The Problem with Sugar



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Why are we doing this?



- The average person eats almost 175 pounds of sugar a year, about half a pound of sugar every day, most of it from sugary drinks! Sugar has no nutritional value, adds calories, and promotes tooth decay
- One third of Fall River children are overweight or obese, putting them at risk of lifelong health problems such as diabetes and heart disease.

Soda is the biggest problem



7 Side Effects of Soda

Phosphoric Acid - Weakens bones and rots teeth

Excessive artificial sweeteners makes you crave more

Carmel Color - Made from the chemical caramel, is purely cosmetric, it doesn't add Flavor yet is tainted with carcinogens.

Formaldehyde - Carcinogen, it is not added in soda but when you digest aspartame, it will break down into 2 amino acids and methanol = Formic acid - Formaldehyde (diet sodas)

High Fructose Corn Syrup is a Concentrated form of sugar, fructose derived from corn. It increases body fat, cholesterol and triglycerides and it also makes you hungry.

Potassium Benzoate = preservative that can be broken down to benzene in your body. Keep your soda in the sun and benzene = Carcinogen

Food Dyes = impained brain function, hyperactive behavior, difficulty focussing lack of impulse control

Drinking one soda per ulletday increases a child's risk of becoming obese by 60% and the risk of developing metabolic syndrome by 44% Drinking two sodas per week increases the risk of pancreatic cancer by 87% Drinking two sodas per • day increases the risk of

gout by 85%

The problem is bigger than soda





An 8 oz. glass of orange juice contains 112 calories, 21 g of sugar

Eight ounces of Snapple Apple has 27 grams of sugar, more than 2 ¹/₂ glazed donuts

One 15.2 fl oz bottle of Minute Maid Apple Juice has 52 grams of sugar, the same as 25 Dunkin Donut munchkins.

Many popular fruit drinks marketed to children can have the same, if not more, sugar as in a candy bar





Where else do we find sugar?

- Added sugar is obviously in cakes, candy, cookies, muffins, cereals, jams, dried fruits, chocolates and ice cream but it is also "hidden" in such foods as pasta sauce, ketchup, salad dressing, yogurt, peanut butter and even bread!
- Added sugar is often given different names: Dextrose, Evaporated cane juice, Fructose, Fruit juice concentrates, Glucose, High-fructose corn syrup, Honey, Invert sugar, Lactose, Maltose, Malt syrup, Molasses, Sucrose, and Syrup
- 41% comes from beverages, but 59% of added-sugar calories come from foods



Sugar is a simple carbohydrate

Simple carbohydrates are dietary components made up of one or two sugar molecules. The most basic is glucose, the type of sugar our bodies and brains use for fuel every day.

Glucose is a monosaccharide, which means "single sugar." Other monosaccharides include fructose, which is found in fruits and vegetables, and galactose, which is found in milk.

Complex carbohydrates are also known as starches and are made of three or more linked sugars. Grains such as bread, pasta, oatmeal and rice are complex carbs, as well as some vegetables like broccoli, corn legumes such as kidney beans and chick peas. They take the longest to digest.





Some carbs are better than others







All carbs are made from sugars and convert to glucose in the body and are stored as fat if not burned (exercise)

Simple carbs (sugars) convert to fat easily

 Complex carbs (starches, cereals, some vegetables and legumes) take longer

Refined (white) flours convert to fat faster than whole grain flours

Excess carbs lead to weight gain

Whatever glucose from digested carbs that is not immediately "burned" by muscles or our brain or used for heat is converted by insulin to stored fat Stored fat is only "burned" when too little glucose is available To burn fat, one has to reduce available glucose, primarily by reducing carb levels

Caloric balance & insulin resistance

"Calories in-calories out" does not take into account how our bodies actually work
The type of food we eat matters as much as how much we eat
Insulin is the hormone that is primarily responsible for glucose conversion to fat

When we eat food with carbohydrates insulin levels rise and unused glucose is stored as fat

Diabetes development

When fat cells no longer accept glucose, our blood sugar levels remain too high
Consistently high blood

sugar levels are considered pre-diabetes or diabetes



Chronically high blood sugar over time results in damage to the heart (heart disease), kidneys, retinal blood vessels and nerves (neuropathy)

What to do to prevent this

- Reduce carbohydrate intake, especially of refined sugars and flours
- Increase muscular exercise to use blood glucose, as well as increasing heart health, muscle mass, strength, flexibility and bone density
- Increase healthy fat intake to reduce hunger and to prevent "diet failure"



"Inside me there's a thin person struggling to get out. Hopefully he's burning a lot of calories!"

What the latest research says

High sugar consumption may double the chance of dying from heart disease

People whose sugar intake is about a quarter or more of their total daily calories had more than twice the risk of dying from heart disease than those who whose intake was 7 percent, according to the research in JAMA Internal Medicine (February 3, 2014).



