

SUGGAR





NATURAL

VS

ADDED  
SUGARS



# NATURAL SUGARS

- Sugars and starches supply energy to the body in the form of glucose
- Glucose = only energy source for red blood cells
- Glucose = preferred energy source for the brain, central nervous system, placenta, and fetus.



# NATURAL SUGARS

- Natural sugars (1 source of glucose) are found in milk, fruits, vegetables, grains, and refined sugar
- We don't need to worry about natural sugars. We're supposed to be eating some sugar and natural sources of sugar should be the majority of sugar we eat

# NATURAL SUGARS

- Choose carbohydrates wisely
- Foods in the basic food groups that provide natural sugars — fruits, vegetables, grains, and milk — are also important sources of many nutrients
- Eating plenty of these foods, within a controlled diet promotes health and reduces chronic disease risk

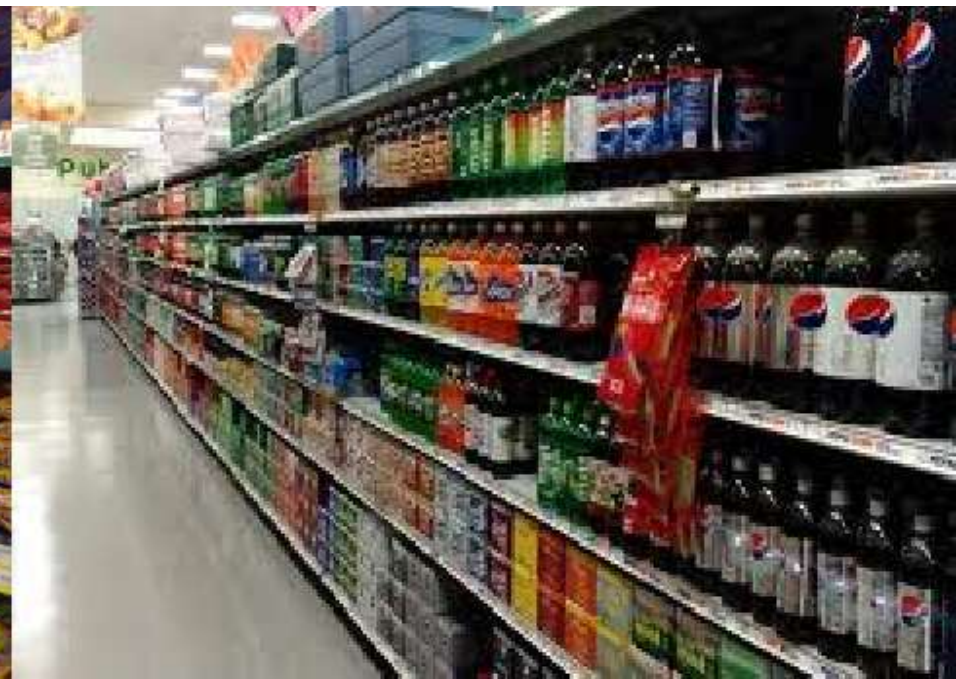
# ADDED SUGARS

- It's ADDED sugars we have to worry about, and they are everywhere!
- Use of added sugars have continued to rise in the North American diet
  - How many of you drink soft drinks?
  - Consumption of soft drinks containing sugar has risen 135% since 1977
  - Soft drinks are the #1 source of sugars in the diet





**SUGAR IS EVERYWHERE!**



# ADDED SUGARS

- The greater the consumption of foods and beverages containing large amounts of added sugars, the more difficult it is to consume enough nutrients without gaining weight
- Consumption of added sugars provides calories while providing little, if any, of the essential nutrients we need



# NATURAL VS. ADDED SUGARS

- Your body's response to sugars does not depend on whether they are naturally present in a food or added to the food
- **However**, added sugars supply calories but few or no nutrients



# TOO MUCH SUGAR IS VERY HARMFUL

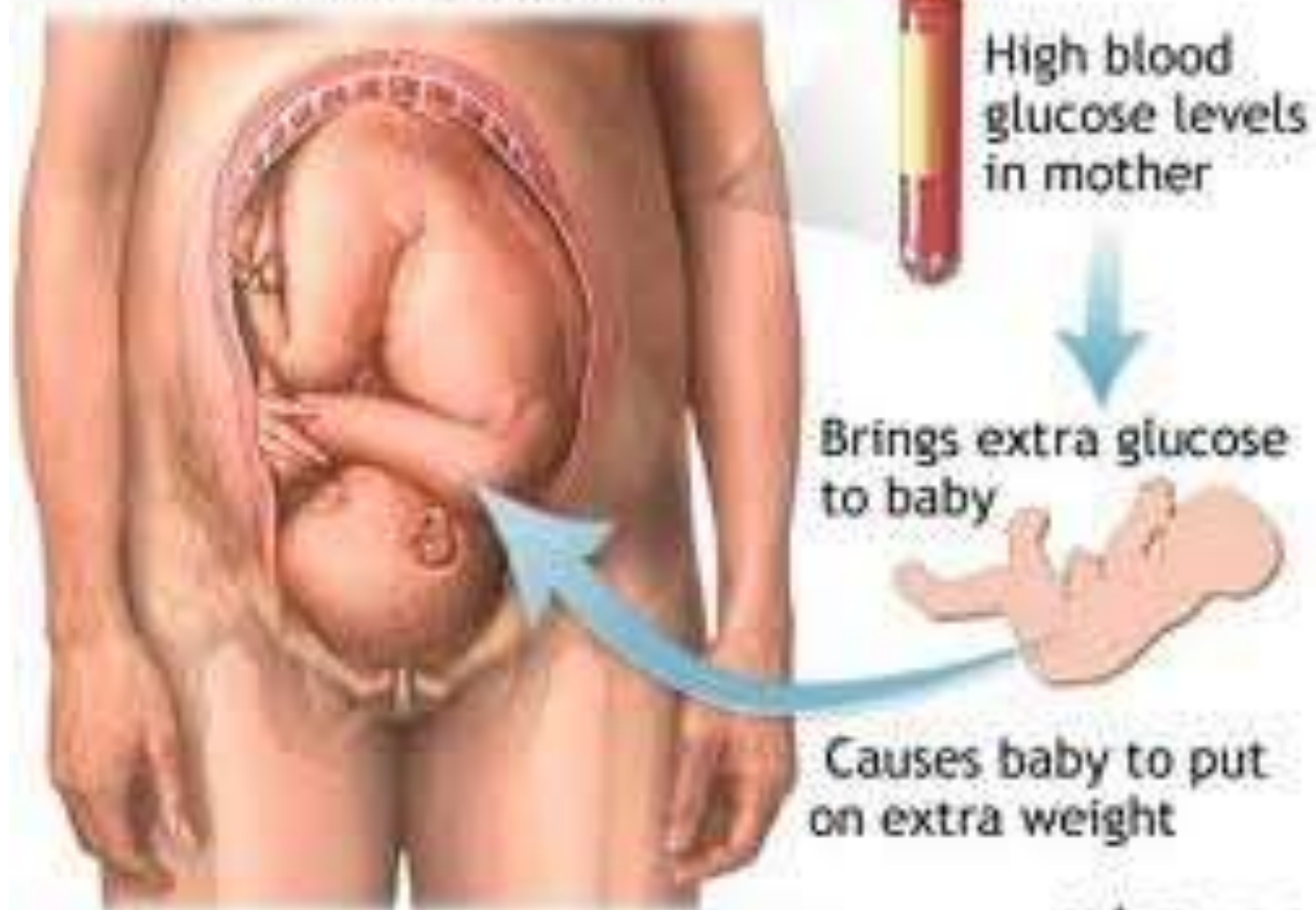
- If used in excess:

1. Can Cause Weight Gain
2. May Increase Your Risk of Heart Disease
3. Has Been Linked to Acne
4. Increases Your Risk of Type 2 Diabetes
5. May Increase Your Risk of Cancer
6. May Increase Your Risk of Depression
7. May Accelerate the Skin Aging Process
8. Can Increase Cellular Aging
9. Drains Your Energy
10. Can Lead to Fatty Liver



- Sugary foods can replace nutritious foods
- Sugar contributes to dental caries (cavities)
- High-sugar diets can be a factor in excessive insulin production in some people
- High-sugar diets contribute to unhealthful blood lipids (cholesterol – heart disease)

## Gestational Diabetes



# SUGAR AMOUNTS

- Daily intake per person in Canada:  
26 tsp. of sugar (110g)  
-That's about 40 kg of sugar per year!



x 40

# SUGAR AMOUNTS

- Most health organizations recommend no more than 10% of calories from sugar
  - In a 2000 calorie diet, no more than 200 calories ,or 50 grams (12 tsp) should come from sugar
  - Average 20 oz. soda has how many grams?

# SUGAR AMOUNTS

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  - In a 2000 calorie diet, no more than 200 calories (or 50 grams) should come from sugar
  - Average 20 oz. soda has how many grams?

**65 grams!**

# NAMES FOR SUGAR

- Sugar, High Fructose Corn Syrup, Brown Sugar, Corn Syrup, Fructose, Honey, Dextrose, Invert Sugar, Molasses, Maple Sugar, Levulose, Turbinado Sugar, Raw Sugar, Confectioner's Sugar, Corn Syrup Solids, Maltose, Maltodextrin, Evaporated Cane Juice, Rice Syrup, Fruit Juice Concentrate, Lactose ...etc.

## FOODS CONTAINING SUGAR

- Soft drinks, cookies, candy, cereals, juice drinks, cake and cookie mixes, Snapple, sports drinks, packaged baked goods, jams and jellies, cocoa, lemonade, Kool-Aid mixes, toaster pastries, pasta sauces, peanut butter, soup, taco seasoning mix, salad dressing & many more.....



# INGREDIENT LABELS

- Ingredients are listed in order from highest concentration to lowest
- Stay clear of foods that include sugar as one of the main ingredients (first few ingredients)

*Look at the Coca Cola ingredients bottom up – it's caffeinated, full of sugarwater!*



# HIGH FRUCTOSE CORN SYRUP

- We have increased portion sizes and many of our favorite foods are filled with empty calories, often with additives such as high-fructose corn syrup (HFCS)
- From 1970 to 2005 alone, our intake of high-fructose corn syrup rose more than **10,000%** per person, paralleling our skyrocketing rates of obesity

# HIGH FRUCTOSE CORN SYRUP

- HFCS is used in so many products from ketchup to soda to bread to candy to yogurt to cereal, and to many other foods— because it's so cheap!



# HIGH FRUCTOSE CORN SYRUP

- HFCS can inhibit your body's ability to use leptin, the naturally occurring hormone that signals when you're full
- In some people, it can actually convince us we're starving, even when we've gotten full
- Imagine that: We're tricking our own minds into eating more!!!

# HIGH FRUCTOSE CORN SYRUP CAN BE DANGEROUS

- HFCS is composed of 55% fructose. When consumed in excess, fructose is readily converted to fat in your liver, and it has been shown to raise triglyceride levels and decrease insulin sensitivity — risk factors for heart disease and diabetes
- Fructose is fine in small doses (it's one of the natural sugars found in fruit), but North Americans are consuming it in higher doses than at any time in human history

# ALTERNATIVE (ARTIFICIAL) SWEETENERS

- Unlike sugar, these are not carbohydrates
- They are not nutritive sweeteners like sugar (they provide no (or very little) calories)
- What's the tradeoff? No calories, but...
  - Controversy over the safety of using artificial sweeteners. They are approved for use, but still may not be safe for consumption, as they are artificially made chemicals.

# ALTERNATIVE (ARTIFICIAL) SWEETENERS

- Saccharin (“Sweet and Low”)
  - The oldest artificial sweetener
  - Thought to be a cancer risk



# ALTERNATIVE (ARTIFICIAL) SWEETENERS

- **Aspartame (“NutraSweet”)**
  - Widely used in soft drinks
  - Can’t be used in baking
  - 200 times sweeter than sugar
  - Potentially harmful
    - Cancer risk?





# ALTERNATIVE (ARTIFICIAL) SWEETENERS

- **Sucralose (“Splenda”)**
  - Made from sugar, but not absorbed by the body because it has been chemically modified
  - Can be used in cooking and baking (recipes need to be modified)
  - Relatively new – is it safe?



# VISUALIZE

- Let's look at some visualizations:
- Sugar stacks:
- <http://www.sugarstacks.com/beverages.htm>