

From Supersized to Human-Sized: Reintroducing Reasonable Portions of Sugary Drinks in New York City

The proposal will amend Article 81 of the New York City (NYC) Health Code to establish a maximum size for sugary drinks offered or sold in Food Service Establishments (“FSEs”) in order to address the obesity epidemic and decrease the consumption of sugary drinks by New Yorkers. Specifically:

- 1) Sugary drinks shall not be offered or sold in cups or manufacturer-sealed containers (e.g. bottles, cans) that contain more than 16 fluid ounces.
 - a. Sugary drinks are defined as beverages that have added sugar, contain $\leq 50\%$ milk/milk substitute by volume and have more than 25 calories per 8 fluid ounces.
 - b. Does not apply to alcoholic beverages, low-calorie drinks served in non-self-service cups that contain less than or equal to 25 calories per 8 fluid ounces, including diet sodas/colas, unsweetened coffees and teas, water, or fruit or vegetable juice without added sugar.
- 2) All self-service cups or containers (e.g. those filled with a drink by the customer) shall not contain more than 16 fluid ounces. The proposal does not limit the ability of FSEs to offer free refills to customers.

Obesity and Diabetes Have Reached Crisis Levels

- 58% of NYC adults are overweight or obese; obesity among adults increased from 18% to 23% between 2002 and 2010.¹
- Nearly 40% of NYC’s public school students (K-8) are obese or overweight.^{2,3}
- Overweight and obese adults are at greater risk of many serious diseases, including heart disease, stroke, type 2 diabetes, and some cancers.⁴
- In NYC, obesity is responsible for an estimated 5,800 deaths per year, of which 2,000 are before age 70,⁵ and around \$4 Billion in direct medical costs.⁶
- One in eight adult New Yorkers has diabetes.⁷
- Annually in NYC, diabetes causes 1,700 deaths⁸ and 2,600 hospitalizations due to amputations.⁹
- In the United States, over 27% of all young adults (17-24 years of age) are too overweight to serve in the military.¹⁰
- Nationally, nearly 1 in 4 teenagers has pre-diabetes or diabetes.¹¹

Portions Sizes Have Increased Dramatically



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 the late 1990s



7 ounces	12 ounces	16 ounces	32 ounces	64 ounces
82 calories	140 calories	180 calories	374 calories	780 calories
22g sugar	38 g sugar	49 g sugar	102g sugar	217g sugar

Note: values based on fountain Pepsi-Coke product; using 2.5g sugar cubes

- Americans consume 200-300 more calories daily than 30 years ago, with the largest single increase due to sugary drinks.¹²
- Sugary drinks are associated with long term weight gain and an increased risk of heart disease and diabetes.^{13,14,15,16,17,18}

- Portion sizes in restaurants have grown - beverages at McDonald's have increased **457%** since 1955, from 7 fluid ounces to 32 fluid ounces.¹⁹
- Manufacturer-packaged carbonated soft drinks have exploded – the original Coca-Cola bottle size was 6.5 fluid ounces, which is significantly smaller than the vast majority of sizes for sale today.²⁰
- A “large” size at quick service chains varies from 32 to 64 ounces. These sugary drinks contain 380 calories and 22 teaspoons of sugar (32 ounces)²¹ to 780 calories and 54 teaspoons of sugar (64 ounces)²², and no nutrients.
- Studies show that people given larger portions simply eat more, without recognizing it.
 - People given larger portion sizes of food eat ~20-50% more, without reducing intake at subsequent meals.²³
 - People eating soup from self-refilling bowls ate 73% more, without perceiving that they had eaten more or feeling more full.²⁴
 - People given beverages 50% larger consume 20% (women) to 33% more (men), with no decrease in food eaten.²⁵

Frequently Asked Questions

Why are dairy drinks excluded from the proposal?

Unlike sugary drinks, which have no nutritional value, dairy drinks contain some important nutrients. These include calcium, potassium and vitamin D.

Why are juice drinks limited to 16 ounces? Aren't they healthy?

There is a difference between a “juice drink,” which contains mostly sugar water and little, if any, actual fruit or vegetable juice, and pure fruit juice. Pure fruit juice and juice products without added sugar can be purchased in sizes larger than 16 ounces, while juice drinks with added sugar and more than 25 calories per 8 ounces cannot.

What if I want more than 16 ounces of a sugary drink?

Customers who want more than 16 ounces of a sugary drink may order more than one beverage.

Will this limit selection at the grocery store?

No. The proposal only affects FSEs, which include restaurants, mobile food carts, delis, and concessions at movie theaters, stadiums or arenas.

Why does the proposal focus just on beverages?

Sugary drinks play a unique role in the obesity epidemic. They provide no nutritional value and because they don't create a sensation of fullness, people typically consume them *in addition* to the calories they get from food.

What is the process for approval? When would the proposal take effect?

The proposal was introduced to the Board of Health on June 12, 2012. It was approved for public comment and a public hearing will be held on July 24, 2012. The Board will vote on the final proposal in September 2012. The proposal will take effect 180 days (6 months) after approval by the Board of Health.

How will it be enforced?

The regulation will be enforced through the City's regular restaurant inspection process. New Yorkers can report violations via 311.

What is the penalty for noncompliance?

Restaurants will have 6 months after the Board of Health adopts the proposal before violations are cited. During that period, they will have time to adjust menu boards, cup and container sizes and make other necessary changes in order to be in compliance with the regulation.

What will the fine amount be for non-compliance?

Fines of \$200 will be issued for violations.

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- ¹ New York City Department of Health and Mental Hygiene, Community Health Survey 2010.
- ² Egger JR, Konty KJ, Bartley KF, Benson L, Bellino D, Kerker B. Childhood obesity is a serious concern in New York City: Higher levels of fitness associated with better academic performance. *NYC Vital Signs* 2009;8(1):1-4.
- ³ Berger M, et al. Obesity in K-8 students – New York City, 2006-07 to 2010-11 school years. *Morbidity and Mortality Weekly Report* December 16, 2011. 60(49): 1673-78.
- ⁴ NIH, NHLBI Obesity Education Initiative. Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. Available from: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf.
- ⁵ New York City Department of Health and Mental Hygiene. Preventing Non-Communicable Diseases and Injuries: Innovative Solutions from New York City. New York: New York City Department of Health and Mental Hygiene, 2011. <http://www.nyc.gov/html/doh/downloads/pdf/ip/un-rpt.pdf>
- ⁶ New York City Department of Health and Mental Hygiene. Preventing Non-Communicable Diseases and Injuries: Innovative Solutions from New York City. New York: New York City Department of Health and Mental Hygiene, 2011.
- ⁷ New York City Health and Nutrition Examination Survey, 2004.
- ⁸ New York City Department of Health, Summary of Vital Statistic 2010.
- ⁹ New York State Department of Health Statewide Planning and Research Cooperative System, 2007.
- ¹⁰ Mission: Readiness Military Leaders for Kids. Too fat to fight: retired military leaders want junk food out of America's schools. 2010.
- ¹¹ May AL, Kuklina EV, Yoon PW. Prevalence of cardiovascular disease risk factors among US adolescents, 1999-2008. *Pediatrics* 2012;129(6):1035-1041.
- ¹² Finkelstein EA, Ruhm CJ, Kosa KM. Economic causes and consequences of obesity. *Ann Rev Public Health* 2005;26:239-57.
- ¹³ Malik VS, Schulze MB, Hu FB. Intake of sugar-sweetened beverages and weight gain: A systematic review. *Am J Clin Nutr* 2006;84(2):274-88.
- ¹⁴ Mozaffarian D, Hao T, Rimm EB, Willett WC, Hu FB. Changes in diet and lifestyle and long-term weight gain in women and men. *NEJM* 2011;364:2392-2404.
- ¹⁵ Malik VS, Popkin BM, Bray GA, Despres J-P, Hu FB. Sugar-sweetened beverages, obesity, type 2 diabetes mellitus, and cardiovascular disease risk. *Circulation* 2010;121(11):1356-64.
- ¹⁶ Schulze MB, Manson JE, Ludwig DS, Colditz GA, Stampfer MJ, Willett WC, Hu FB. Sugar-sweetened beverages, weight gain, and incidence of type 2 diabetes in young and middle-aged women. *JAMA* 2004;292(8):927-34.
- ¹⁷ Fung TT, Malik V, Rexrode KM, Manson JE, Willett WC, Hu FB. Sweetened beverage consumption and risk of coronary heart disease in woman. *Am J Clin Nutr* 2009;89(4):1037-42.
- ¹⁸ Welsh JA, Sharma A, Cunningham SA, Vos MB. Consumption of added sugars and indicators of cardiovascular disease risk among US adolescents. *Circulation* 2011;123(3):249-57.
- ¹⁹ Young L. *The Portion Teller Plan: The No-Diet Reality Guide to Eating, Cheating, and Losing Weight Permanently*. New York: Morgan Road Books, 2005.
- ²⁰ Retrieved on 5/7/2012 from: <http://www.thecoca-colacompany.com/ourcompany/historybottling.html>
- ²¹ Based on calculation by the New York City Department of Health and Mental Hygiene. A 32 ounce Coke contains 310 calories and 86 grams of sugary (<http://nutrition.mcdonalds.com/getnutrition/nutritionfacts.pdf>, accessed May 31, 2012); assumes 1 teaspoon of sugar = 4 grams.
- ²² Based on calculation by the New York City Department of Health and Mental Hygiene. A 64 ounce Pepsi contains 780 calories and 217 grams of sugar (http://www.kfc.com/nutrition/pdf/kfc_nutrition.pdf, accessed May 23, 2012); assumes 1 teaspoon of sugar = 4 grams.
- ²³ Ledikwe JH, Ello-Martin JA, Rolls BJ. Portion sizes and the obesity epidemic. *J Nutr* 2005;135:905.
- ²⁴ Wansink B, Painter JE, North J. Bottomless bowls: why visual cues of portion size may influence intake. *Obes Res* 2005;13(1):93-100.
- ²⁵ Rolls BJ, Roe LS, Meengs JS, The effect of large portion sizes on energy intake is sustained for 11 days. *Obesity* 2007;15:1535.