What does *non-nutritious* mean?

Essential Standard

- 6.NPA.2 - Apply strategies to consume a variety of nutrient dense foods and beverages in moderation.

- Clarifying Objectives
  - 6.NPA.2.2 - Differentiate the health effects of beverages which are nutrient dense with those high in sugar and calories

Statement of Objectives:

- *Many people monitor their intake of calories and sugars from the foods they eat, but forget to notice how many calories and how much sugar they are consuming in beverages. Today, we are going to examine a variety of beverages and determine which of these beverages would be the better choices for us to consume.*

Brainstorm a list of diseases which are associated with poor nutrition

1. Obesity
2. dental caries (cavities)
3. high blood pressure
4. atherosclerosis (heart disease)
5. Diabetes
6. some cancers

Which could be made worse by the over-consumption of sugar or calories?

Added Sugars

- are sugars that are not found naturally in a product.
- Sugars are found naturally in fruits (fructose) and fluid milk and milk products (lactose).
- However, the majority of sugars in a typical American diet are added sugars during processing, preparation or sugars added at the table.
- Many foods with added sugars provide calories, but no essential nutrients or fiber, which we call "empty calories".

The major sources of added sugars in the diets of Americans are:

- Sodas, energy drinks and sports drinks (36% of added sugar intake)
- Grain-based desserts (13% of added sugar intake)
- Sugar-sweetened fruit drinks (10% of added sugar intake)
- Dairy -based desserts (6% of added sugar intake)
- Candy (6% of added sugar intake)

What do you think is your daily intake of sugar?

- http://education.wichita.edu/caduceus/examples/soda/soda_index.html
  - "What is a Gram?"

Sugar Game

- Sugar

Do you think you go over your sugar limit most days?

The Dietary Guidelines recommend that we limit the sugar in our diet. Is there a health problem associated with consuming too much sugar?

Today we are going to determine which beverages or drinks are the most nutritious choices for you.

Besides being high in sugar, what other criteria should we consider to determine if a beverage is nutritious?

1. What are the total number of calories?
2. What is the amount of sodium?
3. How much caffeine does a serving contain?
4. Does the beverage provide nutrients needed in our diet?

Guided Practice:

- *We are going to examine different drinks to determine which ones provide you with the most nutrients and are not high in sugar, sodium, or calories.*
  - *Place students in groups of 3-4 and give each group 4 different types of drink containers*

Directions: Record the nutritional information for each of the beverages you were assigned.

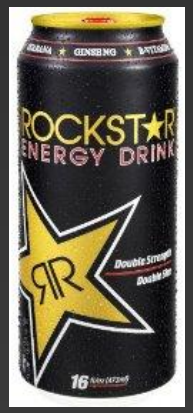
Drink: _ Oz

Serving size	
Serving per container	
Amount per serving:	
Calories	
Calories from fat	
Total Fat	
Saturated Fat	
Sodium	
Potassium	
Total Carbohydrates	
Sugar	
Protein	
Vitamin A	
Vitamin C	
Calcium	

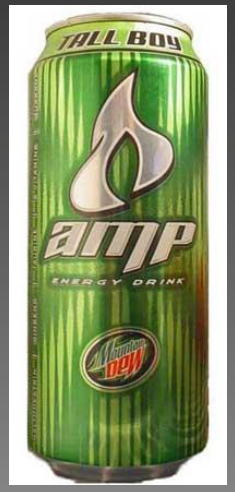
Drink: ____ Oz

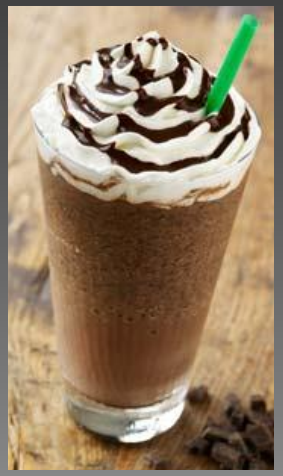
Serving size	
Serving per container	
Amount per serving:	
Calories	
Calories from fat	
Total Fat	
Saturated Fat	
Sodium	
Potassium	
Total Carbohydrates	
Sugar	
Protein	
Vitamin A	
Vitamin C	
Calcium	

Rank the drinks from lowest amount of sugar to the highest amounts.



Based on a Large 32oz Drinks



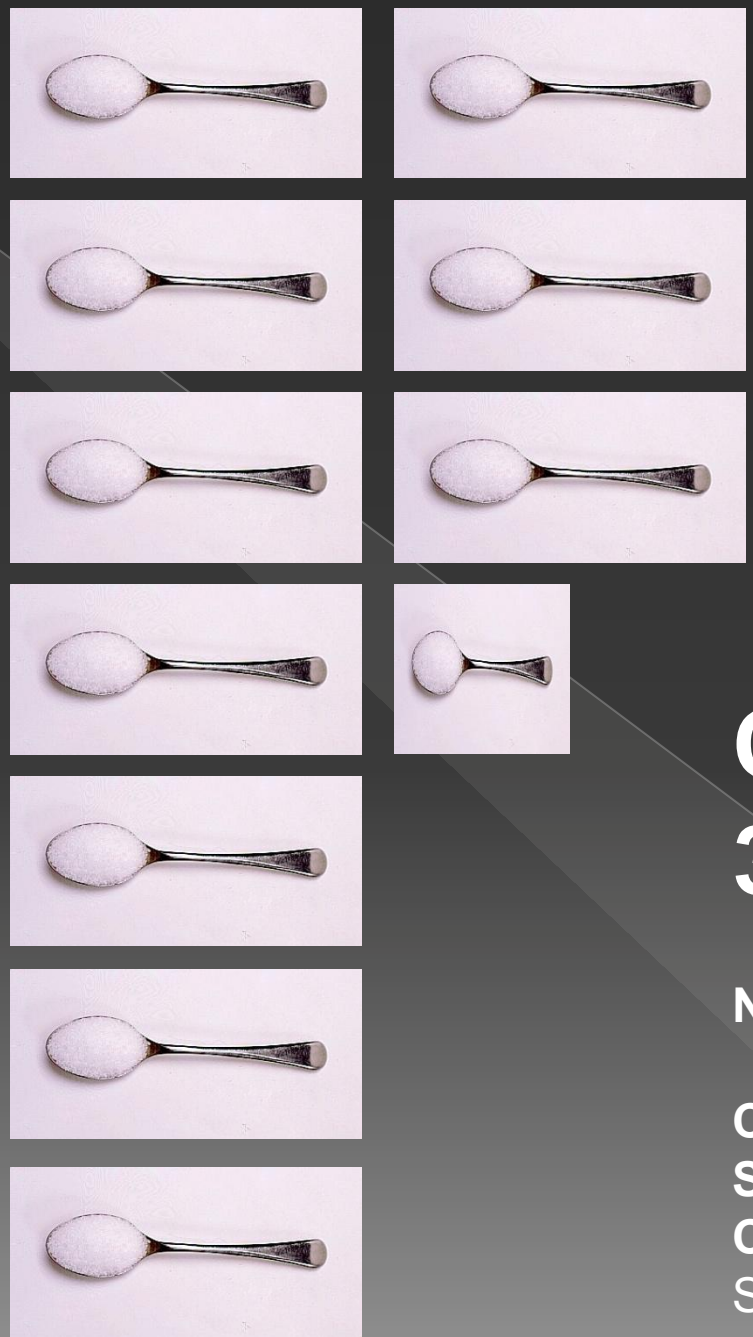


Rack the drinks from lowest sugar to highest
15 total items

#15

Amount of Sugar

10.5 tsp



Chocolate Milk 32 oz

Nutrition Facts

Calories	320
Sodium	480 mg
Carbohydrates	44 g
Sugars	44 g

14

Amount of Sugar

21.9 tsp

Fuze 32 oz

Nutrition Facts

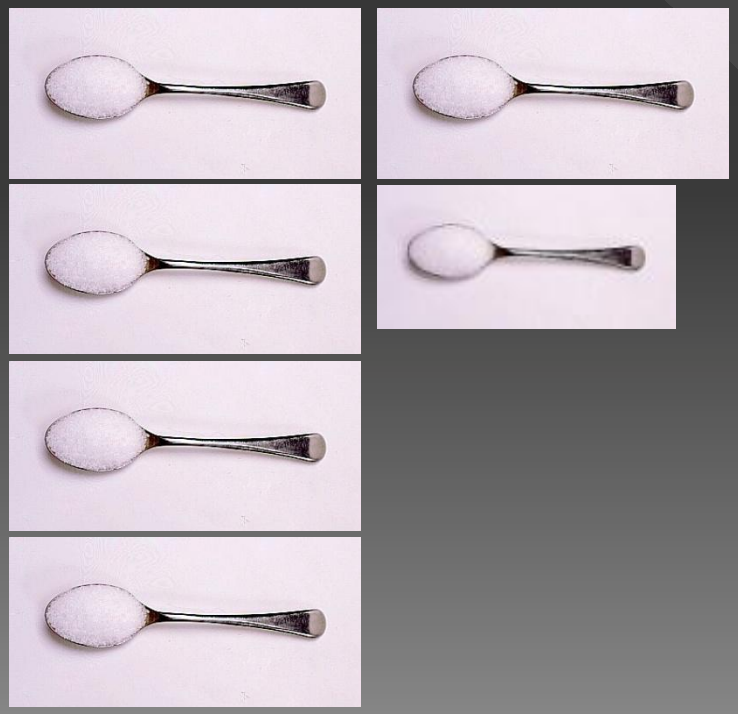
Calories	360
Sodium	60 mg
Sugars	92 g

13

Sweet Tea (with ice) 32 oz

Amount of Sugar

24.7 tsp



Nutrition Facts

Calories	150
Sodium	28 mg
Carbohydrates	37 g
Sugars	45 g

12

Amount of Sugar

24.7 tsp

Coke
32 oz

Nutrition Facts

Calories	373
Sodium	133 mg
Sugars	104 g

11

Amount of Sugar

24.76 tsp

Red Bull 32 oz

Nutrition Facts

Calories	424
Sodium	24 mg
Sugars	104 g

10

Amount of Sugar

25.7 tsp

Monster 32 oz

Nutrition Facts

Calories	400
Sodium	720 mg
Sugars	108 g

9

Amount of Sugar

24.87 tsp

Apple Juice 32 oz

Nutrition Facts

Calories	448
Sodium	66.92 mg
Sugars	104.48 g

8

Amount of Sugar

26.6 tsp

Orange Juice 32 oz

Nutrition Facts

Calories	480
Sodium	0 mg
Sugars	112 g

7

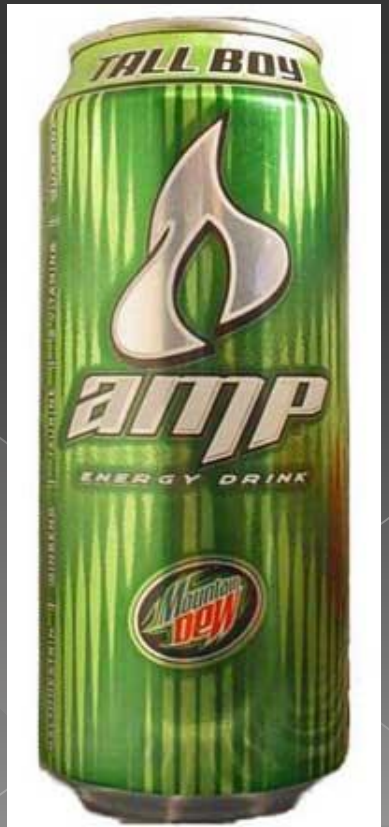
Amount of Sugar

27.6 tsp

Amp
32 oz

Nutrition Facts

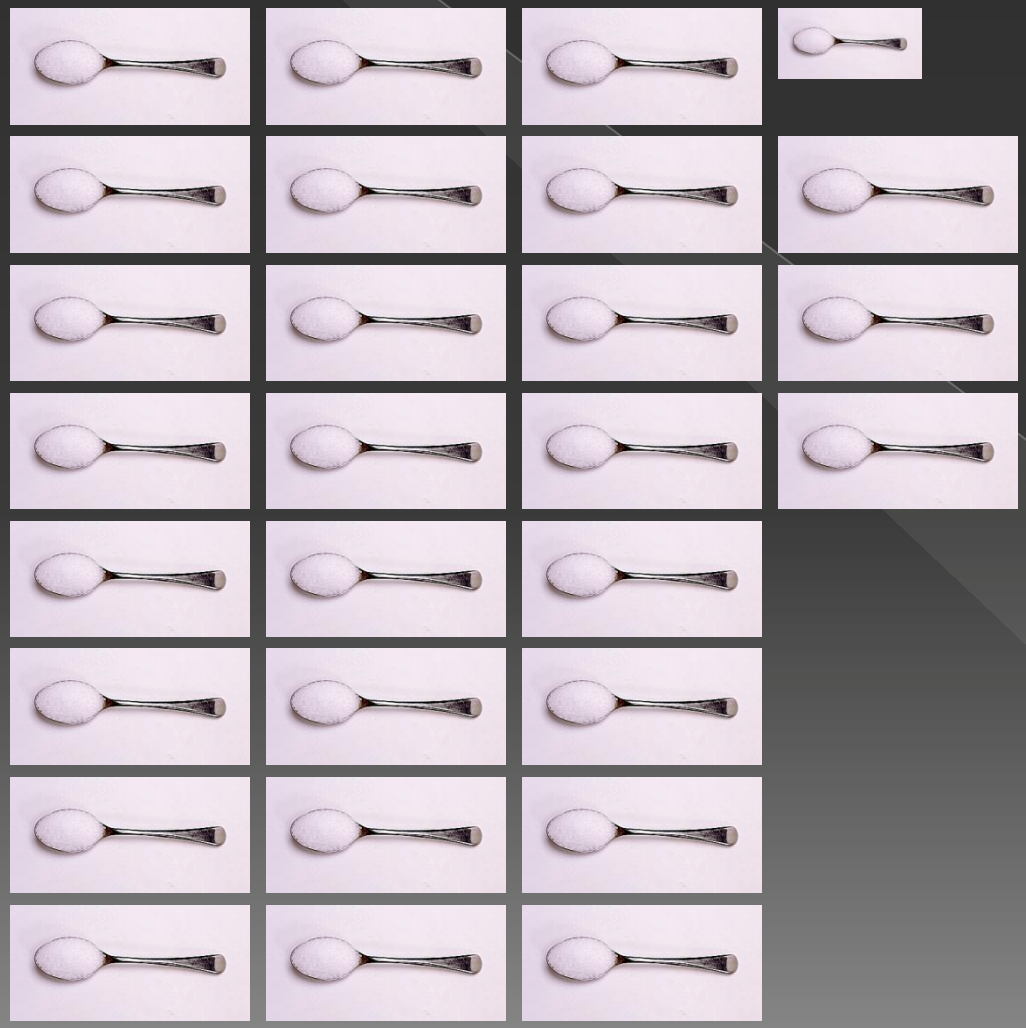
Calories	440
Sodium	280 mg
Sugars	116 g



6

Amount of Sugar

27.6 tsp



Hawaiian Punch 32 oz

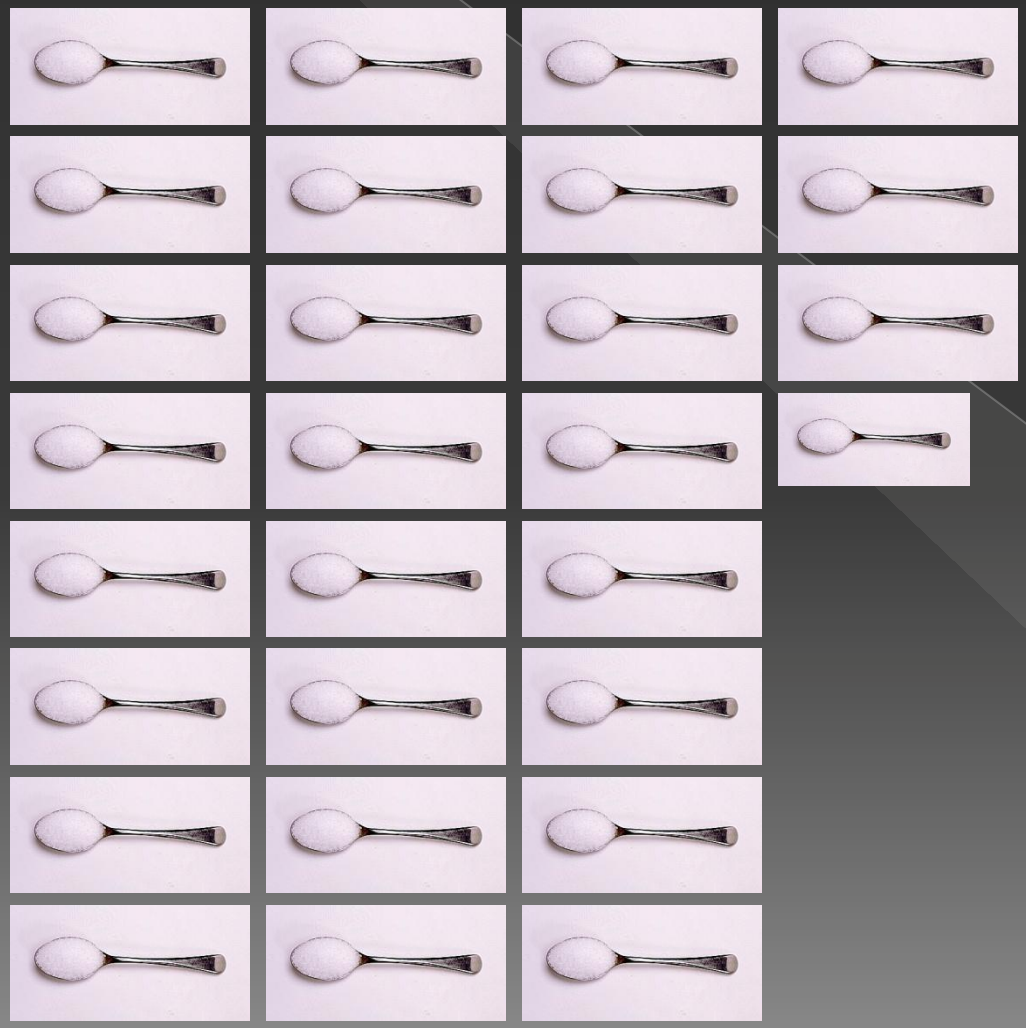
Nutrition Facts

Calories	480
Sodium	480 mg
Sugars	116 g

5

Amount of Sugar

27.6 tsp

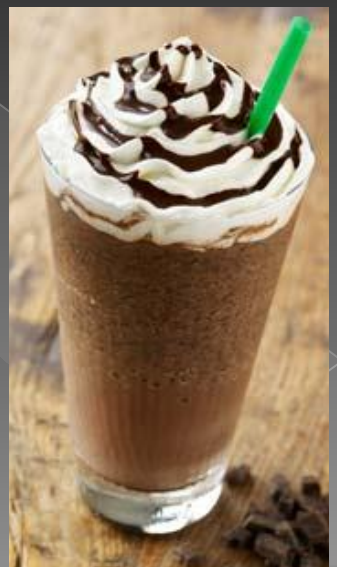


Double Chocolaty Chip Frappuccino Blended Crème

32 oz

Nutrition Facts

Calories	800
Sodium	0 mg
Sugars	101 g



4

Amount of Sugar

27.9 tsp

McCafé Strawberry Banana Smoothie

32 oz

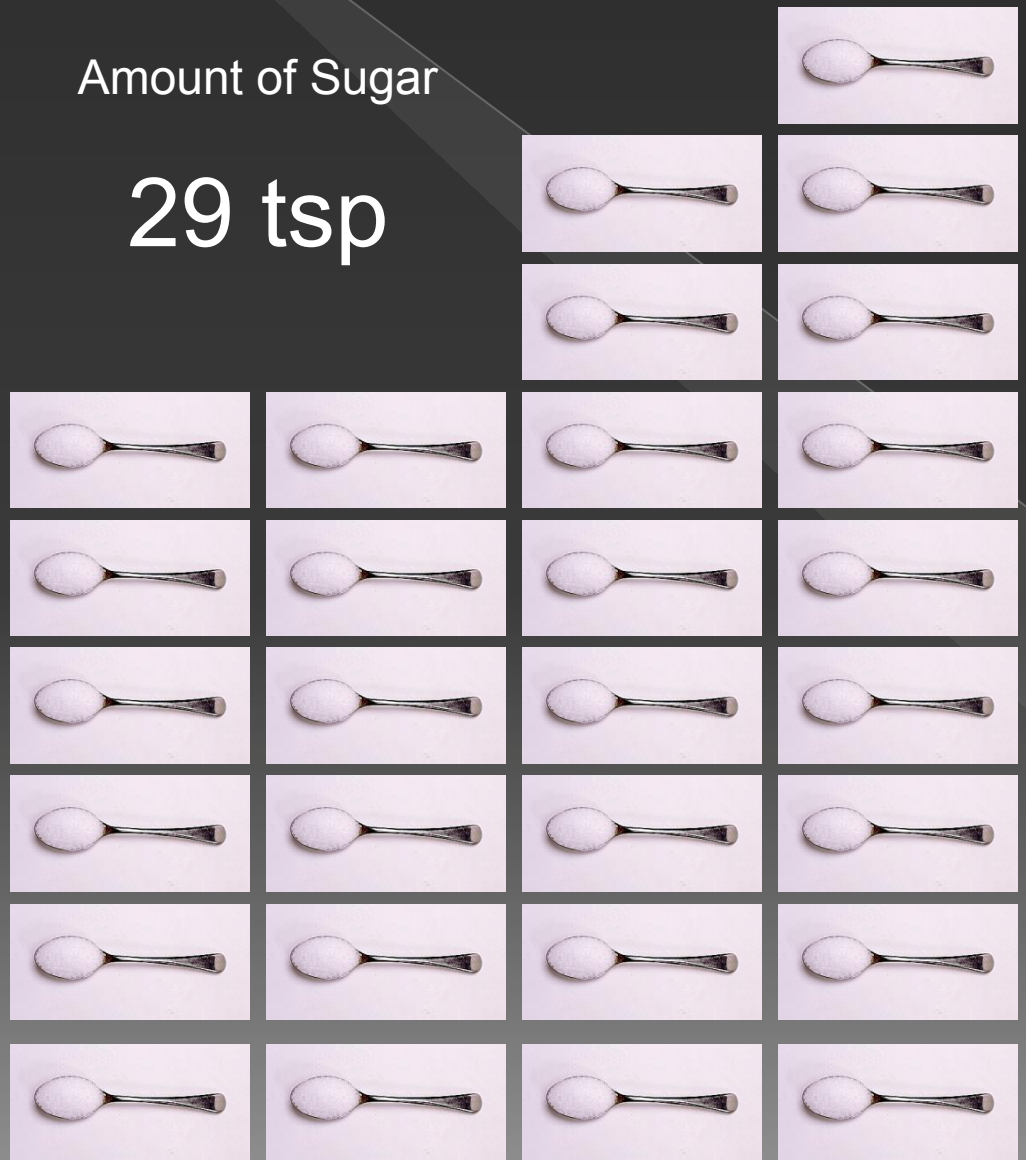
Nutrition Facts

Calories	560
Sodium	133 mg
Sugars	117 g

3

Amount of Sugar

29 tsp



Mountain Dew 32 oz

Nutrition Facts

Calories	453
Sodium	186 mg
Sugars	122 g

2

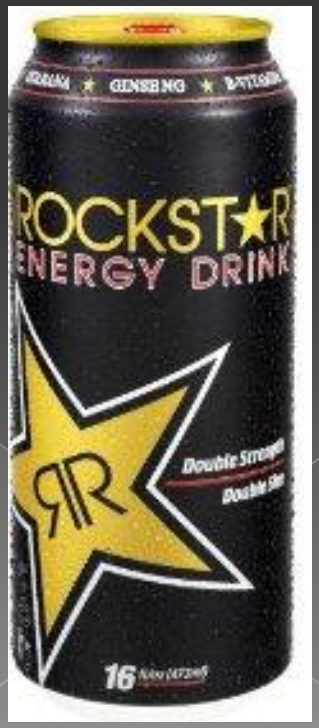
Amount of Sugar

29.5 tsp

Rockstar 32 oz

Nutrition Facts

Calories	560
Sodium	160 mg
Sugars	124 g



1

Amount of Sugar

30.5 tsp

McDonalds Frappe' Mocha **32 oz**

Nutrition Facts

Calories	974
Sodium	276 mg
Sugars	128 g

FYI

Calories

- Sweet Tea 150
- Milk 320
- Fuze 360
- Coke 373
- Monster 400
- Red Bull 424
- Amp 440
- Apple Juice 448
- Mt Dew 453
- Orange Juice 480
- Hawaiian Punch 480
- Strawberry Banana smoothie 560
- Double Choc Frap 800
- Frappe Mocha 974

Sodium

- (2300 mg or 1500 if over age 51)
- Orange Juice 0
- Double Choc Frap 0
- Red Bull 24
- Sweet Tea 28
- Fuze 60
- Apple Juice 104
- Coke 133
- Strawberry Banana smoothie 133
- Rockstar 160
- Mt Dew 186
- Frappe Mocha 276
- Amp 280
- Milk 480
- Hawaiian Punch 480
- Monster 720

How can we tell if a food or drink has added sugar?

- Ingredient list
- The ingredient list on all foods is listed from what is in there the most to least.
  - So, if sugar was listed in the first 3 ingredients in the list that would mean there is a significant amount of sugar in that food.
  - Sometimes reading an ingredient list can be confusing because sugars are listed under a number of different names.

What are the health effects of consuming drinks that are high in sugar?

- These drinks are high in calories, which contributes to weight gain and tooth decay; weight gain can lead to overweight or obesity, which increases the chances of other conditions: diabetes, high blood pressure, heart disease, certain types of cancers.

What are the health effects of consuming nutrient-dense drinks?

- Person receives more nutrients he or she needs to consume
- they are lower in sugar
- they help decrease the number of calories consumed.

- Which beverages are nutrient dense?
  - Low - fat milk, fruit juices with no added sugar
- Is water a better choice than soft drinks, sports drinks, smoothies or energy drinks? Why?
  - No added sugar

Are My Drinks Healthy?

Name _____

Directions: Record 2 different beverages and the amounts that you drank. Fill out the chart for the beverages you consume.

Drink: _ Oz

Serving size	
Serving per container	
Amount per serving:	
Calories	
Calories from fat	
Total Fat	
Saturated Fat	
Sodium	
Potassium	
Total Carbohydrates	
Sugar	
Protein	
Vitamin A	
Vitamin C	
Calcium	

Drink: ____ Oz

Serving size	
Serving per container	
Amount per serving:	
Calories	
Calories from fat	
Total Fat	
Saturated Fat	
Sodium	
Potassium	
Total Carbohydrates	
Sugar	
Protein	
Vitamin A	
Vitamin C	
Calcium	

Answer the following questions about your drink choices:

1. Were both drinks healthy? Explain _____

2. Were any of your drinks high in sugar? Which one(s) _____

3. Were any of your drinks high in calories? Which one(s) _____

4. Do you think you could make healthier choices? Explain what those choices might include. _____

Article to Discuss

New York bans big drinks, but not Big Gulps

Closure:

- *You did a good job analyzing the beverages that were assigned to your group and determining which drinks would be the more nutritious for you to consume*