Good Morning: Representative Steinberg, Senator Gerratana, Senator Somers, Representative Srinivasan and esteemed members of the Committee on Public Health. I want to thank you for the opportunity to provide testimony on behalf of the Connecticut Nurses’ Association (CNA). I am Mary Jane Williams Ph.D., RN current chairperson of Government Relations Committee for the Connecticut Nurses Association.

I speak in support of PROPOSED BILL NO. 35 AN ACT CONCERNING BEVERAGES WITH ADDED SUGARS, SWEETNERS AND ARTIFICIAL SWEETNERS AND OBESITY

Obesity is often multi factorial, based on both genetic and behavioral factors. Accordingly, treatment of obesity usually requires more than just dietary changes. Exercise, counseling and support, and sometimes medication can supplement diet to help patients conquer weight problems. Extreme diets, on the other hand, can actually contribute to increased obesity risks.

“Obesity is defined as abnormal or excessive fat accumulation that may impair health. Americans have a serious sweet tooth and rely on foods and beverages using artificial sweeteners to satisfy the need for sweetness without packing on the pounds. But along with the expanding number of artificial sweeteners comes controversy – are artificial sweeteners safe and healthy alternatives to sugar? According to the FDA, they are safe. Sweeteners fall under the 'generally recognized as safe' list of foods or food additives. In order to be declared safe, there must be sufficient evidence that the product is safe when consumed in normal portions.
But health experts worry that we are over consuming artificial sweeteners, which increases our demand for super sweet foods and beverages. The problem, experts say, is that the natural sweetness from fruit pales in comparison and may no longer satisfy our desire for sweets. Most people use artificial sweeteners to prevent weight gain and slash calories. However some studies show they can lead to weight gain. How? It may increase sugar cravings. Some dieters drink a diet beverage to justify the chocolate cake. Studies have shown that sweetness in the absence of calories may stimulate overeating. Artificial sweeteners do not need to cause weight gain – the key is to control your intake of sweets and sweet beverages.

Most Americans consume about 20 teaspoons of added sugar per day according to the USDA. Too much sugar is unhealthy and can lead to dental problems, obesity, type 2 diabetes and more. The American Heart Association recommends we limit added sugars to about 100 calories per day.

Our intake of sugar has increased over the years but so has our consumption of artificially sweetened products. The 2010 Dietary Guidelines recommend a reduction in sugar and sweetened beverages because it is estimated that 22% of calories in the diet come from sweet drinks.

One of the easiest ways to trim calories from your diet would be to replace sweetened beverages with unsweetened or artificially sweetened beverages. Nutrition experts recommend water, sparkling water, nonfat milk, unsweetened coffee and teas, 100% fruit juice (in limited amounts) and artificially sweetened beverages consumed in moderation.

All of the artificial sweeteners are virtually calorie free and approved as safe by the FDA. Each artificial sweetener has some untoward impact therefore a limited intake is essential. Consuming artificial sweeteners in moderation should be safe but the long-term health effects are unknown. We would benefit from more scientific data on the long-term effects of artificial sweeteners on the body.

(Zelma, K. MPH, RD, LD)

A great deal of controversy exists related to the Public Health Impact of sugar, sweeteners and/or artificial sweeteners in order to change behaviors. Many organizations are working on research that addresses the question being asked in this legislation. It would be beneficial to educational programming to develop programs based on evidence-based research that have demonstrated effectiveness.

I have attached two web sites that partially address some of the possibilities that specifically apply to children.
Therefore I urge you to support **PROPOSED BILL NO. 35 AN ACT**

**CONCERNING BEVERAGES WITH ADDED SUGARS, SWEETNERS AND ARTIFICIAL SWEETNERS AND OBESITY**

Thank you

Mary Jane M. Williams PhD., RN
Chair, Government Relation, Connecticut Nurses Association
Professor Emeritus Central Connecticut State University

**Sweetened Drinks**


increase physical activity by limiting screen time...


At this time, there are insufficient data to determine conclusively whether the use of NNS to displace caloric sweeteners in beverages and foods reduces added sugars or carbohydrate intakes, or benefits appetite, energy balance, body weight, or cardiometabolic risk factors. Limiting added sugars is an important strategy for supporting optimal nutrition and healthy weights, as concluded in the 2009 American Heart Association scientific statement “Dietary Sugars Intake and Cardiovascular Health.”1 Monitoring carbohydrate intake, which includes limiting added sugars, is also a key strategy to achieve glycemic control as published in the American Diabetes Association clinical practice recommendations.58 There are some data to suggest that NNS may be used in a structured diet to replace sources of added sugars and that this substitution may result in modest energy intake reductions and weight loss. Successful reduction in energy intake requires that there is incomplete compensation of energy reduction from the use of NNS-containing beverages and/or foods. The impact of incorporating NNS and NNS-containing beverages and foods on overall diet quality should be included in assessing the overall balance of benefits and risks. Apparent from the available literature is the paucity of data from well-designed human trials exploring the potential role of NNS in achieving and maintaining a healthy body weight and minimizing cardiometabolic risk factors. The evidence reviewed suggests that when used judiciously, NNS could facilitate reductions in added sugars intake, thereby resulting in decreased total energy and weight loss/weight control, and promoting beneficial effects on related metabolic parameters. However, these potential benefits will not be fully realized if there is a compensatory increase in energy intake from other sources. Acknowledgments
Are Artificial Sweeteners Healthy?

By Kathleen Zelman, MPH, RD, LD

Americans have a serious sweet tooth and rely on foods and beverages using artificial sweeteners to satisfy the yen for sweetness without packing on the pounds. But along with the expanding number of artificial sweeteners comes controversy – are artificial sweeteners safe and healthy alternatives to sugar?

According to the FDA, they are safe. Sweeteners fall under the 'generally recognized as safe' list of foods or food additives. In order to be declared safe, there must be sufficient evidence that the product is safe when consumed in normal portions.

But health experts worry that we are over consuming artificial sweeteners which increases our demand for super sweet foods and beverages. The problem, experts say, is that the natural sweetness from fruit pales in comparison and may no longer satisfy our desire for sweets.

Do artificial sweeteners cause weight gain?
Most people use artificial sweeteners to prevent weight gain and slash calories. However, some studies show they can lead to weight gain. How? It may increase sugar cravings. Some dieters drink a diet beverage to justify the chocolate cake. Studies have shown that sweetness in the absence of calories may stimulate overeating.

Artificial sweeteners do not need to cause weight gain – the key is to control your intake of sweets and sweet beverages.

**Reducing sugar intake**

Most Americans consume about 20 teaspoons of added sugar per day according to the USDA. Too much sugar is unhealthy and can lead to dental problems, obesity, type 2 diabetes and more. The American Heart Association recommends we limit added sugars to about 100 calories per day.

Our intake of sugar has increased over the years but so has our consumption of artificially sweetened products. The 2010 Dietary Guidelines are expected to recommend a reduction in sugar and sweetened beverages because it is estimated that 22% of calories in the diet come from sweet drinks.

One of the easiest ways to trim calories from your diet would be to replace sweetened beverages with unsweetened or artificially sweetened beverages. Nutrition experts recommend water, sparkling water, nonfat milk, unsweetened coffee and
teas, 100% fruit juice (in limited amounts) and artificially sweetened beverages consumed in moderation.

Artificially sweetened foods and beverages can help trim calories but experts suggest limits. A few servings a day is perfectly reasonable. A packet of your favorite artificial sweetener in your coffee, a diet drink and a serving of diet pudding or ice cream is an example of a moderate daily intake.

**Artificial sweeteners on the market**

All of the artificial sweeteners are virtually calorie free and approved as safe by the FDA.

**Aspartame** – The little blue packet, also known as Equal and Nutrasweet, contains two amino acids, aspartic acid and phenylalanine. Considered a general purpose sweetener, it is used mainly for beverages but is also included in some diet colas and desserts. The only caution is that it should not be consumed by anyone with phenylketonuria (PKU). The FDA maintains it is safe despite rumors that it may cause cancer.

**Saccharin** – Comes in the little pink package, also known as Sweet n Low, made from benzoic sulfinide. One of the original non nutritive sweeteners, it is less expensive and stable at high temperatures so it can be used in baking. Saccharin is found in diet beverages, baked goods and some dietetic products but is primarily used to sweeten foods and beverages at the table.
Early studies linked it to cancer but more than 30 human studies found saccharin safe for human consumption.

**Sucralose** – Found in the little yellow packet, also known as Splenda, made from a sugar molecule that is chemically altered. This is a very popular table top sweetener that is also found in drinks, foods, juices and more, sometimes combined with Ace-K. It holds up to high temperatures better than other sugar substitutes and has little impact on blood sugar levels. It is 600 times sweeter than table sugar and is not fully absorbed. Even though it is made from a sugar molecule, the final product is completely different.

**Acesulfame-K (Ace-K)** – Not as recognizable as the other sweeteners, made from acetoacetic acid and potassium, this sweetener is not metabolized or absorbed by the body. It is found in foods and drinks and is also sold as Sunett and Sweet One. It holds up to heat and can be used in baking or cooking.

**Stevia** – Is the latest addition to the artificial sweetener category although it has been around for centuries in other countries. PureVia, Truvia and other companies make refined stevia products. Extracted from the stevia plant, it is promoted as natural although it is chemically extracted. Used primarily as a table top sweetener, it is much sweeter than sugar so less can be used to achieve sweetness. Stevia can also be used in baking.
Bottom line

It is a very controversial topic. If you choose to enjoy artificially sweetened products, a limited intake is essential. Consuming artificial sweeteners in moderation should be safe but the long-term health effects are unknown. We would benefit from more scientific data on the long-term effects of artificial sweeteners on the body.