

SWEET TREAT ADDICTION: *The Scourge of Sugar*

PART 1

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The food a person becomes familiar with as a child forms the eating pattern he/she will follow throughout his/her adult life. Thus, giving sweets as a treat to children not only sends the wrong message, it inflicts a great deal of harm; harm that can affect them for a lifetime. This is especially detrimental when a child is not properly nourished. Sweets are not only addictive, they also become a psychological comfort. Hence, these people have a difficult time controlling their weight and craving for sweets; especially when they become depressed, lonely, or just wish to feel better.

Holidays, Halloween, and special occasions, such as birthdays, etc..., are the most common times of the year when sweet treats are most irresistible and sugar bingeing occurs.

To learn more on the global scale of this problem, read the **transcript for Globesity - Fats New Frontier** aired on Australia's ABC TV on 24 July 2012: <http://www.abc.net.au/foreign/content/2012/s3547707.htm> This Foreign Correspondent TV special exposed the shocking explosion of global obesity in China, Brazil, India, and Mexico, which is the biggest consumer of soft drinks in the world and where diabetes is the number one killer. Sadly, people in these countries are addicted at an early age because of high pressure corporate advertising. Children are served soda in schools and babies are fed Coca Cola! In 1980 obesity was a rarity in Mexico. By 1999 a third of the population were overweight. By 2006 two thirds of the adult population were overweight! By 2010 the number of obese people globally had exploded to 500 million. It is predicted that by 2030 more than one billion will be obese.

The fast food and soda industries have used their powerful influence to determine what goes on labels. Thus, consumers are unable to differentiate what type of sugars products contain. There is a big difference between how the body metabolises refined sugar and natural sugar with fibre. Whole fruits and some products contain fibre, which is metabolised more slowly. Where as processed junk foods and sodas contain high amounts of refined sugar, which is rapidly absorbed, and raises the insulin level. Over time, this constant overload and stimulation contributes to Metabolic Syndrome diseases.

Currently, 80% of our food has been laced with refined sugar of one kind or another, which has had its fibre removed. Refined sugars are dead calories, which means they have no nutrients or fibre. They are just like drugs. When eating out or travelling, there are few if any options for sugar-free foods! For this to change, more public education and demand is needed. Also, a new culture of healthy, tasty food and naturally sweet treats, free of refined sugars or artificial sweeteners, needs to be taught in cooking schools around the world.

Children who are given sweet treats and sugary soda/drinks/juices on a daily basis develop excess fat cells, liver damage, and eventually malfunctioning glands. Unhealthy glands do not secrete a balance of or sufficient amount of hormones. This leads to various metabolic diseases, such as obesity, diabetes, hypertension, heart and liver disease, hypoglycaemia, polycystic ovarian syndrome, cancer, dementia, improper growth, depression, psychological problems, and infertility.

TYPES OF SUGAR

Monosaccharides:

Glucose, dextrose, or grape sugar - are simple monosaccharides found in plants, juices, and syrups.

Fructose - is a simple monosaccharide naturally found in many plants, honey, tree and vine fruits, flowers, berries, and root vegetables. Commercially, it is derived from sugar cane, beets, and

corn, with the fibre removed. It is the sweet aspect of sugar. There are three forms:

- . **Crystalline fructose** - is a monosaccharide, that is dried, ground, and of high purity.
- . **HFCS** - is a mixture of glucose and fructose as monosaccharides.
- . **Sucrose** - is a compound with one molecule of glucose covalently linked to one molecule of fructose.

All forms of fructose are added to foods and drinks for taste enhancement, shelf life, and browning of some foods such as baked goods. High fructose corn syrup (HFCS) is the most commonly form used in junk foods, sodas, baked goods, and sugary drinks. Fructose is generally regarded as being 1.73 times as sweet as sucrose. It is the sweetest of all naturally occurring carbohydrates.

Gallactose - is a simple monosaccharide that does not generally occur in the free state. It is a component of milk sugar/lactose and less sweet than glucose. It is also a component of the antigens found on the surface of red blood cells that determine blood groups.

Disaccharides:

Lactose (glucose and gallactose) - is a disaccharide naturally occurring in milk sugar. It is broken down by the enzyme lactase during digestion. Some adults and ethnic groups lack this enzyme, (lactose intolerant) preventing them from digesting dairy.

Maltose (glucose and glucose) - is a disaccharide produced from the germination of seeds and certain grains, such as barley, which is converted to malt. It is less sweet than glucose and formed in the body when amylase breaks down starch. It is also found in beer and produced when glucose is caramelised. The addition of another glucose unit yields **maltoriose**; further additions produce **maltodextrin** and eventually starch.

Sucrose (glucose and fructose covalently linked) - is a disaccharide found in stems of sugar cane and roots of sugar beets. It occurs naturally alongside fructose and glucose in other plants, carrots, and fruits. Commercially, it is highly refined with sulphuric acid into **white** granulated sugar.

Caster sugar is even more highly refined into a powder.

Brown sugar is white sugar with added molasses.

Raw sugar is a minimally processed form of cane sugar.

Demerara sugar is a light brown cane sugar originally from Guyana.

Turbinado sugar is a type of raw sugar that is less processed.

Sucanat is a trademark name for minimally processed dried sugar cane juice that contains the molasses. It is similar to Panela from Latin America, Rapadura from Brazil, Muscavado from the Philippines, Jagger from Asia, Africa, Latin America, and the Caribbean.

Maple syrup is 90% glucose and 10% sucrose and fructose.

According to Dr. Robert Lustig, professor of paediatrics in the division of endocrinology at the University of California, San Francisco, it was the McGovern Commission on Dietary Guidelines for Americans Directive in the 1970s that started the obesity epidemic when it replaced fat with sugar. Low fat means high in sugar. Sugar is not good for us in any way, shape or form. Whereas fats are needed for brain growth and function. The body must have its supply of essential fatty acids (EFAs) for hormone production and many other functions. Dr. Lustig's research shows that sugar is a way bigger problem than fat ever was. It is the new dietary evil.

The AHA, AMA, ADA, UDSA, and food industry all collaborated with this change to secure their control of the information, education, health, and food industries. However, current data now shows that these so called "experts" got it wrong. Perhaps, deliberately. In any case, their LDL research was flawed and based on incomplete and erroneous information. For decades, ill health caused from the consumption of refined sugars (and damaged fats) was covered up. They even launched an aggressive campaign to silence and destroy Nutritionists, Naturopaths, and anyone else who tried to teach the truth about the benefits of real food and good nutrition. Presently, in the U.S, only dieticians, controlled by the food giants and big pharma, are allowed to practice in schools, hospitals, etc. and be reimbursed by medicare. Also, naturopaths and independent nutrition consultants are no

longer being licensed or allowed to practice.

Dr. Lustig's data clearly shows that obesity has increased in 30 years from 10% to 40% because of this change. There is even an epidemic of obesity in 6 month olds. Medical costs from metabolic diseases are now 75% of global health care expenses.

Fatty Liver disease affects 1/3 (33%) of all Americans and others consuming the American junk food diet. Polycystic Ovarian Syndrome affects 10%. And, that is not all. Obesity is responsible for \$274 million extra in jet fuel; sinking of boats due to weight; \$65 billion loss in productivity; and 50% increase in absenteeism. In the United States alone, \$147 billion are spent in health care costs, do to Metabolic Syndrome diseases. Three Surgeon Generals and the Joint Chief of Staff consider obesity a threat to National Security, because at least 9 million young adults (27% of all Americans aged 17-24 in 2005) were too overweight to serve in the military.

In his 12 April 2012 UCTV Prime series: "**The Skinny on Obesity**" [Health and Medicine] [Show ID: 23591], Dr. Lustig explains how our bodies metabolise sugar and exposes the consequence of the over abundance of sugar in today's processed convenience foods. His research reveals that sugar is metabolised in the same way as alcohol or other toxins, causing damage to the liver and other organs. <http://www.uctv.tv/skinny-on-obesity/>

Using the Food and Agriculture Organization data base and linking it to the the International Diabetes Federation data base, country by country, Dr. Lustig's research found that calories from sugar are the only ones that correlate with the increase in obesity related diseases. His research also proved that the dogma of "a calorie is a calorie" asserted by dieticians and food manufacturers is all **wrong**.

Real nutritionists have known for decades that all calories are NOT equal. In fact, refined sugar is 50 times more potent than other calories in increasing diabetes rates world wide. In nature, fat and carbohydrates/sweets are never found together in the same food. Sugar, which is highly refined, is the only food that is metabolized as both fat and carbohydrate.

When sugar and other refined carbohydrates are consumed, 80% of the glucose is is metabolized by all the organs in the body which convert it into glycogen until it is replete. Glycogen provides energy. What is not utilized, converts into fat. Only 20% of glucose is metabolized by the liver.

However, fructose can only be metabolized in the liver, because only the liver has the transporter for fructose. Thus, all the fructose one consumes in junk food and drinks, overloads the liver, where it is then sent to the mitochondria and converted into fat. This is a recipe for mitochondrial melt down; mitohcondrial constipation and disease because the mitochondria is the energy engine of a cell.

Commercial fructose (without the fibre) is a chronic dose dependent liver toxin, just like alcohol. It is metabolised to fat, just like alcohol. Both create more liver fat than the liver can't export. Hence, fatty liver disease develops. Hepatic fructose metabolism leads to the manifestations of all the Metabolic Syndrome diseases.

In addition, refined sugar and fructose (HFCS) in particular, cause the liver to become insulin resistant. This drives the pancreas to make more insulin, which in turn creates fat cells adding to weight gain. The extra insulin produced also drives blood pressure up, which can lead to heart disease. High insulin also creates mutational cell division, which may lead to cancer and changes in the brain, which can cause dementia. When the pancreas can't produce anymore insulin it burns out and you have diabetes. The diseases of alcohol, sugar, and obesity are all the same.

Dr. Lustig's research clearly reveals that refined sugar is the real toxin in our food that is causing damage to the mitochondria, leading to early death.

A study released by the World Economic forum found chronic non-communicable diseases (NCDs) kill 36 million a year, account for 63% of deaths in the world, and are projected to cost the global economy \$47 trillion in the next 20 years. The socio-economic impact is staggering. In response to this, the United Nation's Sec. General announced in Sept. 2011, that chronic NCDs such as diabetes, heart disease, hypertension, cancer, dementia, now pose a bigger threat to the developing world than acute/infectious diseases.

Food manufacturers have created a very toxic environment in our food supply in order to make food addictive, sell more, and reap larger profits. They don't care that adding sugar to processed food/ drinks destroys the food and eventually kills the consumer. The primary reason that fructose is used commercially in food products and beverages, is its low cost, long shelf life, and is its high sweetness.

People erroneously think that if something is in our food supply it is safe. However, this is far from the truth! Government regulatory agencies are heavily influenced by powerful corporate lobbyist, who highly fund political campaigns and infiltrate these agencies. Many executive positions in regulatory agencies are filled by corporate implants from food or drug companies. When their mission is accomplished, then the government agency executives are recruited back to the corporation. whose product or drug was just approved. It is very much of a revolving door scenario. This is how many potentially harmful drugs and substances, including Nutrasweet, managed to get approved.

Big sugar, being one of the most powerful lobby groups globally, wields a great deal of influence in establishing dietary policies, obtaining approval of their products, and ensuring that regulatory agencies turn a blind eye on the chronic metabolic diseases created from their products. Also, the FDA only regulates acute diseases they can't and won't regulate chronic diseases. This is why nothing has been done to curtail the causes of (chronic) metabolic diseases, which are increasing at an alarming rate.

As if this was not bad enough... Sugar impacts the brain just as much as the waistline. Sugar is very addictive.

READ PART 2 of "SWEET TREAT ADDICTION: *The Scourge of Sugar*"