell appeared in the *Doctor's Health Review* of July 1989.]

Fearfully and wonderfully made!

Do you realize that of all the foods consumed today, refined sugar is considered to be one of the most harmful? Although it is true that our bodies require sugar, it depends upon natural sugars as found in fresh fruits and vegetables. Nearly 70% of the food we eat is changed by the body into sugars which in turn produce energy, and the remaining 30% is used for building and repairing our bodies. Our bodies were created to handle natural, unrefined sugar. Not processed, refined white sugar!

In 1915, the natural average of sugar consumption in the United States was about 18 pounds per person. In 1989, it had increased to a whopping 126 pounds per person per year. By 1990, it was estimated that the average person consumed his or her weight in sugar, plus 20 pounds of corn syrup — averaging 150 pounds a year! When will it end? Perhaps one day we'll hit a plateau when children are weaned straight onto soft drinks!

Plainly stated, the human body cannot tolerate this large amount of refined carbohydrates. The vital organs of the body are actually damaged by this gross intake of sugar. As explained in the previous article, refined sugar contains no minerals, fiber, protein, fats, enzymes — only empty calories!

What happens when you eat a refined carbohydrate like sugar? Your body must borrow vital nutrients from healthy cells in order to metabolize the incomplete food. Calcium, sodium, potassium and magnesium are taken from various parts of the body to make use of the sugar. Often so much calcium is used to neutralize the effects of sugar that the bones become osteoporotic due to the withdrawn calcium. Likewise, the teeth are affected and they lose their components until decay occurs and hastens their loss.

As refined sugar is void of all nutrients, consequently it causes the body to deplete its own stores of various vitamins, minerals and enzymes. If sugar consumption is continued, an over-acid condition results and more minerals are robbed from deep within the body in order to correct the imbalance. If the body is lacking the nutrients needed to metabolize the refined sugar, it will not be able to properly handle and rid itself of the poisonous residues. These wastes accumulate through the brain and nervous system, which speeds up cellular death. The

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bloodstream becomes over loaded with toxins and waste products and symptoms of carbonic poisoning results.

The pancreas is a gland that is part of the endocrine system. These glands control many of the body's functions through chemical substances. The pancreas has two functions. One is to produce pancreatic juice which aids in the digestion process, by breaking down proteins, changing starches into a simple sugars, and splitting fats into fatty acids and glycerin. The other function is to produce insulin and glucagon. Insulin controls the level of blood sugar, enables the body to store and burn sugar properly, and is also needed by the cells to help them use glucose, which is their main fuel. Foods said to be of special help in maintaining proper blood sugar levels include cabbage, onions, sprouted lentils, ripe olives, greens, beets, carrots, celery, soybeans, baked potatoes, almonds and walnuts. All fruits tree-ripened in the sun are excellent, but never sweeten them with sugar. Soda decreases the activity of the pancreatic juices which are used to aid the digestion of protein, fats, and carbohydrates.

Paying the Piper

Diabetes is a disease which can be caused by sugar consumption as well as a high fat diet. Diabetes is caused by the failure of the pancreas to produce adequate insulin when the blood sugar rises. A concentrated amount of sugar introduced into the system sends the body into shock from the rapid rise in the blood sugar level. The pancreas eventually wears out from overwork.

Hypoglycemia occurs when the pancreas overreacts to the large amount of sugar in the blood and releases too much insulin leaving one feeling "tired" as the blood sugar level becomes lower than it should be.

An article in the British Medical Journal, entitled *The Sweet Road to Gallstones*, reports that refined sugar may be one of the major dietary risk factors in gallstone disease. Gallstones are composed of fats and calcium. Sugar can upset all of the minerals, and one of the minerals, calcium, can become toxic or nonfunctioning, depositing itself anywhere in the body, including the gallbladder. The article goes on to say that one out of ten Americans has gallstones. This risk increases to one out of every five after age forty. Gallstones may go on unnoticed or may cause pain — wrenching pain. Other symptoms might include bloating, belching, and intolerance to certain foods.

Another serious problem with sugar consumption that is now coming to the forefront is the various levels of mental problems. Our brains are very sensitive and react to quick chemical changes within the body. As sugar is consumed, our cells are robbed of the B vitamins, which destroys them, and insulin production is inhibited.

Low insulin production means a high sugar (glucose) level in the bloodstream which leads to a confused mental state or unsound mind, and has also been linked to juvenile criminal behavior. In his book *Diet, Crime and Delinquency*, Dr. Alexander G. Schauss addresses this solemn fact and maintains that many mental ward and prison inmates are "sugarholics" and erratic emotional outbreaks often follow a sugar binge.

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And it is any wonder? Dr. David Reuben, author of *Everything You Always Wanted to Know About Nutrition* says "...white refined sugar—is not a food. It is a pure chemical extracted from plant sources, purer in fact than cocaine, which it resembles in many ways. Its true name is sucrose and its chemical formula is $C_{12}H_{22}O_{11}$. It has 12 carbon atoms, 22 hydrogen atoms, 11 oxygen atoms and absolutely nothing else to offer."

Incidentally, the chemical formula for cocaine is $C_{17}H_{21}NO_4$ and sugar's formula is $C_{12}H_{22}O_{11}$. For all practical purposes, the difference is that sugar is missing the "N" or nitrogen atom.

Sugar is sugar is sugar?

Sugar is commonly made from sugar cane or sugar beets. Although rich in nutrients as they come from the earth, during the refinement process 64 food elements are destroyed. All the potassium, magnesium, calcium, iron, manganese, phosphate, and sulfate are removed. The vitamins A, D, and B are eliminated. Amino acids, vital enzymes, unsaturated fats, and fiber are gone. All that is left is the sweet, refined sugar.

Table sugar can stimulate the production of fat in the body. Workers who handle raw sugar often develop rashes and other skin problems. When it oxidizes with sweat, sugar draws water from the skin and causes chapping and cracking. Infections, erosions, and fissures around the nails can occur.

To a lesser or greater degree, all refined sweeteners such as corn syrup, maple syrup, etc. can undergo similar destructive processes. Even in the processing of maple sugar and honey, their natural states can be altered.

While there seems to be some debate on the issue, Dr. Jay M. Hoffman in his book *The Missing Link* presents these interesting facts and a bit of history in the chapter he devoted to the "Honey vs. Sugar" issue.. Most nutritionists regard honey as a more favorable sweet than the refined sugars. The following quotations are of interest on the subject of nutritious sweets.

"The almost universal craving for sweets, especially in children, best proves that there is a true need for them in the human system. The two invert sugars that honey contains (75% in most grades) have many advantages in food substances. Ordinary sugar, also starch, must undergo digestion, a process that changes them into simple sugars the same as, or similar to, those found in honey. The sugars of honey, therefore, may be considered as predigested; hence the use of honey takes a load of work off the stomach and pancreas.

"Many nervous states can be attributed to excessive sugar consumption. Our swift modern life requires rapid metabolism to create and to replace the much-needed physical and mental energy. Simple sugar can supply this need much better than can the ordinary refined products, which are not only hard to digest, but tend to cause such ills as gastric ulcer, renal diseases, and diabetes. Dr. Beck states that 'sugar is just as habit-forming as narcotics, and its use, misuse, and abuse, a modern nutritional disaster.' Viewing the many channels through which we find refined sugar getting into the alimentary canal, such as candy, ice cream, soft drinks, syrups, pastry, jams and jellies, besides the sugar bowl, it is not hard to believe."

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Many people have asked the question “What is the difference between honey and sugar?” In answer to this question, it should be made very clear that there is a vast difference between these two types of sweeteners. First, sugar, which comes from beets or cane, is sucrose, a disaccharide, which over stimulates the Islands of Langerhans in the pancreas, a gland that secretes digestive juices and enzymes for metabolization of foods in the small intestines. Within this gland the Islands of Langerhans, glands within a gland, furnish insulin to burn up excess sugar.

Honey is not a disaccharide like sugar; it is a monosaccharide, which does not overstimulate the Islands of Langerhans as sucrose does. The high content of fructose in honey also may be an advantage, since fructose is not dependent on insulin for its uptake. Pure, unadulterated honey can be tolerated in small amounts by diabetics and hypoglycemics; but not sucrose, which causes much trouble to a diabetic and a hypoglycemic.

What is meant by “unadulterated honey?” We will explain this in detail, so that there can be no misunderstanding. Beekeepers remove honey in the summer and the fall. However, some beekeepers only remove honey in the summer; if there is an excess of honey, they will remove the excess in the fall, but leave enough honey for the bees to live on over the winter. There are, among the large honey producers, some who take out too much honey in the fall; then in order to keep the bees alive over the winter months, feed them sugar water or sugar syrup. Now they have a new gimmick; they remove one of the honey frames and replace it with a plastic container the same size as one of the honey frames. This container holds sugar water or syrup. Many of the beekeepers use syrup... This sucrose is eaten and deposited in a comb of the frame. In the summer, when beekeepers are gathering their honey for extraction, they take out all the frames that are filled and extract both sucrose and honey. This is how sucrose gets into honey. Pure, unadulterated honey is levulose or fructose, which is a monosaccharide... Bees do not manufacture sucrose.

It has been said by some that there is no difference between sugar and honey, but this is not so. White sugar is an empty calorie; honey contains nutrients. In 3 1/3 ounces, or 100 grams, of honey, we find 20 milligrams of calcium, 6 milligrams of phosphorus, 3 milligrams of magnesium, .8 milligrams of iron, 5 milligrams of sodium, 51 milligrams of potassium, .01 milligrams of chromium, a trace of vitamin A, .01 milligrams of B₁ (thiamin), .07 milligrams of B₂ (riboflavin), .3 milligrams of B₃ (niacin), 4 milligrams of vitamin C, and also copper, silica, manganese, chlorine, sulphur, and aluminum. The minerals in honey are a natural source from nature itself, and can be readily used to repair and build body tissues, muscles and bones. We would all do well to get rid of sugar and begin using pure unadulterated honey, from bees that have not been fed on sugar water or sugar syrup.

Move over Tony!

As a child, I remember Tony the Tiger growling that his favorite cereal was “Grrreat!” Since that time, many cereals have come and gone. Today for the most part, the sugar coated ones line the shelves of our super markets. But do you realize the cereals on the shelves of your neighborhood “health” food store could be just as sweet and unhealthy? Here’s a comparison of some brand name cereals next to their so called “healthy” counterparts, listing their grams of sugar per serving:

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<i>HEALTH STORE</i>	<i>SUPERMARKET</i>
Cherrios 1g	2g
Apple Jacks 14 g	11g
Rice Crispies 3g	2g
Cocoa Pebbles 13 g	19g
Waffle Crisp 11 g	9g
Frosted Flakes 13 g	8g
Corn Flakes 2g	3g
Frosted Mini Wheats 12 g	12g

On the other hand, there are several cereals available without refined sugar. Whole or sliced fresh fruit or blended canned fruit added to cold cereal can provide a delicious taste treat. For a grrreat alternative, toss in a few pieces of your favorite dried fruit (apples, apricots, pineapple, raisins, dates, etc.) the next time you prepare cooked whole grain cereal.

A Sticky Question

Nothing goes better on a steaming stack of whole-wheat pancakes or waffles than thick, pure maple syrup. Sounds like a part of the perfect vegetarian breakfast, right? Unfortunately, this centuries-old sweet treat may not be 100% vegetarian.

To make a gallon of maple syrup, some 40 gallons of sap have to be collected and boiled down. During the boiling the sap tends to foam up, and heavier grades of sap spill over into the lighter sap on its way to becoming syrup. The best way to combat foam is to add a drop of fat every minute. Depending on the producer, that may mean lard, cream, butter, vegetable oil or pretty much any other oil or fat. "They use whatever they have around," said Eric Lande, a syrup producer in Johnson, Vermont. Lande produces kosher maple syrup under the supervision of a rabbi, and uses Crisco shortening as a defoamer.

Bruce Martell, a maple inspector for the Vermont Department of Agriculture, said he heard of one man using a dollop of peanut butter. David Scanlon, president of the International Maple Syrup Institute and of the Clark Hill Sugary in Canaan, NH, said his company uses soybean oil and that many producers use one of several commercial defoamers, some of which are vegetable-based, but not all. One common practice, particularly among old-time maplers, is to hang a strip of bacon above the boiling sap and let the fat drip in, Scanlon said.

If your maple syrup comes from an individual producer, such as Lande of Clark Hill, it's relative easy to find out whether animal or vegetable fat was used as a defoamer. But if the syrup packager buys from dozens or hundreds of individual producers, as many of the larger ones do, the chances are good that at least some of them used animal or dairy products.

An interesting side note: Dimethylpolysiloxane is one of the most commonly used as commercial defoamers. It can be found in chewing gum, gelatins, poultry, salt, sugar, wine, transformer liquid, and brake fluids. Now doesn't that whet your appetite?!

Would sugar by any other name be just as sweet?

If you are health conscious, hopefully you have already become an avid label reader and recognize many of the clever disguises that sweeteners can hide behind.

Brown sugar: Sucrose crystals covered with a film of molasses.

Confectionery sugar: Powdery sucrose.

Corn sugar: Sugar made from cornstarch. Basically sucrose.

Corn sweeteners: A liquid sugar made by the partial breakdown of cornstarch.

Dextrose: A marketing name for glucose.

Fructose: Sugar found in fruit, fruit juices and honey.

Galactose: A common simple one-ring sugar [monosaccharide] not commonly found in natural products by itself, but necessary to form the common two-ring sugar [disaccharide] lactose, milk-sugar.

Glucose: The most common simple one-ring sugar found in nature. It is the sugar found in the blood, either derived from digested food or made by the body from other carbohydrates and protein.

Granulated sugar: Sucrose.

Honey: A syrup made of mostly fructose [unless adulterated].

Invert sugar: An altered sugar found in fruits and honey. Best for body use.

Lactose: The sugar found in milk. A two-ring sugar made of glucose and galactose.

Maltose: A two-ring sugar made of two glucose rings. It is commonly formed in the process of breaking down starch.

Mannitol: A sugar alcohol that is broken down in the body the same way as other sugars but absorbed more slowly.

Maple syrup: A syrup made from the sap of the sugar maple tree, mostly fructose.

Sorbitol: A sugar alcohol produced by hydrogenation of glucose and invert sugar and absorbed more slowly than ordinary dietary sugar.

Starch: Complex carbohydrates; long chains of one-ring sugars [glucose] linked together. Digestion of starches breaks these chains into simple sugar units, thus releasing the sugar into the bloodstream slowly.

Sucrose: Table sugar. A two-ring sugar made of glucose and fructose.

Sugar can also masquerade under a variety of other names and sometimes it is difficult to identify. A food can be labeled “natural,” “sugar free,” or “sugarless” and still contain calories from sugar alcohols (xylitol, sorbitol, and mannitol), provided the basis for the claim is explained (but not necessarily understood). Saccharin is a non-nutritive sweetener—that is, it

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has no calories. Aspartame has the same calories as sugar, but is so much sweeter that only small amounts are needed to provide the desired sweetness in a product.

We may even be getting more than we bargained for when we get our sweets from fruit juice. A popular brand of diet fruit juice has a beautiful picture of an open pineapple and a cut orange on its label proclaiming it to be "sugar free." However, it is artificially sweetened with saccharin and Aspartame.

Maple sugar and ordinary sugar offer about equal sweetness, teaspoon to teaspoon. Honey is 2½ times sweeter than sugar; so if you substitute an equal amount of honey for sugar in a recipe, the result will be more than double sweetness. Every natural sugar substitute is lower in calorie content than refined sugar. Total calories in one tablespoon vary as follows:

Refined sugar 100 calories

Molasses 65 calories

Honey 70 calories

Maple syrup 65 calories

When substituting honey for refined sugar in any recipe, use 1 cup honey less ¼ cup of the amount of liquid called for; or use ¾ cup honey. The time taken to digest refined sugar places a great strain on the digestive system. However, honey is absorbed quickly and does not require any digestive effort.

Ice Cream

As the well-known advertisement goes "Hotdogs, ice cream, apple pie, and Chevrolet" ice cream is the all-American favorite pastime. Matter of fact, *Baskin & Robbins 31 Flavors* reports that just as much ice cream is sold during the cold winter months as in the hot summertime. Perhaps that sheds some light on why most Americans are over weight. One serving of this delicious tempter can range from 150 to 400 calories, packing a whopping 19 grams of fat. That's 170 fat calories! But calories are not the only unhealthy factors that ice cream has to offer. Despite how "natural" the label says it is, once that scrumptious concoction slides past your tongue, consider what your tummy has to contend with. Not only is the combination of milk and sugar injurious, but ingredients such as these can wreak havoc on the delicate membranes of your digestive system.

n-Butyl Acetate is used as a flavoring in ice cream, but it is also an ingredient in perfumes, nail polishes, polish remover and lacquers. This chemical is mildly toxic by breathing and swallowing large amounts. A skin and severe eye irritant. Effects by breathing are nasal and respiratory system problems. It is a mild allergen. High concentrations are irritating to eyes, respiratory tract, and cause narcosis (semi-unconsciousness).

Calcium sulfate found in soft serve ice cream and other frozen dairy desserts, is more commonly known as gypsum or Plaster of Paris.

Furfural provides a nutty flavor in ice creams but also serves as a herbicide (artificial ant oil) and leather preservative. It is poisonous if swallowed in large amounts, moderately toxic by breathing and skin contact, and a proven human mutagen (which means it changes inherited

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characteristics). The liquid is dangerous to the eyes, the vapor is irritating to the nose and throat, and it is a central nervous system poison. Next time you're offered a banana split, perhaps it would be well to take the banana and split!

The Counterfeit

For every good thing God has given us, it seems Satan has come up with a counterfeit. It is human nature to want something for nothing. All gain, no pain. Unfortunately, with the false revival of "health reform" in the world today, is there any wonder that science (so called) has provided us with so many sweet alternatives? Yes, we do want our cake and eat it too!

So called "experts" in the field of health continue to debate the pros and cons of Aspartame, NutraSweet, saccharin, Equal, Sweet 'N Low, etc. The FDA has been petitioned time and time again but, as usual, deep pocketed lobbyists, politics and the almighty dollar take precedence above the consumer.

Aspartame, the chemical name for NutraSweet, consists of three components: phenylalanine, aspartic acid and methanol. Because it contains methanol, a human specific and highly toxic poison, its safety should be examined. Methanol is converted to formaldehyde and formic acid - two substances that have a toxic effect on the thymus gland.

The health effects listed for Aspartame (NutraSweet) reads as follows: FDA approves use at moderate levels to accomplish the intended results... Could cause allergic dermatitis. Concentrated chemical caused reproductive effects (infertility, or sterility, or birth defects) in animal studies. Aspartame does contain a chemical called phenylalanine which is dangerous to people with the inherited disease phenylketonuria (PKU).

In 1988, the Mexican government stopped soda and food processors from using *nutra* in the brand name because it was "misleading." They also required labeling that carries the following warning: "This product should not be used by individuals who are allergic to phenylalanine. Consumption by pregnant women and children under 7 is not recommended. Users should follow a balanced diet. Consumption by diabetics must be authorized by a physician."

Do you think there's something the FDA is not telling us?

Saccharin has been in use since 1879. And it is still on the FDA's top priority list to retest for mutagenic, subacute, and reproductive effects. The FDA has considered restricting saccharin to 15 milligrams per day for each kilogram of body weight or 1 gram a day for a 150 pound person. In 1977 the FDA announced that the use of saccharin in foods and beverages would be banned because the artificial sweetener had been found to cause malignant bladder tumors in laboratory animals (7 out of 38 animals tested developed tumors, 3 of them malignant.) However, at the time of the FDA's announcement, Americans were consuming 5 million pounds of saccharin per year, 74% of it in diet soda, 14% in dietetic foods, and 12% as a "tabletop" replacement for sugar. Because of the immediate outcry of commercial producers and users of saccharin, the FDA, urged by Congress, delayed the ban. The moratorium on prohibiting its use has been extended indefinitely.

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In 1951, France banned saccharin except as a nonprescription drug. In 1978 the Committee of the Institute of Medicine and National Research Council reported that it had reached the conclusion that saccharin is a potential carcinogen in humans. But they have not removed it from our reach.

Taking Responsibility

Without a doubt, these products (and countless others) are not conducive to healthful living. At some point each of us, as individuals, must take responsibility for our own actions. If we wait for the FDA to warn us away from these harmful products, we're more at fault than they are! When's the last time someone held you down and shoved some article of unhealthy food down your throat? No, you and I are the ones who continue to appease our own appetites with these unhealthy items. God has given us charge over our own bodies. It's up to us to make good decisions if we want to enjoy good health.

The Bible is full of references to honey and the honeycomb. "My son, eat thou honey, because it is good; and the honeycomb which is sweet to thy taste" "Hast thou found honey? eat so much as is sufficient for thee" "It is not good to eat much honey" "Pleasant words are as a honeycomb, sweet to the soul and health to the bones" (Proverbs 24:13; 25:16,27; 16:24).

Sweets which will cooperate healthfully with our bodies can be selected from sources such as fresh fruits, honey, dried fruits such as dates, figs, raisins, etc. Honey cannot be classed as a refined sugar as it is entirely a different sweet and will not cause the system to react as it does to refined sugar. It will not ferment in the stomach, and larger quantities than refined sugar can be eaten without harm to the digestive system because of its quick absorption. Honey is the best natural sweet for all cooking purposes.

In complete agreement with secular authorities on this subject, Ellen White, in *Counsels on Health* makes these statements: *"The free use of sugar in any form tends to clog the system and is not infrequently a cause of disease"* (Pg. 154). *"Sugar clogs the system. It hinders the working of the living machine"* (Pg. 149). God has given sufficient counsel regarding the care we should give our bodies which He created in His image. Our decisions today determine where we will spend our tomorrows.

"What? know ye not that your body is the temple of the Holy Ghost which is in you, which ye have of God, and ye are not your own? For ye are bought with a price: therefore glorify God in your body, and in your spirit, which are God's" "Know ye not that ye are the temple of God, and that the Spirit of God dwelleth in you" (1Cor. 6:19,20; 3:16). "In whom all the building fitly framed together groweth unto an holy temple in the Lord:" (Eph. 2:21). "God dwells in humanity, and through saving grace the heart of man becomes again His temple" (DA 161). "Whether therefore ye eat, or drink, or whatsoever ye do, do all to the glory of God" "If any man defile the temple of God, him shall God destroy; for the temple of God is holy, which temple ye are" (1 Cor 10:31; 3:17). "The body is the only medium through which the mind and the soul are developed for the upbuilding of character" (MH 130)..

"The knowledge that man is to be a temple for God, a habitation for revealing of His glory, should be the highest incentive to the care and development of our physical powers. Fearfully and wonderfully has the Creator wrought in the human frame, and He bids us make it our study, understand its needs, and act our part in preserving it from harm and defilement" (MH 271).

How Sweet it is

Having the appetite under control and under subjection to the will of our Creator is the first step we can take toward worshiping Him and preparing ourselves for the reception of the latter rain which is to be revealed in us through the body, the temple. The body must be clean and undefiled, a fit vessel for the habitation of the Holy Spirit as the personal presence of Christ.

"...but ye know Him; for He dwelleth with you, and shall be in you." "At that day ye shall know, that I am in my Father, and ye in me, and I in you" "If a man love Me, he will keep My words: and My Father will love him, and We will come unto him, and make Our abode with him" (John 14:17,20,23).

"When one surrenders to Christ, the mind is brought under control of the law; but it is the royal law, which proclaims liberty to every captive. By becoming one with Christ, man is made free. Subjection to the will of Christ means restoration to perfect manhood" (MH 131).

The apostle Paul writes *"Know ye not that they which run in a race run all, but one receiveth the prize? So run, that ye may obtain. And every man that striveth for the mastery is temperate in all things. Now they do it to obtain a corruptible crown; but we an incorruptible. I therefore so run, not as uncertainly; so fight I, not as one that beateth the air: But I keep under my body, and bring it into subjection: lest that by any means, when I have preached to others, I myself should be a castaway" (1Cor 9:24-27).*

"Abstinence from all hurtful food and drink is the fruit of true religion. He who is thoroughly converted will abandon every injurious habit and appetite. By total abstinence he will overcome his desire for health-destroying indulgences" (9T 113).

"God desires us to reach the standard of perfection made possible for us by the gift of Christ. He calls upon us to make our choice on the right side, to connect with heavenly agencies, to adopt principles that will restore in us the divine image. In His written word and in the great book of nature He has revealed the principles of life. It is our work to obtain a knowledge of these principles, and by obedience to co-operate with Him in restoring health to the body as well as to the soul" (MH 114,115).

"The requirements of God must be brought home to the conscience. Men and women must be awakened to the duty of self-mastery, the need of purity, freedom from every depraving appetite and defiling habit. They need to be impressed with the fact all their powers of mind and body are the gift of God, and are to be preserved in the best possible condition for His service." "He has provided every facility that man may possess completeness of character" (MH 130).

"Eating has much to do with religion. The spiritual exercise is greatly affected by the way in which the stomach is treated... If men and women would only remember how greatly they afflict the soul when they afflict the stomach, and how deeply Christ is dishonored when the stomach is abused, they would deny the appetite and thus give the stomach opportunity to recover its healthy action." "It is impossible for those who indulge the appetite to attain to Christian perfection" (CH 577, 581).

"I can do all things through Christ which strengtheneth me" (Phil. 4:13).