



Written Testimony of
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Corn Refiners Association
Submitted to the
Senate Standing Committee on Health
New York State Senate
For the Public Hearing on
Food Policy in New York State
January 22, 2010

The Corn Refiners Association appreciates the opportunity to submit written testimony to the Senate Standing Committee on Health for their consideration regarding "Food Policy in New York State."

The Corn Refiners Association (CRA) is the national trade association representing the corn refining (wet milling) industry of the United States. CRA and its predecessors have served this important segment of American agribusiness since 1913. Corn refiners manufacture sweeteners, ethanol, starch, bioproducts, corn oil, and feed products from corn components such as starch, oil, protein, and fiber.

Singling out certain foods or beverages for government penalization, whether through nutrition or tax policies, will only serve to further confuse consumers and will not lead to meaningful results in assisting Americans to adopt healthier lifestyles.

According to James M. Rippe, M.D., cardiologist and biomedical sciences professor at the University of Central Florida, "We are eating too much of everything, not just sugar. Over the last three decades, the average American has increased their calorie consumption by 24% and physical activity has declined. People are singling out sugar as the one smoking gun in the obesity epidemic when there are guns everywhere." (Boyles S. "Fresh Take on Fructose vs. Glucose." WebMD Health News. April 21, 2009)

A peer-reviewed study published in the August 2007 issue of *Food and Chemical Toxicology* found that those who frequently consume sweetened soft drinks do not have a higher obesity rate than those who rarely drink them. The study found higher obesity rates correlated with several other factors, such as the amount of time in front of the computer or TV, or the consumption of high amounts of dietary fat.

The authors noted, "Obesity is a multi-factorial problem which is rooted in a positive balance between energy intake and expenditure. Lifestyle, behavior, and environment appear to have a more dominant role in obesity prevalence than do individual foods." (Sun SZ, Empie MW. 2007. Lack of findings for the association between obesity risk and usual sugar-sweetened beverage consumption in adults - A primary analysis of databases of CSFII-1989-1991, CSFII-1994-1998, NHANES III, and combined NHANES 1999-2002. *Food Chem Toxicol* 45(8):1523-1536.)

It is especially important to understand that Americans are consuming more calories from all types of foods today than what was consumed 30 years ago, and we expend less energy to burn the extra calories. Consider the numbers reported in the February 2009 Loss-Adjusted Food Availability Data by the U.S. Department of Agriculture. Total caloric intake on a per capita basis for Americans increased from 2,172 calories per day in 1970 to 2,775 calories per day in 2007 – an additional 603 calories.

Major contributors to this 603-calorie increase include 299 calories from added fats and 194 calories from flour and cereal products. Added sugars account for only 57 calories of the daily increase. (U.S. Department of Agriculture, Economic Research Service. 2009. Calories: average daily per capita calories from the U.S. food supply, adjusted for spoilage and other waste. Loss-Adjusted Food Availability Data.)

Many sodas and sports drinks are made with high fructose corn syrup, a safe and natural ingredient that is handled the same as sugar by the body. There has been a lot of confusion about high fructose corn syrup. We would like the following statements from the American Medical Association and American Dietetic Association included on the record.

The American Medical Association stated that, “Because the composition of high fructose corn syrup and sucrose are so similar, particularly on absorption by the body, it appears unlikely that high fructose corn syrup contributes more to obesity or other conditions than sucrose.” (Report 3 of the Council on Science and Public Health A-08, June 2008.)

According to the American Dietetic Association (ADA), “high fructose corn syrup...is nutritionally equivalent to sucrose. Once absorbed into the blood stream, the two sweeteners are indistinguishable.” The ADA also noted that “Both sweeteners contain the same number of calories (4 per gram) and consist of about equal parts of fructose and glucose.” (Hot Topics, “High Fructose Corn Syrup.” December 2008.)

The Corn Refiners Association urges the Committee to oppose a tax on sodas and sports drinks. Should members of the Committee wish to discuss this testimony further, please contact Audrae Erickson, President, Corn Refiners Association at (202) 331-1634 or aerickson@corn.org.

Thank you for taking this testimony into consideration.

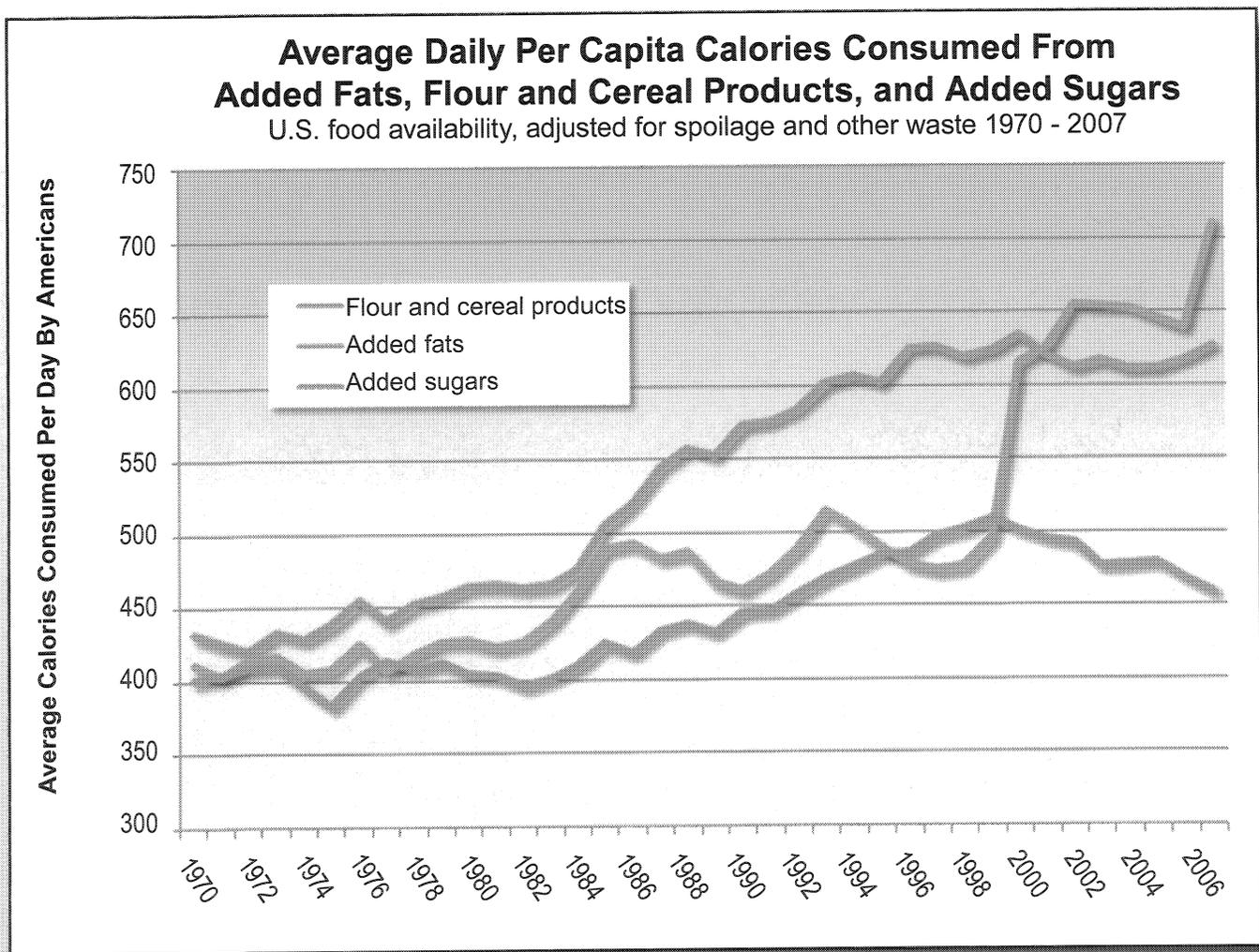
Attachments

ALL CALORIES COUNT

Americans are consuming more calories from all types of foods today than what we consumed 30 years ago. And we expend less energy to burn the extra calories. Loss-Adjusted Food Availability Data reported by the U.S. Department of Agriculture (USDA) show that U.S. average daily per capita consumption of added sugars is on the decline (see chart below). However, total caloric intake on a per capita basis for Americans increased from 2,172 calories per day in 1970 to 2,775 calories per day in 2007 – an additional 603 calories (see chart on reverse).¹

High fructose corn syrup has been erroneously blamed for uniquely contributing to the rise in obesity in the United States. This overly simplistic view ignores peer-reviewed research that demonstrates that high fructose corn syrup and table sugar are metabolized similarly by the body and that each sweetener contributes an equal number of calories to the diet: four per gram.

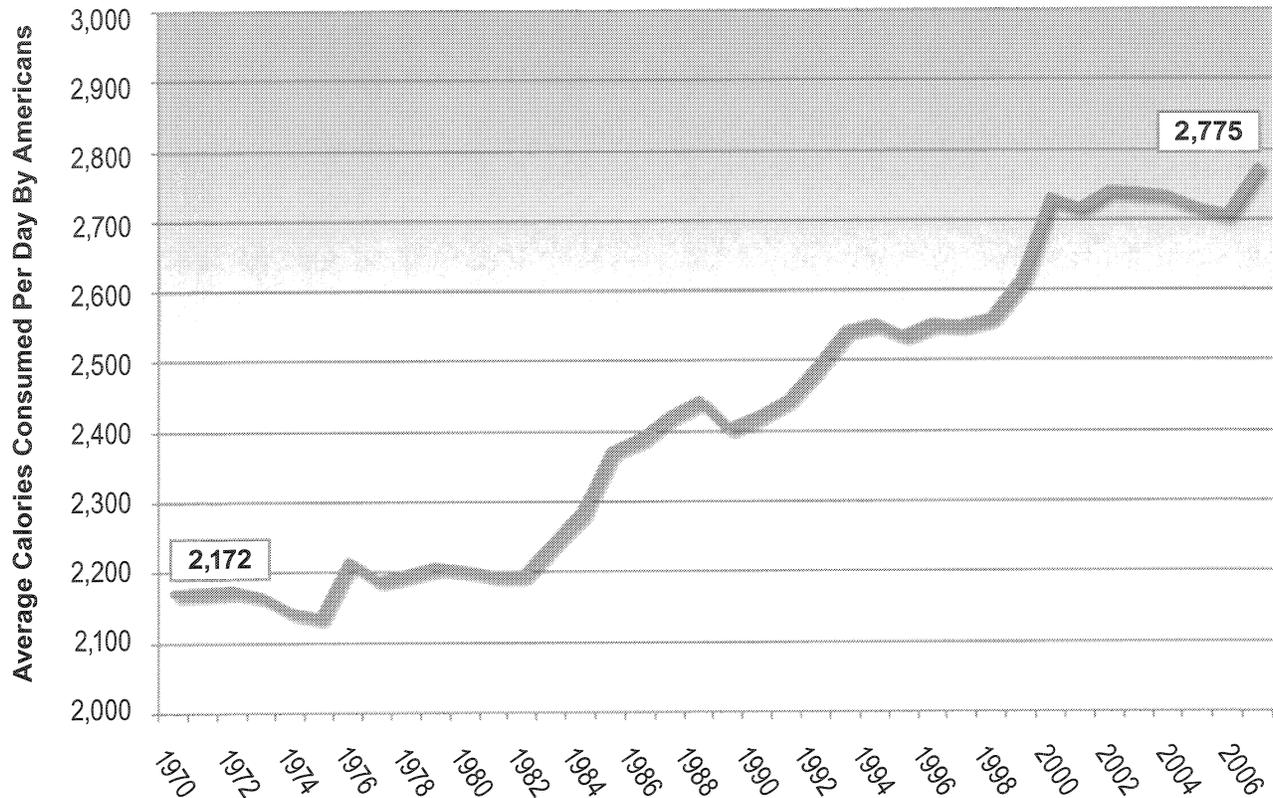
USDA data show that per capita consumption of sugar has always exceeded the per capita consumption of high fructose corn syrup.² In fact, consumption of this corn sweetener has declined since its peak in 1999. According to USDA estimates, annual per capita consumption of high fructose corn syrup for 2008 was 37.8 pounds.³ The 2008 sugar consumption estimate was over 9 pounds greater at 47.2 pounds per person.⁴



ALL CALORIES COUNT

Average Daily Per Capita Calories Consumed

U.S. food availability, adjusted for spoilage and other waste 1970 - 2007

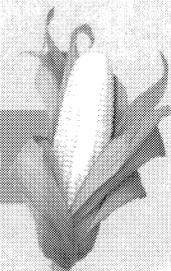


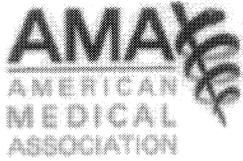
1. U.S. Department of Agriculture, Economic Research Service. 2009. Calories: average daily per capita calories from the U.S. food supply, adjusted for spoilage and other waste. Loss-Adjusted Food Availability Data.
2. U.S. Department of Agriculture, Economic Research Service. 2009. Table 50—U.S. per capita caloric sweeteners estimated deliveries for domestic food and beverage use, by calendar year. Sugar and Sweeteners Yearbook.
3. U.S. Department of Agriculture, Economic Research Service. 2009. Table 52—High fructose corn syrup: estimated number of per capita calories consumed daily, by calendar year. Sugar and Sweeteners Yearbook.
4. U.S. Department of Agriculture, Economic Research Service. 2009. Table 51—Refined cane and beet sugar: estimated number of per capita calories consumed daily, by calendar year. Sugar and Sweeteners Yearbook.

To learn more about high fructose corn syrup, please visit www.SweetSurprise.com.



SweetSurprise.com





AMA finds high fructose corn syrup unlikely to be more harmful to health than other caloric sweeteners

For immediate release

June 17, 2008

CHICAGO -- After studying current research, the American Medical Association (AMA) today concluded that high fructose syrup does not appear to contribute more to obesity than other caloric sweeteners, but called for further independent research to be done on the healthier effects of high fructose syrup and other sweeteners.

“At this time there is insufficient evidence to restrict the use of high fructose syrup or label products that contain it with a warning,” said AMA Board Member William Dolan, MD. “We do recommend consumers limit the amount of all added caloric sweeteners to more than 32 grams of sugar daily based on a 2,000 calorie diet in accordance with the Dietary Guidelines for Americas.”

High fructose syrups are sweeteners produced from starches such as corn, rice and wheat. They can be found in a variety of food products, including breakfast cereals, soft drinks and breads. Currently there are few available studies on the health effects of high fructose syrup and most are focused on the short-term effects.

“Obesity continues to be a major public health problem in this country. Overweight and obese adults and children are at an increased risk for chronic health conditions like heart disease and diabetes” said Dr. Dolan. “Eating a healthier diet can help maintain a healthy weight and drastically reduce your chances of developing weight-related illnesses.”

This report was introduced at the AMA’s Annual policy-making meeting in Chicago.

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Hot Topics

High Fructose Corn Syrup and Weight Status December 2008

CLAIM OF TOPIC: High fructose corn syrup and its relationship to weight status.

DISCUSSION OF TOPIC: High fructose corn syrup is frequently mentioned in the media as a major culprit in the increased incidence of obesity among Americans. Many of the claims against high fructose corn syrup have suggested that this corn sweetener is metabolized differently than sucrose. The American Medical Association (AMA) recently concluded that high fructose corn syrup “does not appear to contribute more to obesity than other caloric sweeteners.” The AMA called for further independent research, and recommends that consumers “limit the amount of all added caloric sweeteners to no more than 32 grams of sugar (8 teaspoons of sugar) daily based on a 2,000 calorie diet...”. Most scientific experts now agree that high fructose corn syrup and sucrose produce similar effects on human metabolic responses. Studies comparing high fructose corn syrup and sucrose have found no significant differences in fasting blood glucose, insulin, leptin and ghrelin. Satiety studies of the two sweeteners have found no differences in appetite, feelings of fullness or short-term energy intakes.

Studies conducted with abnormally high levels of pure fructose (which are not found in the human diet) that are misinterpreted as being representative of high fructose corn syrup may have led to confusion about the relationship between high fructose corn syrup and obesity. However, high fructose corn syrup and sucrose both contain about 50 percent fructose and 50 percent glucose. When these two monosaccharides are consumed together in roughly these proportions, glucose appears to moderate or ‘balance’ fructose.

BOTTOM LINE: High fructose corn syrup may be used as a sweetener in processed foods and beverages and is nutritionally equivalent to sucrose. Both sweeteners contain the same number of calories (4 per gram) and consist of about equal parts of fructose and glucose. Once absorbed into the blood stream, the two sweeteners are indistinguishable. No persuasive evidence supports the claim that high fructose corn syrup is a unique contributor to obesity, however, like all nutritive sweeteners, it does contribute calories. This is where moderation and portion size become important. The greater the consumption of foods and beverages containing large amounts of added sugars of any kind, the more calories are consumed, influencing weight gain. The *source* of the added sugar – whether sucrose, high fructose corn syrup, honey or fruit juice concentrate – should not be of concern; rather it is the *amount of total calories* that is important. Overall, carbohydrates and sugars in foods and beverages can be enjoyed in moderation as part of a balanced diet and active lifestyle. HFCS is a controversial topic and although not all nutrition professionals will readily accept the scientific evidence, this paper represents an evidenced-based, balanced perspective.

OPPORTUNITIES FOR THE RD/DTR:

RDs and DTRs can help correct common misperceptions about high fructose corn syrup and help consumers make better informed choices related to sweeteners, including making the conversion of grams of sweetener to teaspoons of sugar. This information can be communicated through various practice settings as well as in community education and the media.

Resources/References:

1. American Medical Association. “AMA finds high fructose syrup unlikely to be more harmful to health than other caloric sweeteners,” American Medical Association Press Release; www.ama-assn.org/ama/pub/category/18691.html
2. Forshee RA et al. A critical examination of the evidence relating high fructose corn syrup and weight gain. *Critical Rev Food Sci Nutr.* 2007; 47:561-582.
3. Melanson KJ et al. Effects of high-fructose corn syrup and sucrose consumption on circulating glucose, insulin, leptin, and ghrelin and on appetite in normal-weight women. *Nutr.* 2007; 23:103-112.
4. Monsivais P et al. Sugars and satiety: does the type of sweetener make a difference? *Am J Clin Nutr.* 2007; 86: 116-123.
5. Fulgoni, Victor III. High-fructose corn syrup: Everything you wanted to know, but were afraid to ask. *Am J Clin Nutr.* 2008;88; 1715S.

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