Rethink Your Drink: Sugar – Loaded Beverages & Obesity
ARE YOU POURING ON THE POUNDS?

You’re drinking 68 PACKETS OF SUGAR in just 4 sugary drinks a day.

LEARNING OBJECTIVES

• Identify sugar-loaded beverages and their sugar content
• Identify negative health impacts of sugar-loaded beverages
• Understand the insidiousness of these drinks
• Share alternatives to sugar-loaded beverages
• Share effective strategies to reduce consumption
The Context

OBESITY & CHRONIC DISEASE
Obesity: A Global Epidemic

Throughout the world, between 1980 to 2008, obesity rates almost doubled.

146 million adults were overweight; 502 million were obese in 2008.
In the USA

Our nation is in the midst of a public health crisis so profound that it is undermining our national well-being, our economic competitiveness and even our long-term national security.

Lots to Lose: How America’s Health and Obesity Crisis Threatens our Economic Future - June 2012
In the USA

In US, 1/3 of children and 2/3 of adults are overweight or obese.

By 2030, 42% of all adults will be obese, costing an additional $550 billion in health care expenditures.
Obesity in Illinois

• In 1995, Illinois’ obesity rate was 15.5%; today it is nearly double. By 2030, the predicted rate will be 53.7%.

• Nearly two-thirds (64%) of all Illinoisans are overweight or obese.

• Illinois is one of the top ten states for obese/overweight adolescents (ages 10-17 years).
1 in 5 Illinois children are obese; the fourth worst rate in the US.

1. Mississippi
2. Georgia
3. Kentucky
4. Illinois & Louisiana are tied.
Obesity is Expensive

• Obesity costs the Illinois health care system and taxpayers $3.4 billion per year – including $1 billion to Medicaid and $800 million to Medicare. Adjusting for inflation, it is an estimated $4.4 billion expenditure.

• If nothing changes, experts predict the cost of obesity could increase to $14 billion or more a year by 2018; $27 billion by 2030.
• Obese people suffer more injuries and disabilities and have more non-productive work days, creating loss of productivity.

• For the first time in history, the current generation may have a shorter lifespan than their parents.
Sugar-Loaded Beverages CONSUMPTION
More than 1/3 of all sugars are consumed in sugary beverages – the greatest source of added sugar in the US diet.
What is a sugar-loaded beverage?

- Any beverage with added caloric sweetener including soda, other carbonated soft drinks, juice drinks, sports drinks, energy drinks, powdered drinks, sweetened milk or milk alternatives, sweetened tea or coffee drinks & flavor-enhanced water.

- Caloric sweeteners include: high fructose corn syrup, cane sugar, fructose, fruit juice concentrate, glucose, sucrose, honey, brown sugar, dextrose, agave syrup and corn sweetener.
Added vs. Naturally-Occurring
US Consumption Trends

<table>
<thead>
<tr>
<th>Study</th>
<th>Fruit Drinks</th>
<th>Soft Drinks</th>
<th>Sweetened Beverages</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFCS 1977-1978</td>
<td>1.1</td>
<td>2.8</td>
<td>3.9</td>
</tr>
<tr>
<td>CSFII 1989-1991</td>
<td>1.2</td>
<td>4</td>
<td>5.2</td>
</tr>
<tr>
<td>CSFII 1994-1996</td>
<td>1.9</td>
<td>5.2</td>
<td>7.1</td>
</tr>
<tr>
<td>NHANES 1999-2001</td>
<td>2.2</td>
<td>7</td>
<td>9.2</td>
</tr>
</tbody>
</table>
Who Drinks Sugar Drinks on a Given Day?

Figure 2. Percentage of U.S. population aged 2 and over who drink sugar drinks on a given day: United States, 2005–2008

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>2–19 years</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>20 years and over</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>2–19 years</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>20 years and over</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Beverages account for 1/5 of all weight gained by Americans between 1977 and 2007.
• Half of US population over the age of two consumes sugar-loaded beverages daily.
• One soda a day equals 25 extra pounds a year.
• Every additional serving of sugar-loaded beverages per day increased risk of obesity in children by 60%.
• Adults who drink one or more daily are 27% more likely to be overweight or obese.
• Illinoisans consumed 620 million gallons of sugar-loaded beverages in 2011.
Soda, energy drinks, sports drinks: 36%
Fruit drinks: 11%
Tea: 4%
Grain- or dairy-based desserts: 19%
Candy: 6%
Ready-to-eat cereal: 4%
Sugars and honey: 4%
Yeast breads: 2%
All other foods: 15%

Source: Dietary Guidelines for Americans 2010
<table>
<thead>
<tr>
<th>BEVERAGE</th>
<th>Serving</th>
<th>Amount of Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLA</td>
<td>12 oz</td>
<td>10 tsp</td>
</tr>
<tr>
<td></td>
<td>20 oz</td>
<td>17 tsp</td>
</tr>
<tr>
<td>ORANGE SODA</td>
<td>12 oz</td>
<td>13 tsp</td>
</tr>
<tr>
<td>LEMONADE ICED TEA</td>
<td>16 oz</td>
<td>13 tsp</td>
</tr>
<tr>
<td>ENERGY DRINK</td>
<td>16 oz</td>
<td>16 tsp</td>
</tr>
<tr>
<td></td>
<td>8 oz</td>
<td>7 tsp</td>
</tr>
<tr>
<td>SPORTS DRINK</td>
<td>20 oz</td>
<td>9 tsp</td>
</tr>
<tr>
<td>FLAVORED WATER</td>
<td>20 oz</td>
<td>8 tsp</td>
</tr>
<tr>
<td>JUICE DRINK</td>
<td>6.75 oz</td>
<td>4 tsp</td>
</tr>
<tr>
<td></td>
<td>6 oz</td>
<td>4 tsp</td>
</tr>
</tbody>
</table>

American Heart Association warns the daily intake of sugar for an adult woman should be no more than 6 teaspoons (tsp) and no more than 9 tsp for adult men. For children the recommended daily amount should not exceed 3 tsp and for teens the maximum amount is 8 tsp.
How Sweet Is It?

Calories and Teaspoons of Sugar in 12 Ounces of Each Beverage

For more information, see The Nutrition Source, www.hsph.harvard.edu/nutritionsource/healthy-drinks/

Key:
- **170** Total Calories
- **10** Teaspoons of Sugar
- RED: Drink Sparingly and Infrequently
- YELLOW: A Better Choice, but Don’t Overdo It
- GREEN: Best Choice

<table>
<thead>
<tr>
<th>Beverage</th>
<th>Calories</th>
<th>Sugar (Teaspoons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cranberry Juice Cocktail</td>
<td>200</td>
<td>12</td>
</tr>
<tr>
<td>Orange Soda</td>
<td>170</td>
<td>11</td>
</tr>
<tr>
<td>Orange Juice</td>
<td>170</td>
<td>10</td>
</tr>
<tr>
<td>Cola</td>
<td>150</td>
<td>10</td>
</tr>
<tr>
<td>FDA Definition of Reduced Calorie</td>
<td></td>
<td>110</td>
</tr>
<tr>
<td>Sports Drink</td>
<td>90</td>
<td>7</td>
</tr>
<tr>
<td>New Target for Food Industry</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>Seltzer With a Splash of Juice</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Coffee With a Sugar Packet</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>BEST BET: SUGAR-FREE NATURALLY (Water, Tea, Etc.)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Sugar-Loaded Beverages
THE SCIENCE
Sugar -Loaded Drinks & Disease

Direct scientific evidence links sugary drinks, not just to obesity but also to:

- Type 2 Diabetes
- Cardiovascular Disease
- Hypertension
- Gout
- Kidney Damage
- Dental Issues
- Cancer
- Sleep Disturbances
Sugary Drinks and Oral Health

• Nearly doubles the risk of dental caries.
• Acid in sugary drinks causes tooth erosion, OFTEN AFTER ONE SIP. (Diet drinks contain acid)
• Provide fuel for bacteria causing tooth decay.
• Associated with plaque deposits in arteries.
↑ de novo lipogenesis
↓ insulin sensitivity
↓ lipid clearance

↓ satiety
↑ caloric intake

↓ muscle insulin sensitivity
↑ fat deposition

↑ inflammation
↑ oxidative stress

insulin resistance
diabetes mellitus

weight gain
obesity
metabolic syndrome

hypertension
coronary heart disease

Obesity Links

Type 2 Diabetes
Cardiovascular Disease
Asthma
Hypertension
Osteoporosis
Poor Diet Quality
Arthritis
Cancer
Sleep Apnea

SLB Links

Obesity
Type 2 Diabetes
Cardiovascular Disease
Hypertension
Gout
Poor Diet Quality
Kidney Damage
Cancer
Sleep Disturbances
Dental Issues
Sugar-Loaded Beverages

PORTIONS & PRODUCTS
16 ounces served 3 people!
### Super Size Me!

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 oz</td>
<td></td>
</tr>
<tr>
<td>32 oz</td>
<td></td>
</tr>
<tr>
<td>44 oz</td>
<td></td>
</tr>
<tr>
<td>52 oz</td>
<td></td>
</tr>
<tr>
<td>64 oz</td>
<td></td>
</tr>
</tbody>
</table>

48 teaspoons of sugar
The Biggest of the Big Gulps
The most outrageous soda sizes ever sold, by franchise.

Team Gulp
7-Eleven
128 oz

HuMUGous
Kum & Go
100 oz

The Beast
ARCO
85 oz

Mega Jug
KFC
64 oz

King Size
Burger King
42 oz

Great Biggie
Wendy’s
42 oz

Kid’s size
McDonald’s (2012)
12 oz

Supersize
McDonald’s (2012)
42 oz

Original fountain drink
McDonald’s (1955)
7 oz

Sources: company websites
Share of Sales: 2010

644 Products
61 Brands
14 Companies

Source: Rudd Center for Food Policy & Obesity Yale University
Fruit Juice & Drinks... Soda by Another Name?
Flavored Water...Sugar Water
American Academy of Pediatrics recommends that energy drinks NEVER be consumed by children or adolescents. One in three teenagers regularly drinks them. These energy drinks contain a comparable number of calories as soda and juice drinks.
For the average child engaged in routine physical activity, the use of sports drinks in place of water on the sports field or in the school lunchroom is generally unnecessary.

American Academy of Pediatrics
Coffee & Tea in Bottles and Cans
Sugar-Loaded Beverages
MARKETING
TV Advertising

• From 2008-2010, exposure to TV ads for full calorie soda doubled for children and teens.
• 2/3 of all radio ads heard by teens were for full calorie soda.
• In 2010, teens saw 18% more energy drink tv ads and heard 46% more radio ads than adults.
• 63% of all full calorie soda and energy drink ads on national TV include sponsorship of an athlete, sports league or team, event or cause.
Target Markets

- Beverage companies see Latinos, African Americans and teens as a source for future sales.
- Black children and teens saw 80% to 90% more ads than white youth.
- Marketing for Spanish market TV is growing. Between 2008 – 2010, Latino children saw 49% more ads for sugary drinks and energy drinks and teens saw 99% more ads.
- Latino pre-schoolers saw more ads than Latino children and teens.
“We’re changing fundamentally from being TV commercial producers to content developers...We’re leading a new and unique approach...from purely mass marketing to one-on-one marketing.”

CEO, Coca-Cola, 2009
Coca-Cola is the number one beverage company on Facebook with 50 million fans! Red Bull is number 8 with over 29 million.
Not just for kids!
“We have a timeless commitment to enhance well-being in all of its forms. Encouraging people to get active and providing them with opportunities to do so, has always been at the heart of our brand values.”

President, Brand Manager, Sparkling Beverages, Coca-Cola North America
Sugar-loaded Beverages

REDUCING CONSUMPTION
Education is important, but rarely improves health outcomes. Changes in policy, systems, and environments broadly affect the way we live and shape the patterns of our health.
Where You Live Affects How You Live

- Being healthy is not just about individual choices.
- Many communities and institutions offer far more unhealthy food/beverage options and choices than healthy ones.
- Healthy options more expensive than unhealthy options.
Reducing Consumption

• Change institutional settings to encourage healthy drink options
  – Create Healthy Beverage Policy in workplaces, hospitals, schools, child care and other community settings
  – Remove from vending machines, cafeterias, etc.
    • Change mix of drinks in machines
    • Product placement – water at eye level
  – Pricing Strategies: Water costs less than sugary drinks
  – Serve drinks that are no more than 25 calories per 8 oz. at meetings, events, conferences, etc.
  – No marketing at public events (arenas, sporting events, playgrounds)
  – Ban them on property
Reducing Consumption

• Increased education about negative health effects of sugary drinks
  – Students, staffs, patients and other constituents
  – Health care leaders/hospitals, doctors, nurses
  – Counter-marketing strategies (e.g. Rethink Your Drink & Pouring on the Pounds)
  – Media outreach
  – Community engagement and empowerment

• Public health policy strategies
  – Excise tax to support a prevention fund
  – Restrict portion sizes (a la New York)
  – Restrict sales & use in schools
Reducing Consumption

- Excise Tax on Sugar-loaded Beverages
  - Generate more money
  - Easier to administer
  - Reflected in the shelf prices that would lower consumption
  - Provides stable revenue
Just a Penny per Ounce

A one-cent per ounce excise tax on sugar-loaded beverages would produce:

- 23.5% drop in consumption;
- 185,127 fewer obese Illinoisans (9.3% reduction in the number of obese youth between the ages of 2-17 and 5.2% reduction in number of obese adults);
- 3,442 fewer people with diabetes;
- Reduction in health care costs related to diabetes and other obesity related diseases totaling $171.5 million in the first year; and
- New tax revenues totaling $606.7 million to invest in prevention.
Obesity Prevention Fund

Tax Revenue used to transform policy & environment

- Develop safe routes for children to walk or bike to school
- Build protected bike lanes and jogging/walking paths
- Increase access to healthier foods and beverages
- Subsidize healthy food
- Fix water fountains
- Support low cost physical activity options
Political Will?

- Polls show support for tax that directly funds obesity prevention efforts
- People don’t want money to close funding gaps
- Similar efforts in Boston, Seattle, Los Angeles, New York, Philadelphia, Mexico, France, California
- In places where efforts have been thwarted, proposals continue
Rethink Your Drink – Healthy Choices

• Stock the fridge with seltzer, unsweetened tea, low-fat milk and other low-calorie drinks.
• Serve cold tap water during meals. Tap water is delicious, clean and free!
• Add fresh fruit and herbs to your water.
• Read labels. Choose drinks with no more than 25 calories per 8 ounces.
• If you buy fruit juice, make sure it’s 100% juice. – Serve in a small glass or dilute with water.
Call to Action!

Take Rethink Your Drink Pledge:
www.rethinkyourdrinknow.com/ryd/Pledge

Spread the word. Talk to family, friends & neighbors.

Write letters to your local newspaper & policymaker.

Go to: www.preventobesityil.org and www.heart.org/nutritioncenter for more info.
Thank you!