

## Smart Sugar? The Sugar Conspiracy

Sugar bashing is all the rage these days, and with virtuous cause? Studies over many years have pointed to sugar as, not hazardous! at the very least, an accomplice, if not the perp, behind many of the health ills of modern civilization. Obesity and diabetes are the obvious candidates caused by overconsumption of the sweet stuff. The obesity epidemic has been written about exhaustively for years, and obesity's good friend, type 2 diabetes, has increased threefold in the past three decades, coinciding with the explosion of sugary products (both obvious and hidden). However, there are an abundance of other illnesses and conditions that have lesser-known connections to sugar. The list is long as follows: high blood pressure, hypoglycemia, depression, acne, headaches, hardening of the arteries, fatigue, violent behavior, hyperactivity, aching extremities, and of course, tooth decay. It seems we pay a heavy price for our sweet tooth. Not only do we eat a lot of sugar and make ourselves ill but also it has no nutritional value at all. No vitamins, no minerals, no enzymes, no fiber. Sugar tastes good. Humans crave sugar right down to their DNA. "Sugar is a deep, deep ancient craving," Daniel Lieberman, an evolutionary biologist at Harvard university recently quoted "Early humans looked for sweet fruits and vegetables because they contained the natural sugars that give us energy. Of course, cavemen were never tempted by ring dings or snickers bars. How badly do we crave sugar now?"

A dynamic relation exists between sugars and oral health. Diet affects the integrity of the teeth; quantity, pH, and composition of the saliva; and plaque ph. Sugars and other fermentable carbohydrates, after being hydrolyzed by salivary amylase, provide substrate for the actions of oral bacteria, which in turn lower plaque and salivary ph. The resultant action is the beginning of tooth demineralization. Consumed sugars are naturally occurring or are added. Many factors in addition to sugars affect the caries process, including the form of food or fluid, the duration of exposure, nutrient composition, sequence of eating, salivary flow, presence of buffers, and oral hygiene. Studies have confirmed the direct relation between intake of dietary sugars and dental caries across the life span.

Sugar has been as hazardous to public health as big tobacco.

Sugar is as addictive as cocaine. Brain scans after sugar consumption are very similar to when we do blow. Dopamine floods the brain, and we feel good. And of course, it is a lot easier on the nostrils... unless you are snorting your sugar.

### An Interesting Fact Reveals

The sugar industry paid scientists in the 1960s to play down the link between sugar and heart disease and



promoted saturated fat the culprit instead, newly released historical documents show. The internal sugar industry documents, recently discovered by a researcher at the University of California, San Francisco, and published in Internal Medicine suggest that five decades of research into the role of nutrition and heart disease, including many of today's dietary recommendations, may have been largely shaped by the sugar industry. The documents show that a trade group called the sugar research foundation, known today as the sugar association, paid three Harvard scientists the equivalent of about \$50,000 to publish a 1967 review of research on sugar, fat, and heart disease. The studies used in the review were handpicked by the sugar group, and the article, which was published in the prestigious new England journal of medicine, minimized the link between sugar and heart health, and cast aspersions on the role of saturated fat. The issue now is that the sugar industry is trying to equate other sweeteners with cane sugar because other sweeteners are cheaper, even though the influence-peddling revealed in the documents dates back nearly 50 years, more recent reports show that the food industry has continued to influence nutrition science. Last year, an article in New York times revealed that Coca-Cola, the world's largest producer of sugary beverages, had provided millions of dollars in funding to researchers who sought to play down the link between sugary drinks and obesity. In June, the associated press reported that candy makers were funding studies that claimed that children who eat candy tend to weigh less than those who do not, and there has been considerable interest in the role of maternal diet in pregnancy in the etiology of childhood asthma and atopy. Studies have focused particularly on the potentially beneficial effects of antioxidants, following the hypothesis that a declining intake of antioxidants in westernized countries has led to a reduction in pulmonary antioxidant defenses, and hence to an increase in the prevalence of asthma and atopy in recent decades. An alternative hypothesis, which has received less attention, is that the epidemic of asthma and atopy in

the west could partly be explained by an increasing dietary intake of foods and constituents which may be harmful. Current international dietary guidelines advise people to reduce their consumption of sugar, and more particularly, free sugars, which comprise sugars (monosaccharides and disaccharides) added to foods or drinks by the manufacturer, cook or consumer, and sugars naturally present in honey, syrups, and unsweetened fruit juices while in children a high consumption of sugar-sweetened beverages and fruit juice has been linked to asthma, and particularly atopic asthma, the relation between total maternal consumption of free sugar during pregnancy and respiratory and atopic outcomes in the offspring has not been studied. One ecological study reported a correlation between perinatal consumption of sugar and severe childhood asthma symptoms but could not specifically address maternal sugar intake in pregnancy. Really, sugar is smart and machination is undoubtly over smart.



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