

Beverage Vending Machines at CUNY¹

This report on beverage vending machines at CUNY presents the availability of healthy beverages in vending machines on CUNY campuses. Participants of the Healthy CUNY Workshop collected data from twelve CUNY campuses throughout the summer of 2011. Data was compared to the New York City Department of Health and Mental Health (DOHMH) guidelines for vending machines at City facilities. Findings from this report will present the status of healthy beverages and foods in vending machines. The next step is for Healthy CUNY to work with college campuses to provide more healthy options in their campus vending machines. Findings from this report will also be used to measure the impact of the Healthy CUNY initiative in supporting healthier options on campuses.

Vending Machine Brands

Students found 280 beverage vending machines on eleven campuses. The majority of them sell cold beverage (260 machines), while twenty are hot beverage vending machines. Table 1 reports the percentage of beverage vending machine brands that do not meet DOHMH standards. Out of the 212 machines that advertised brands, most did not meet DOHMH standards, with 147 machines whose brand advertised soda and other high-calorie content beverages. The College of Staten Island, Kingsborough Community College, LaGuardia Community College, and New York City College of Technology (NYCCT) had particularly high rates of vending machine brands that did not follow DOHMH standards. CUNY Graduate Center (CUNY GC) and Hunter College at Brookdale had only a few vending machines (one and four, respectively), and they were all high calorie beverage brands.

Table 1. Beverage Vending Machine Brands at CUNY

	No. of machines with product brands	No. of machines that do not meet DOHMH standards	% of machines that do not meet DOHMH standards
Bronx CC	15	9	60%
Brooklyn College	50	29	58%
College of Staten Island	9	8	89%
CUNY GC	1	1	100%
Hunter College 68th St.	17	17	100%
Hunter College Brookdale	4	4	100%
Kingsborough CC	35	30	86%
LaGuardia CC	13	13	100%
Lehman College	0	0	na
NYCCT	27	22	81%
Queensborough CC	41	14	34%
Total	212	147	69%

Nutritional Content & Size

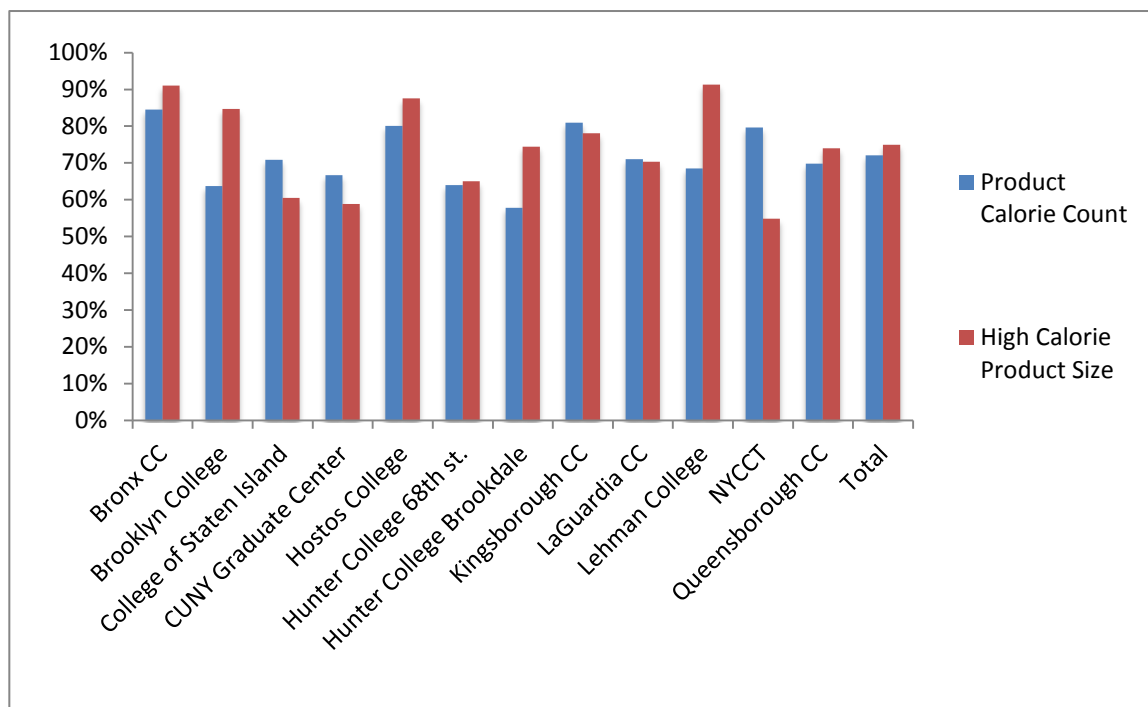
DOHMH suggests that no more than two columns should hold high calorie beverages (beverages with more than 25 calories per 8 ounces) and that all beverages, with the exception of water and seltzer,

¹ For more information go to www.cuny.edu/healthycuny

should be less than 12 ounces. Out of the 84 vending machines with transparent fronts (allowing data collectors to see the rows of products), only three followed the DOHMH guideline of less than two lines of high calorie beverages (one machine each at Hostos Community College, Hunter College Brookdale and Brooklyn College).

Figure 1 reports the percentage of cold beverage vending machines² products that follow DOHMH standards for nutritional content and size. The first column in Figure 1 shows that high calorie beverages are by far the majority of vending machine content. Bronx Community College, Hostos Community College, Kingsborough Community College and NYCCT all report more than 70 percent of its content to be high calorie beverages. The second column in Figure 1 reports the size of high-calorie count beverages and shows that the majority of vending machines on CUNY campuses do not follow the DOHMH guidelines regarding beverage size. The majority of campuses have high calorie beverages that are containers larger than 12 ounce in over 70 percent of their vending machines.

Figure 1. Comparing Vending Machine Products to DOHMH Guidelines for Calorie Count and Size



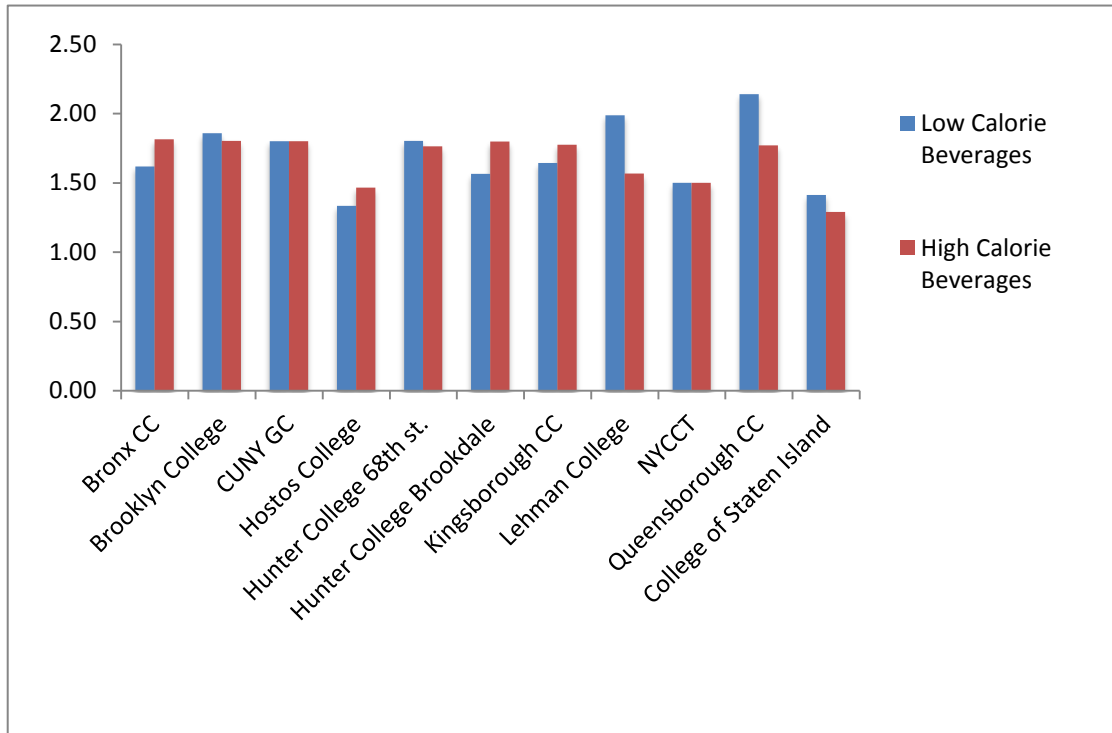
Price Differentiation

The DOHMH suggests pricing of beverages that encourages healthy choices by offering healthy beverage choices at lower prices than high calorie beverages. Figure 2 reports that on most CUNY campuses, there is a difference of 20 cents or less between low and high calorie beverages. Three

² Because of the variety of milk and sugar supplements for customers to add to their hot beverages, hot beverage vending machines were left out of this analysis.

campuses report a lower price for the healthier options (Bronx Community College, Hostos Community College, Kingsborough Community College) and three campuses have lower prices for the high calorie beverages (Brooklyn College, Hunter College 68th St., College of Staten Island). Lehman and Queensborough Community Colleges reported healthier options averaging 42 and 37 cents (respectively) higher than the less healthy options; while low calorie beverages at Hunter College at Brookdale were 23 cents cheaper than high calorie beverages.

Figure 2. Price Differentiation between Low and High Calorie Beverages



Calorie Labeling

Another issue that CUNY campuses could improve is access to nutritional information for products in beverage vending machines. Table 2 presents the prevalence of nutritional information labeling on beverage vending machines. Out of the 93 total beverage vending machines assessed, 63 had nutritional information visible; yet, only 6 had nutritional labels available on the machine. The majority of nutritional information was from on-product labels, on-product advertisement and advertisement on machines; none of these fit DOHMH standards of nutritional information displays.

Table 2. Availability of Nutritional Information on Beverage Vending Machines

	Nutrition info visible	No. of machines	On product label	On product advert.	On machine label	On machine advert.
Bronx CC	4	10	3	4	0	0
Brooklyn College	2	10	0	2	0	5
CUNY Graduate Center	1	9	0	1	0	1
Hostos College	2	2	0	0	0	1
Hunter College 68th St.	1	3	8	0	0	1
Hunter College Brookdale	4	10	0	0	0	1
Kingsborough CC	2	5	6	0	1	1
LaGuardia CC	1	10	6	0	0	0
Lehman College	4	10	1	4	0	1
NYCCT	2	10	2	0	0	1
Queensborough CC	3	4	1	4	2	0
College of Staten Island	4	10	0	3	2	1
Total	42	93	26	19	6	18

Campus Grades

Grades for product calorie count and size were determined by the percent of products that did not follow DOHMH standards. If campuses reported between 100 and 76 percent that did not follow the guidelines, they received a C; if campuses reported between 75 and 51 percent, they received a B; 50 percent or less, they received an A. Bronx Community College, Kingsborough Community College, and NYCCT received a C in both measures. Looking at price differentials, if campuses offered high calorie beverages at a cheaper price than low calorie beverages, they received a C. If it was the opposite, low calorie beverages were cheaper, they received an A. Campuses with no price difference, received a B. All campuses received a C for nutritional information labeling, since no campuses had more than half of vending machines with the appropriate labels. Taking an aggregate grade count across the four measures, Brooklyn College, Hostos College, and Queensborough College received the lowest scores.

Table 3. CUNY Campus Grade for Beverages

Campus	Calorie Count	Product Size	Price	Nutrition Labeling	Grade
Bronx CC	C	C	A	C	B
Brooklyn College	B	C	C	C	C
College of Staten Island	B	B	B	C	B
CUNY Graduate Center	B	B	A	C	B
Hostos College	C	C	C	C	C
Hunter College 68th St.	B	B	A	C	B
Hunter College Brookdale	B	B	A	C	B
Kingsborough CC	C	C	A	C	B
LaGuardia CC	B	B	na	C	B
Lehman College	B	C	B	C	B
NYCCT	C	C	A	C	B
Queensborough CC	B	C	C	C	C

Conclusion

This report shows the high prevalence of high calorie beverages in vending machines at CUNY. The majority of vending machines sell high calorie beverages and only a handful had near equal low calorie beverages available. Most campuses reported little price differentiation between Low and high calorie beverages (less than 20 cents in difference). CUNY could encourage healthy choices by decreasing the price of low calorie Beverages while increasing high calorie beverages. There is also a lack of nutritional information available for students, staff and faculty, with only 5 vending machines displaying nutritional information labels on the machine. Table 3 reports grades for each campus according to the four measures: calorie count, product size, price differentiation, and nutritional information labels.