

Calorie Posting



Culinary Institute of America
January 21, 2010

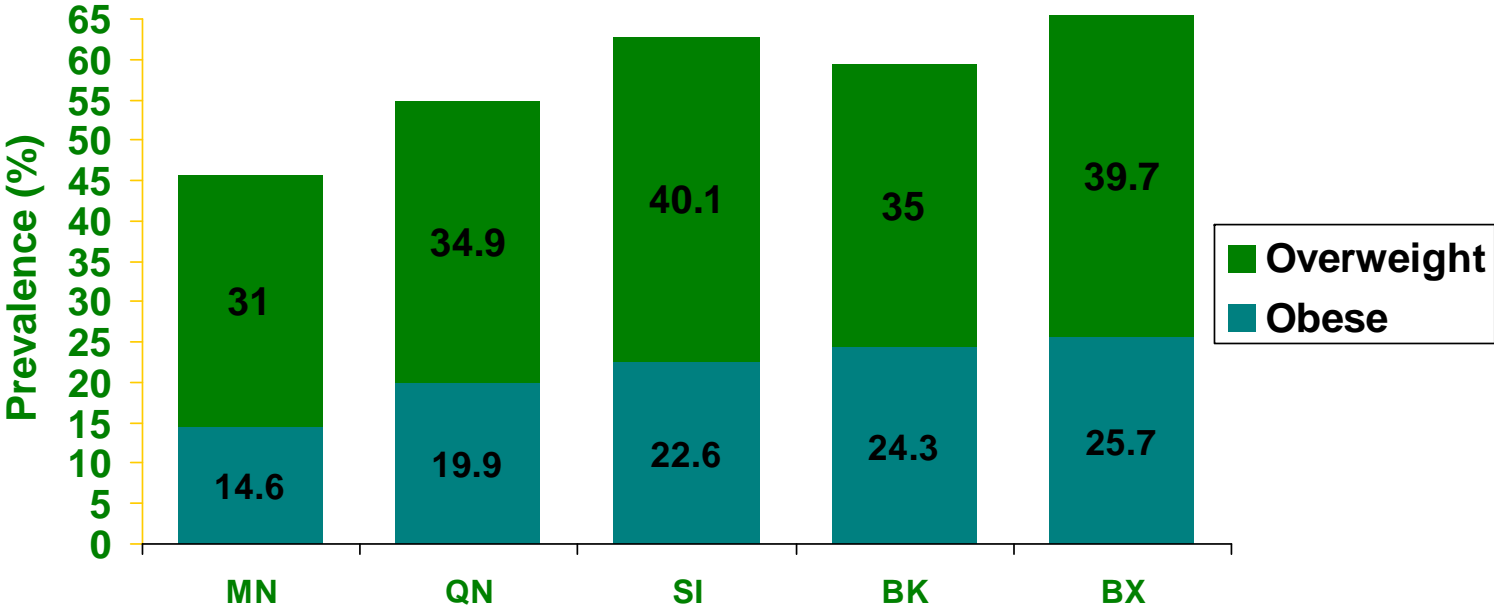
Sonia Angell, MD, MPH
Director, Cardiovascular Disease Prevention and Control Program
NYC Department of Health & Mental Hygiene



Outline

- Obesity
- Improving Population Health
- Calorie Posting
 - History
 - Findings
- Moving Forward

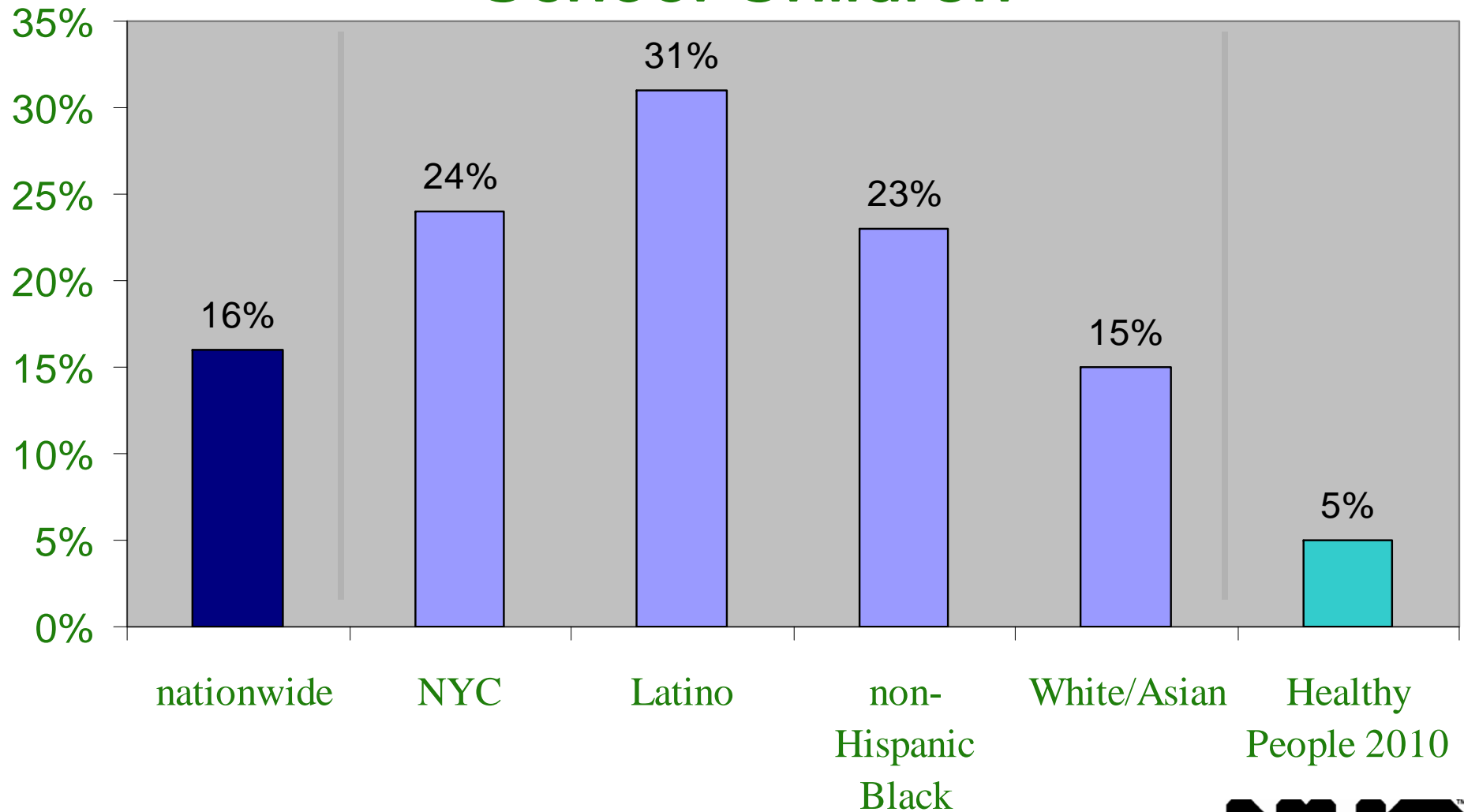
Prevalence of Overweight and Obesity Among Adults By NYC Borough



Source: NYC Community Health Survey 2006



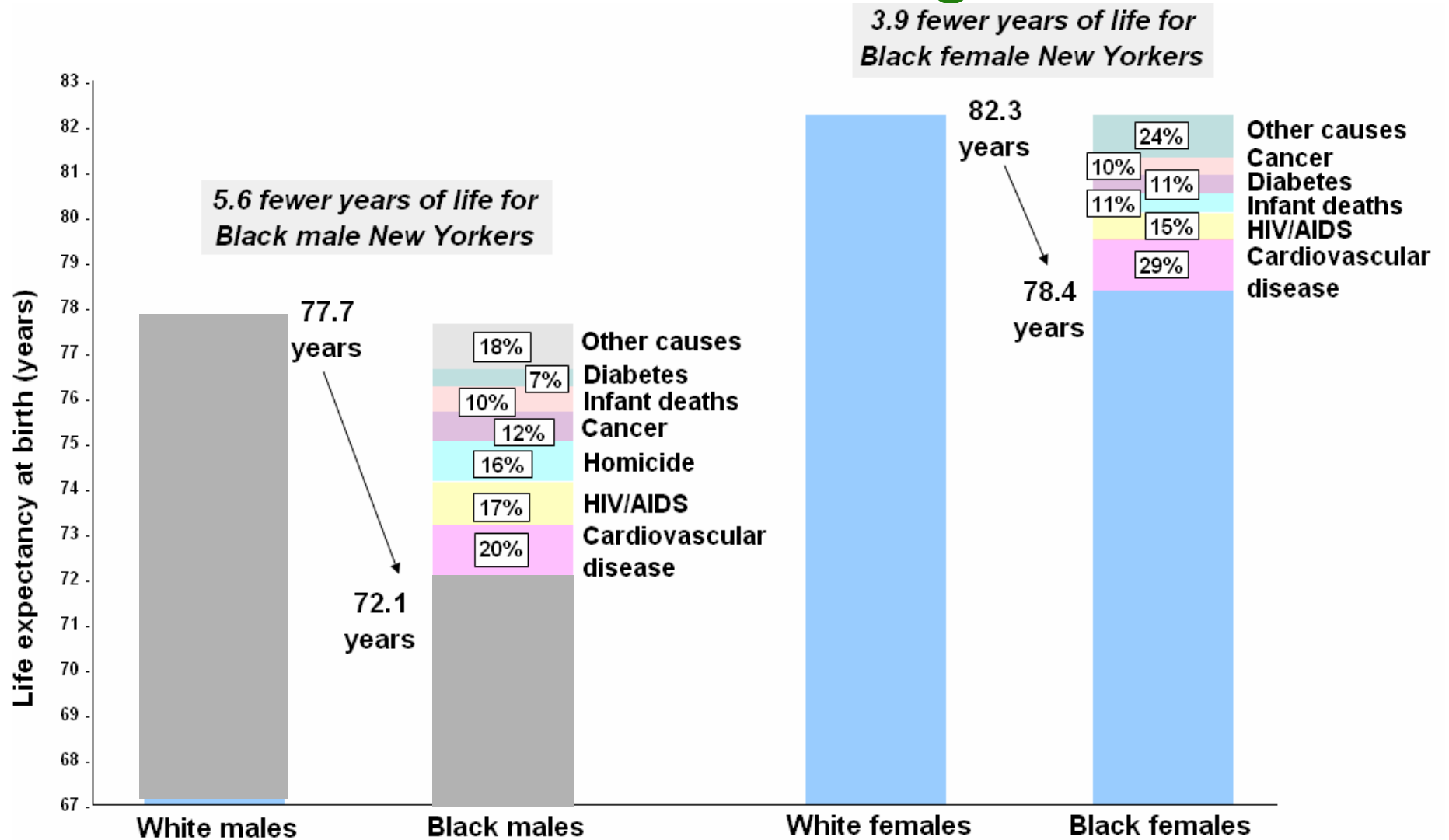
Obesity among NYC Elementary School Children



Thorpe et al, AJPH, 2004

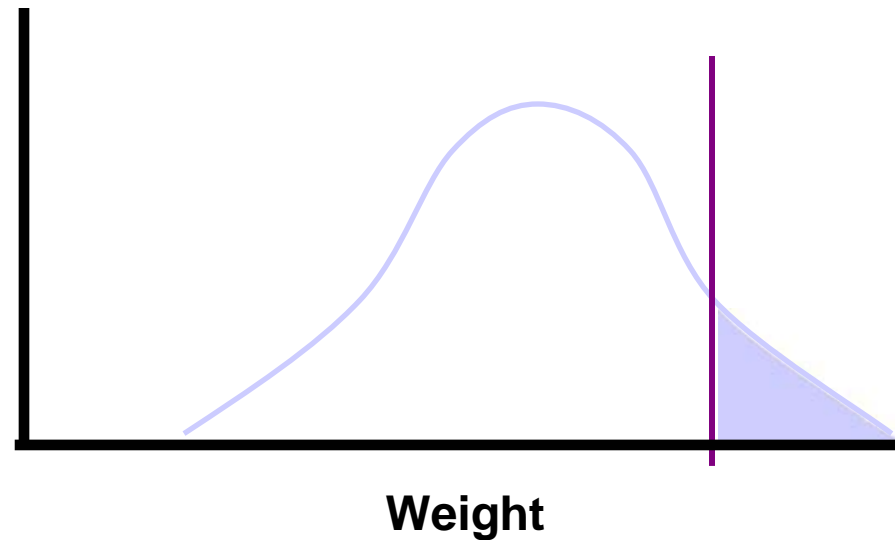


New Yorkers are Living Longer but Blacks Die Younger

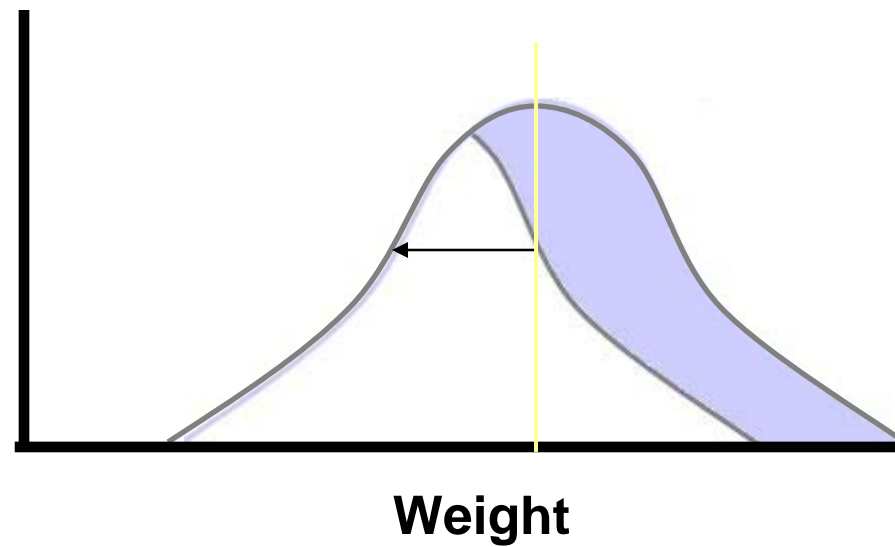


Source: NYCDOHMH Bureau of Vital Statistics and U.S. Census population estimates, 2004-2005

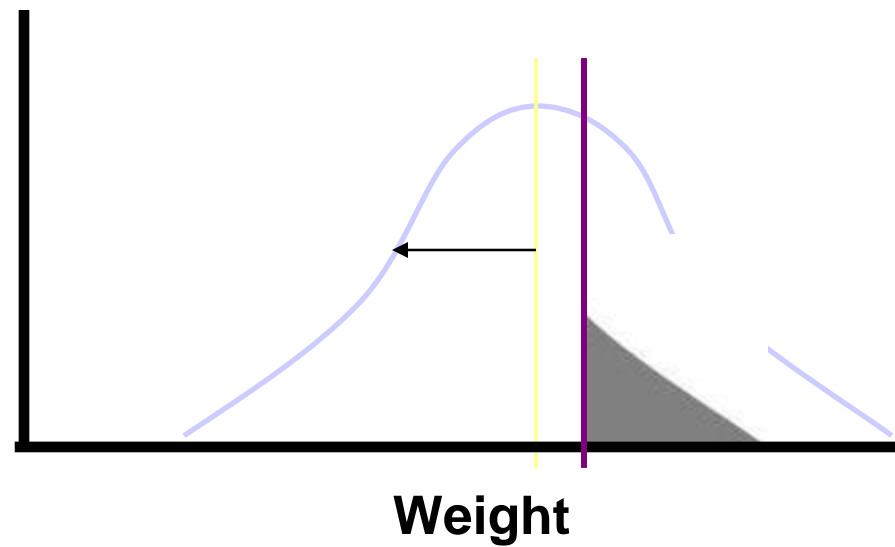
Improving Health: Targeted Approach



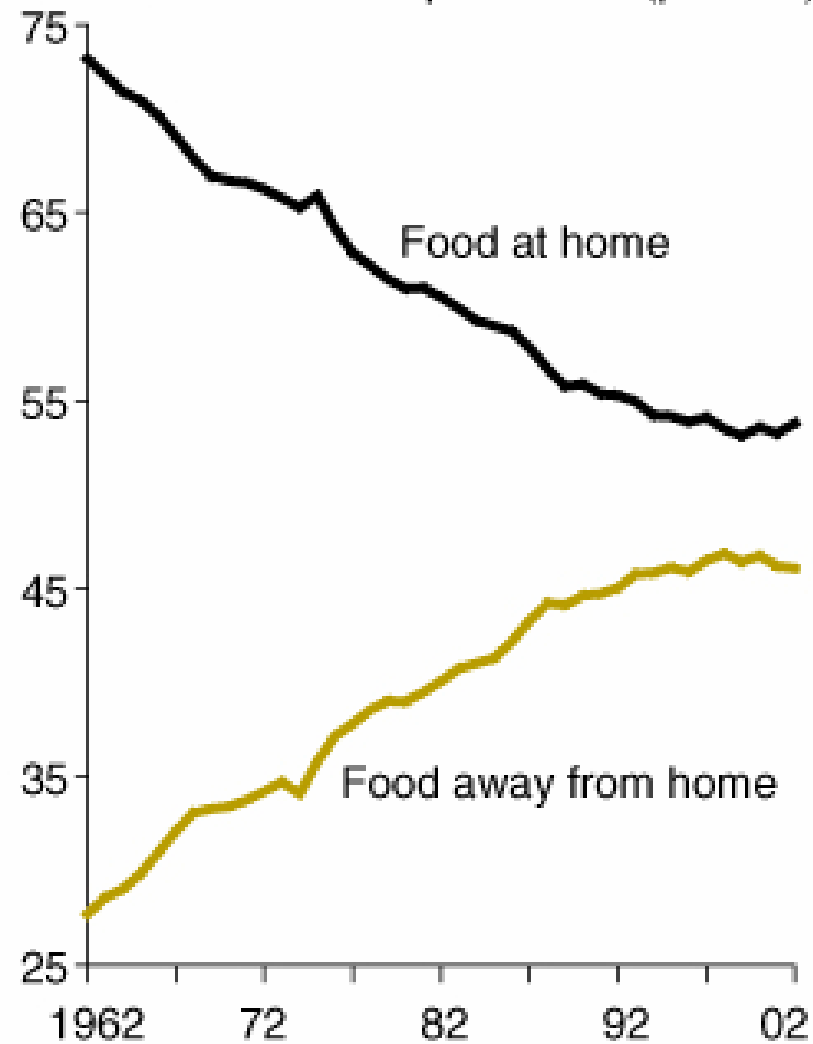
Improving Health: Population Approach



Improving Health: Combining Approach



Share of total food expenditures (percent)



Source: Food Consumption (Per Capita) Data System, USDA, Economic Research Service.

NYC's Calorie Posting Regulation

Dec 2006	Regulation Approved
Jun 2007	Lawsuit Filed: NYS Restaurant Association (NYSRA) vs. NYCDOHMH
Jul 2007	Regulation Effective
Sep 2007	Regulation Suspended due to judge decision
Oct 2007	Existing Regulation Repealed; Modified Regulation Introduced
Jan 2008	Regulation Approved
Jan 2008	Lawsuit Filed: NYSRA vs. NYCDOHMH
Mar 2008	Regulation Effective
Apr 2008	Judicial Decision– NYSRA Motion Denied
May 2008	NYSRA Appeals Lower Court's Decision re: Regulation
Jul 2008	Enforcement Begins
Feb 2009	US Court of Appeals Upholds NYC Calorie Labeling Regulation

Calorie Posting at Chain Restaurants

- 1 in 4 adults report eating fast food on a typical day
- Fast casual restaurants are increasingly popular
- In 2007 major chain restaurants in NYC metro area accounted for more than 1/3 of all restaurant traffic – 34.7%.
- They all have highly standardized food

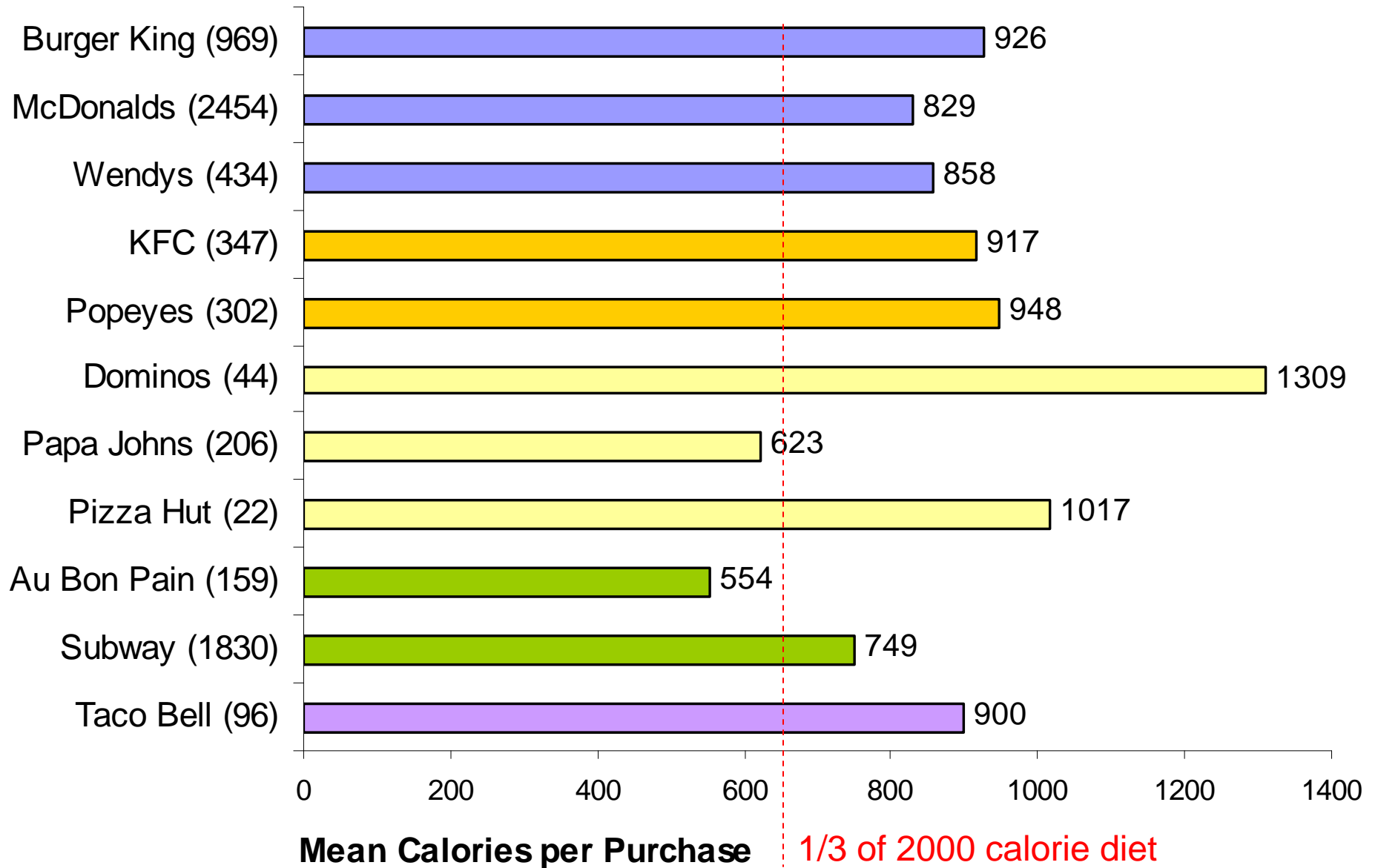
Bowman S, Vinyard B. J Am Coll Nutr 2004;
NPD data

Calorie Information, Where?

% of customers who saw calorie information at NYC establishments covered under Health Code Calorie Labeling Regulation, with their existing information practices in May-June 2007

Brand	# of Sites	# of Customers Interviewed	% of Customers who Reported Seeing Calorie Information in the Restaurant
Dominos	10	57	0.0%
Papa Johns	5	222	0.0%
Popeyes	7	512	0.6%
Dunkin Donuts	70	2756	1.3%
Starbucks	37	1285	2.7%
Au Bon Pain	2	166	3.7%
Burger King	20	1033	3.8%
Yum Brand	21	861	4.6%
McDonald's	45	2593	4.7%
Wendy's	11	474	6.9%
Subway	48	1906	31.3%
TOTAL	276	11865	<8%

Average Calories per Purchase, 2007



Signature Sides

	Reg	Calories	Lg	Calories
Red Beans & Rice	\$1 ⁷⁹	320	\$3 ⁴⁹	900
Mashed Potatoes with Cajun Gravy	\$1 ⁷⁹	130	\$3 ⁴⁹	390
Cole Slaw	\$1 ⁷⁹	260	\$3 ⁴⁹	780
Cajun Rice	\$1 ⁷⁹	170	\$3 ⁴⁹	510
Cajun Battered Fries	\$1 ⁷⁹	310	\$3 ⁴⁹	880
Corn on the Cob	\$1 ⁷⁹	190		
Chicken & Sausage Jambalaya	\$1 ⁷⁹	220	\$3 ⁴⁹	660
Breast Substitution	\$0 ⁹⁹	70-250		
Biscuits ea.	\$59	240		
6	\$2 ⁵⁹	1440	12	\$4 ²⁹ 2880



Drinks



\$1.59

Calories 0-336
0-448

Chicken Dinners

	Calories
2 Pc Dinner	\$4 ⁷⁹ 735-1060
3 Pc Dinner	\$5 ⁷⁹ 880-1205
4 Pc Dinner	\$6 ⁷⁹ 1235-1455

Dinners include: reg side + biscuit

Sandwiches

SPICY OR MILD
Chicken DELUXE \$3⁷⁹ 480-660



Chicken Strips

3 STRIPS Basket \$4⁸⁹ 730-950
5 STRIPS Basket \$6⁷⁹ 990-1210

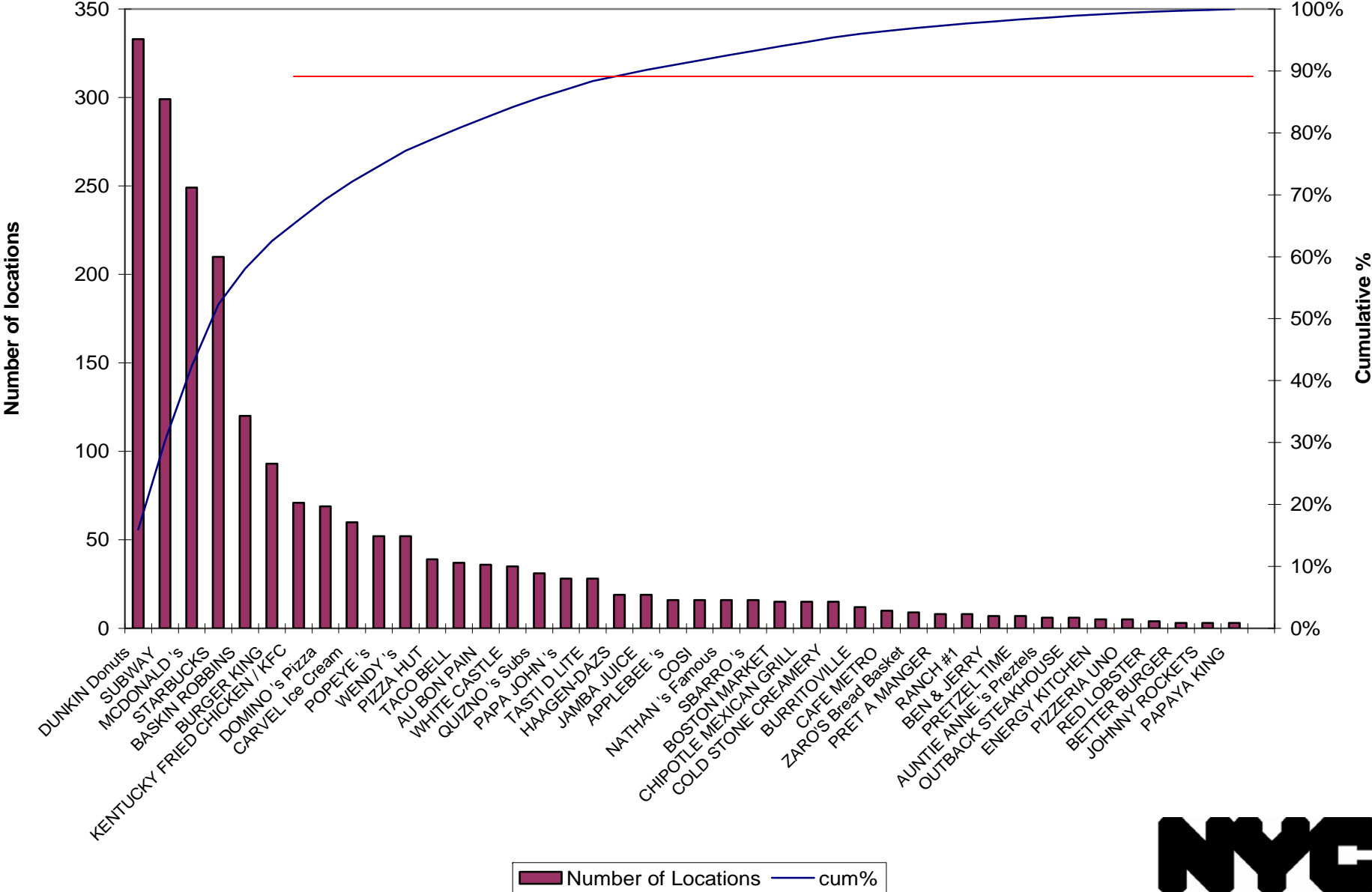
Baskets include: reg side + biscuit



Study Design

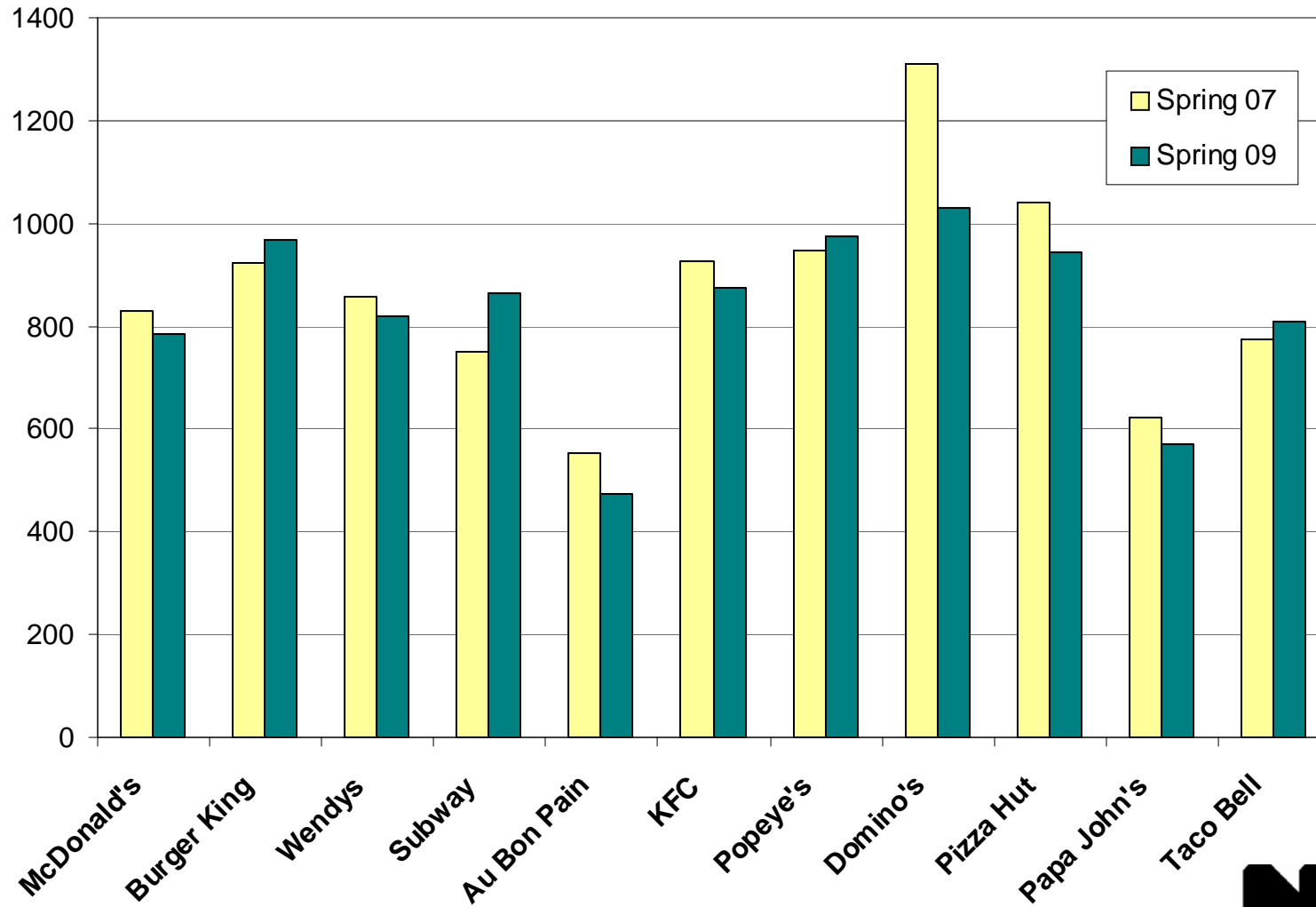
- Serial, cross-sectional surveys of customers exiting regulated fast-food chains
 - Spring 2007 Baseline
 - Spring 2009 Follow-up
- Population-based sample of all weekday lunchtime fast-food customers; and weekday afternoon coffee chain customers
- A random sample of all stores for the top 13 fast-food and coffee chains in NYC
- 275 stores included in the sample out of ~2000 covered by initial regulation

13 chains account for most of NYC's fast food outlets

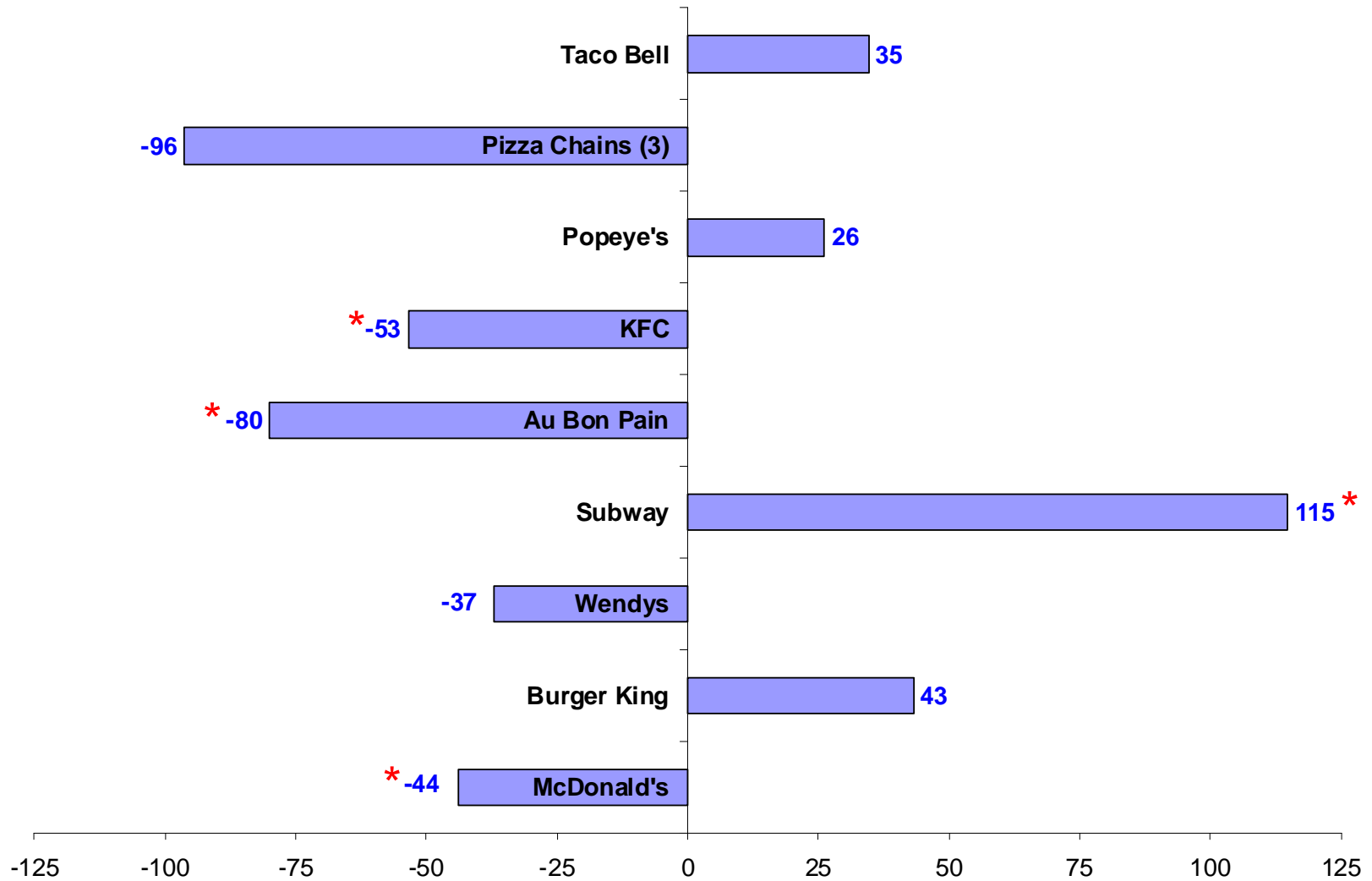


Average Calories by Fast Food Chain

Spring 07 and Spring 09



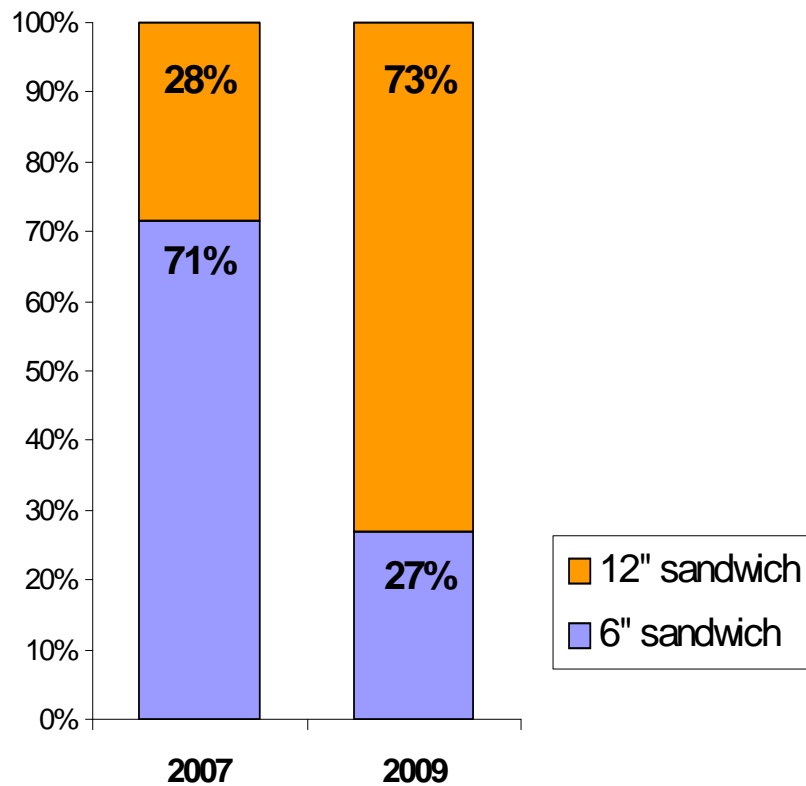
Average Calorie Difference by Fast Food Chain from Spring 07 to Spring 09



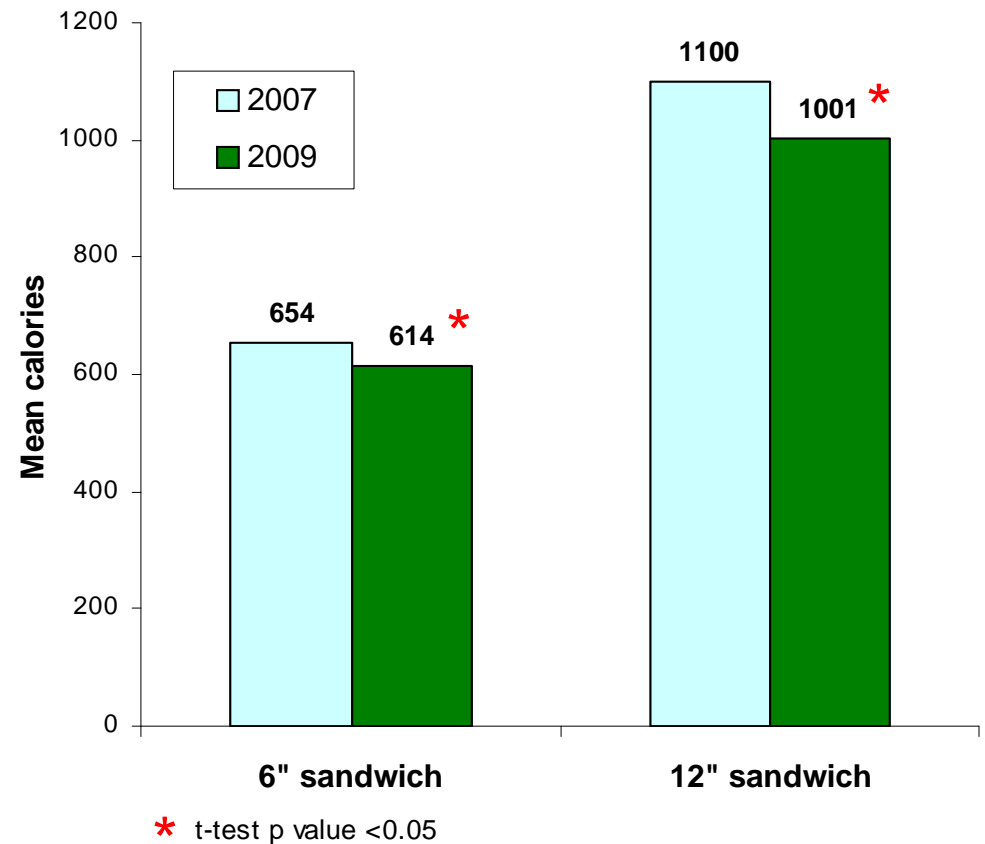
* t-test; p<0.05

Change in Purchasing Patterns at Subway, Spring 07 to Spring 09

The percentage of customers ordering 12" sandwiches almost tripled from 28% to 73%



Although purchasing patterns changed, mean calories declined for both 6" and 12" sandwiches

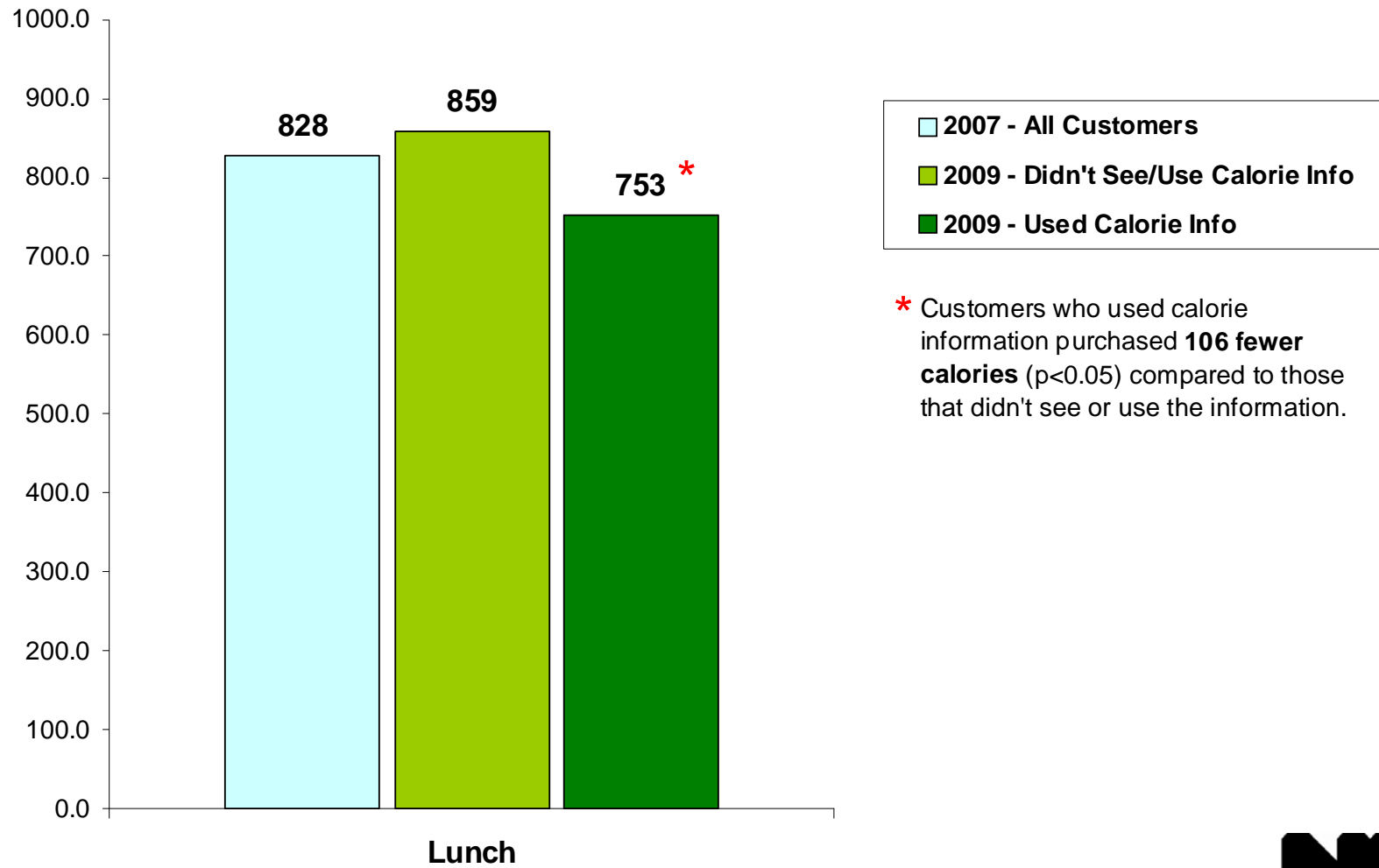


More Customers are Seeing and Using Calorie Information

% of Customers, Spring 07 and Spring 09

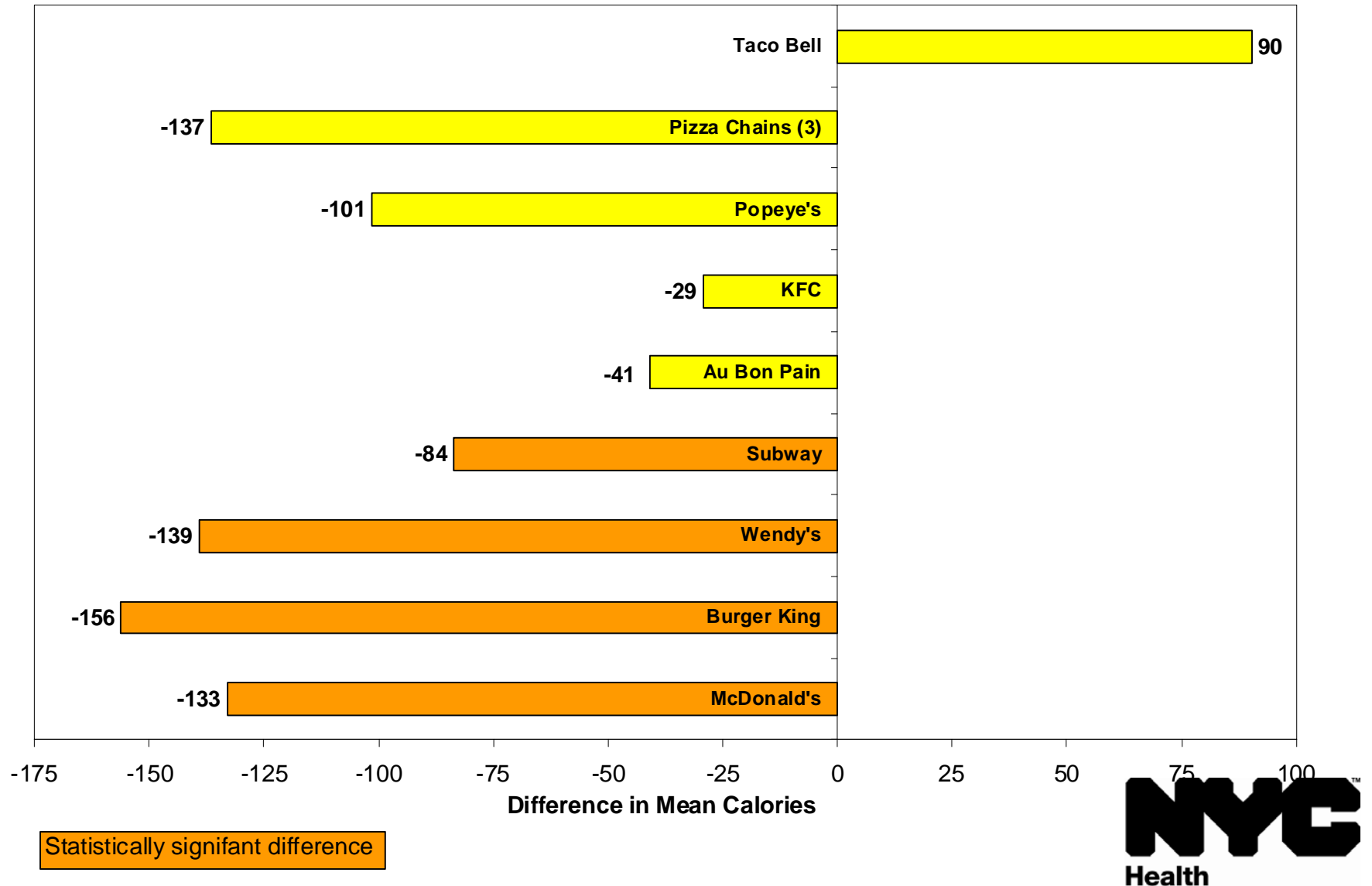


Mean Calories Purchased Spring 07 and Spring 09



Average Calories

Those Who Used Calorie Information vs. All Others - Spring 09



Summary

- Overall, 56% of fast food diners in NYC report seeing calorie information – and 1 in 6 use the information to make lower calorie choices
- Customers who use calorie information consume on average 106 calories fewer than those who don't
 - Across the 11 “lunch” chains – purchases were over 100 calories lower for customers who used calorie information
 - At all three burger chains – which account for over ½ of all lunch purchases – customers that used the calorie information purchased an average of 152 fewer calories

Study Strengths and Limitations

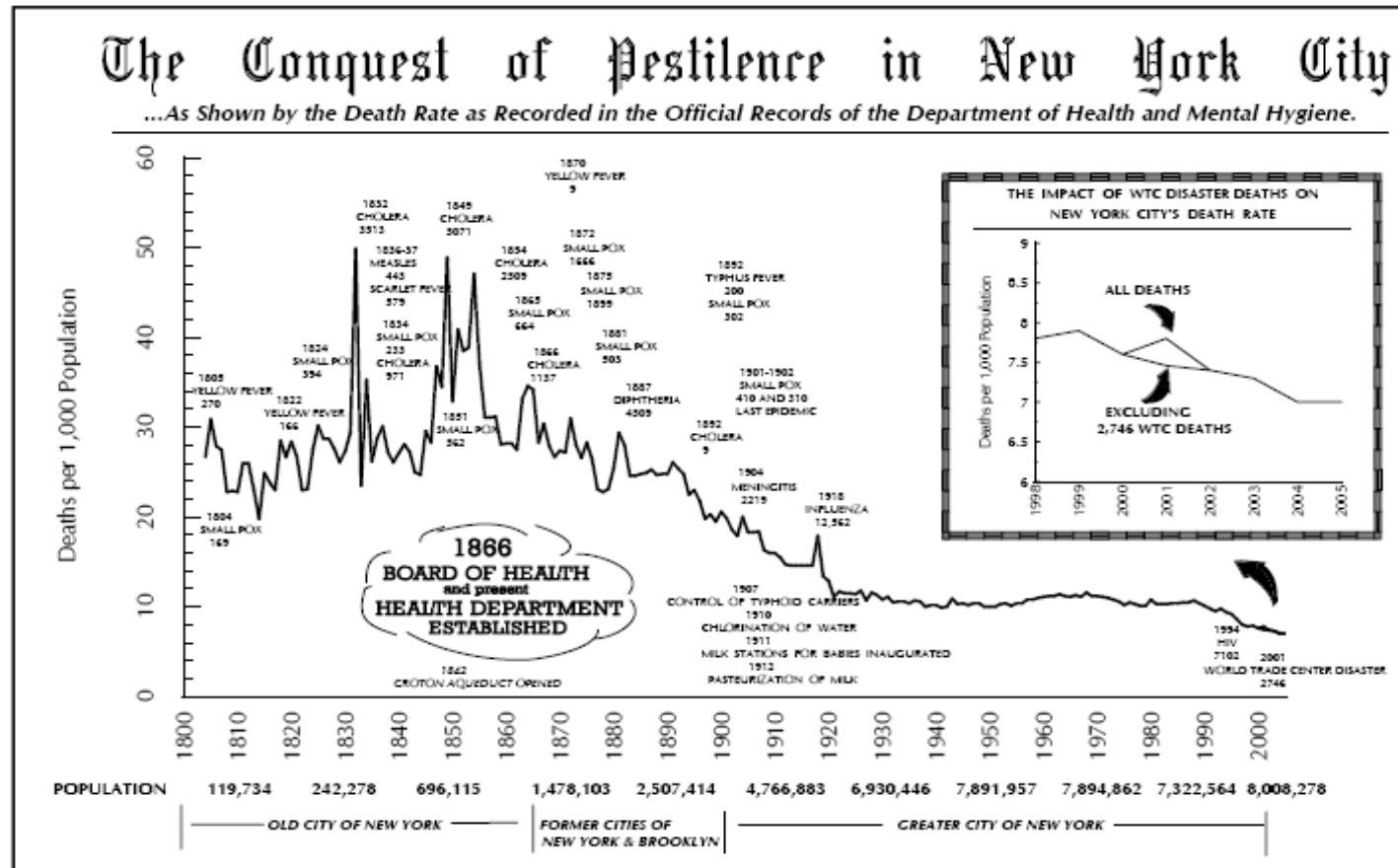
Strengths

- Population-based study design
- Large sample size allows for in-brand analyses (for most chains)
- Receipt-based data verified by customer surveys

Limitations

- Very low customer counts at certain chains (especially pizza)
- Limited to fast food chains; no data on casual dining chains
- Limited to fast food customers – so we have no information on people deciding against fast food

Population Health in the 21st Century: The Conquest of Chronic Disease



NYC Population Approaches to Reducing Chronic Disease

- Policy
 - Calorie Labeling Regulations
 - Daycare Regulations
 - Trans Fat Restrictions
 - Vending Machine Standards
 - Public Procurement Standards
 - National Salt Reduction Initiative
- Environmental
 - Built Environment
 - Stairwells
 - Water Access
 - Construction
 - Bike lanes
 - Parks
- Clinic Based
 - Access to care
 - Clinic Access to IT/EMRs
 - Systems change
 - Self Blood Pressure Monitoring
 - Panel Management
- Community Programs
 - SPARK, Shape Up, School PE
 - Healthy Bodegas, Health Bucks
 - Food & Fitness Partnership
 - Fruit & Vegetable Access
 - Shelf Labeling
 - Blood Pressure Monitoring and checks
 - Walking clubs

...to name a few.

NYC Calorie Labeling Evaluation Project Team

Tamara Dumanovsky

Christina Huang

Cathy Nonas

Lynn Silver

Special thanks to Mary Bassett, Tom Matte, Tom Frieden, Tom Farley, Chevonne Cato, Leah Tedrick-Moutz, Jessica Rao, Rosalyne Tu and all of the data collectors.

This study was supported by the Robert Wood Johnson Foundation Healthy Eating Research program and by the City of New York.



Calorie Posting



Culinary Institute of America
January 21, 2010

Sonia Angell, MD, MPH
Director, Cardiovascular Disease Prevention and Control Program
NYC Department of Health & Mental Hygiene



