Strategies to Reduce Obesity:
The Portion Cap Rule

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The Portion Cap Rule

• Amendment to Article 81 of the New York City Health Code
• Impacts all Food Service Establishments
• Limits sugary drink portion sizes to 16 ounces
  – “Sugary drinks” include beverages with greater than 25 calories per 8 ounces and sweetened with sugar or another caloric sweetener
  – Pure fruit juice, drinks with more than 50% dairy, alcohol not covered
  – All self-service cups limited to 16 ounces for enforcement feasibility
## Understanding the Rule

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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</table>
| Fruit juice               | • Pure fruit juice contains no added sugar  
                              • Provides many of the nutritional benefits of whole fruit                                                                                   |
| Dairy                     | • Contains calcium, vitamin D, potassium  
                              • Dairy has effect on satiety[^1]                                                                                                           |
| Alcohol                   | • Service of alcohol regulated by the State                                                                                                   |
| Non-FSE food retail       | • Supermarkets, bodegas, pharmacies regulated by the State                                                                                   |
| Calorie threshold         | • Captures calorie-dense beverages, allows for lightly sweetened drinks  
                              • Consistent with other NYC standards                                                                                                        |
| 16 ounce maximum          | • Balances health impact and feasibility  
                              • 16 ounce drinks already available at some FSEs  
                              • Manufacturer-sealed products smaller than 16 ounces are available                                                                          |
Rationale

• Obesity is epidemic among New Yorkers
• Sugary drinks are associated with weight gain in both adults and children\textsuperscript{1,2,3,4}
• Consumption of sugary drinks is excessive
• High consumption of sugary drinks associated with increased risk of heart disease & diabetes\textsuperscript{5,6}
• Sugary drinks contain almost no nutrients and do not satiate like solid food\textsuperscript{7}
• Portion sizes have exploded in recent decades
• People consume more when given larger portion sizes\textsuperscript{8,9,10,11,12,13}
Evidence of Links Between Sugary Drinks and Obesity

### Observational Studies and Controlled Trials
- 2012 – Tate et al., *American Journal of Clinical Nutrition*
- 2012 – Ruyter et al., *New England Journal of Medicine*
- 2012 – Ebbeling et al., *New England Journal of Medicine*
- 2011 – Mozaffarian et al., *New England Journal of Medicine*
- 2009 – Chen et al., *American Journal of Clinical Nutrition*
- 2006 – Ebbeling et al., *Pediatrics*
- 2004 – Schulze et al., *JAMA*
- 2004 – James et al., *British Medical Journal*
- 2004 – Berkey et al., *Obesity Research*
- 2001 – Ludwig et al., *Lancet*

### Reviews and Meta-Analyses
- 2010 – Woodward-Lopez et al., *Public Health Nutrition*
- 2010 – Malik et al., *Circulation*
- 2007 – Vartanian et al., *American Journal of Public Health*
- 2006 – Malik et al., *American Journal of Clinical Nutrition*
How Sizes Have Changed

Original 1920s size: 6.5 ounces
12 ounce cans introduced in the 1960s
20 ounce contour bottles introduced in the early 1990s
1 liter (34 oz) contour bottles introduced in late 1990s
A 64 Ounce Sugary Drink Has: The Equivalent of 54 Teaspoons of Sugar!

Note: values based on fountain Pepsi-Cola product; using 2.5g sugar cubes
SERVES 3

OVER ICE - NICE!

BIG 16 OZ. SIZE

ENJOY

Coca-Cola

Coca-Cola Museum, Atlanta, Georgia
## Timeline

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>May 31, 2012</td>
<td>Mayor Bloomberg announces proposal to the public and media</td>
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<tr>
<td>June 12, 2012</td>
<td>Board of Health Meeting Proposal officially introduced through Notice of Intent</td>
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<tr>
<td>June 12 – July 24</td>
<td>Public comment period</td>
</tr>
<tr>
<td>July 24, 2012</td>
<td>Public hearing</td>
</tr>
<tr>
<td>September 13, 2012</td>
<td>Board of Health Meeting DOHMH response to comments Board of Health votes on proposal</td>
</tr>
<tr>
<td>March 2013</td>
<td>Rule takes effect</td>
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</table>
Response: Media

“It was gigantic enough for a small marine mammal to do laps in, and its only value is in speeding you toward a double bypass”

Frank Bruni, NYT Op-Ed Columnist, on a super-sized drink from KFC

“No more giant sodas? C’mon! This is America, land of the plenty; we haven’t even achieved Type III diabetes yet”

Steven Colbert, The Colbert Report, 5/31/12

http://www.nytimes.com/2012/06/03/opinion/sunday/bruni-trimming-a-fat-city.html
Response: Media
Response: Comments and Testimony

Over **38,000** written comments
- 32,000 supported
- 6,000 opposed
  - Including a petition from *New Yorkers for Beverage Choices*, a coalition funded by the American Beverage Association

55 public hearing participants
- 28 supported
- 25 opposed
- 2 position unclear
Select Organizations in Support
Supportive Comments: Major Themes

• Sugary drink consumption among children and adults is excessive
• Health consequences of sugary drink consumption are devastating
• Reducing the size of sugary drinks will help reduce burden of obesity and chronic disease
• Rule will expand options for healthy size drinks and reintroduce reasonable portions
• Sugary drink marketing is a problem
• Government has a responsibility to act
Select Organizations in Opposition

American Beverage Association

National Automatic Merchandising Association

Auntie Anne’s

New Yorkers for Beverage Choices

Dunkin’ Brands

FPI: Foodservice Packaging Institute

Washington Legal Foundation

Keep Food Legal

Wendy’s
Opposition Comments: Major Themes

1. Health Impact
   ➢ Associations between sugary drinks, obesity and chronic disease disputed
   ➢ Won’t work

2. Choice
   ➢ Consumer demand drives large portions

3. Feasibility
   ➢ Impact to business
   ➢ Customization

4. Rationale
   ➢ Proposal exclusions/guidelines are arbitrary
   ➢ Government overreach

5. Anti-Obesity Strategy
Understanding the Counterarguments

<table>
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| Sugary drinks comprise 7% of the average American’s diet | • 7% = 140 calories per day; if no other changes could lead to a yearly **15 pound weight gain**  
• 12-17 year olds consume nearly **200 calories a day** from sugary drinks¹⁴ |
| Food accounts for majority of added sugars in diet | • >40% of added sugars come from beverages; **more than any other single food source**¹⁵ |
| Sugary drink consumption is declining; obesity rates are rising | • Increases in obesity prevalence are slowing;¹⁶ plateau *may* be related to reduced consumption  
• Trends aside, consumption is excessively high; further reductions are needed |
Understanding the Counterarguments

Consumption of Sugary Drinks by U.S. High School Students

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<td>“Only 32.9% of the students reported drinking any combination of these [sugary drinks] two or more times per day.”</td>
<td>One third of high school students consuming two or more sugary drinks per day is a health issue</td>
</tr>
<tr>
<td>“...almost 70% [67.1%] of high school students are consuming 1 or less SSB per day”</td>
<td>62.8% of high school students are consuming at least one or more sugary drinks per day</td>
</tr>
</tbody>
</table>
Consumer Freedom is Preserved

• The proposal is not a ban on sugary drinks

• Individuals are free to consume more than 16 ounces of sugary drink

• Currently consumers have limited choices of portion sizes, determined by restaurants or beverage companies

• Options for smaller, healthier drinks are enhanced by the proposal
Portion Size Influences Consumption

**Unit Bias:**

- A sense that a single entity is the appropriate amount to consume

Different units:
20, 16 and 12.5 ounce bottles
Commercial Impact Of Policies Is Often Overestimated

• Same concerns raised during calorie labeling, trans fat
  ➢ Starbucks receipt study following calorie labeling implementation showed no profit loss\textsuperscript{20}
  ➢ To DOHMH’s knowledge, no evidence suggests profit loss as a result of trans fat

• Consumers prefer ‘one-stop’ shopping\textsuperscript{21,22}

• Proposal does not affect pricing or promotion
Obesity Costs Are Massive

Costs associated with the proposal small in comparison to obesity-related healthcare costs:

• $4.7 billion: Annual obesity-related direct medical costs in NYC

• $1,500: Annual cost of obesity to each NYC household

• $1,429: Increase in medical spending for obese vs. normal weight adult
Many Widely Accepted Policies Were Once Controversial

Many policies integral to public health initially aroused similar debates:

• Smoke-free restaurants
• Restriction on trans fats
• Removal of lead from paint
• Seatbelt laws
To reduce obesity, physical activity must be complemented by reduced caloric intake.
Policy Is Part Of A Comprehensive Plan
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For More Information:

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Additional information on NYC’s obesity initiatives can be found at:

Citations

10. Rolls BJ, Roe LS, Meengs JS. Larger portion sizes lead to a sustained increase in energy intake over 2 days. *Journal of the American Dietetic Association* 2006;106(4):543-49.
Citations

24. Calculated based on the New York State estimate from Trogdon et al and the ratio of New York City adults to New York State adults (0.426 using US Census Bureau data). n.b. the prevalence of obesity is similar in New York State and New York City (24.5% versus 23.4% using CDC and DOHMH data).