

Calorie Posting in Chain Restaurants

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BLENDÉD CRÈME

	TALL 12 FL OZ	GRANDE 16 FL OZ	VENTI 24 FL OZ
Strawberries & Crème	3.85 370 cal	4.45 470 cal	5.05 650 cal
Vanilla Bean	3.30 340 cal	3.90 470 cal	4.50 600 cal
Double Chocolaty Chip	3.85 380 cal	4.45 510 cal	5.05 670 cal
Green Tea	3.85 370 cal	4.45 490 cal	5.05 650 cal
Pumpkin Spice	4.15 360 cal	4.75 470 cal	5.35 630 cal



Orange Mango Banana | 3.95 16 FL OZ 250 cal

Made with a whole banana and all natural Naked® Juice and our own whey protein* and fiber powder.

Banana Chocolate | 3.95 16 FL OZ 270 cal

Made with a whole banana and bittersweet cocoa and our own whey protein* and fiber powder.

New York City 2008

- ◉ Chains with 15 or more units nationwide
- ◉ Post calories as prominently as price
- ◉ Patient Protection and Affordable Care Act – March 2010

Information disclosure as a policy tool

- Demand-side effects
 - › Consumers substitute to lower calorie items
 - › Consumers substitute to different restaurants
 - › Consumers purchase fewer items
- Supply-side effect
 - › Restaurants change their menus

On the other hand

- ◉ Nutrition information is already available
- ◉ Choices driven by convenience, taste & price
- ◉ “Teaching to the test”

Pasta Dishes Made to Order

Calories

- | | |
|---|-----------------------------|
| 1) Penne w/ Olives, Capers & Plum Tomato Sauce | \$8.50/1938 |
| 2) Penne w/ Eggplant, Basil & Mozzarella | \$9.50/2735 |
| 3) Penne w/ Shrimp & Broccoli | \$11.95/1825 |
| 4) Penne alla Vodka w/ Bacon With Fresh Mozzarella | \$8.95/2917
\$9.50/2935 |
| 5) Pasta Primavera w/ Zucchini, Broccoli & Peppers | \$8.95/1626 |
| 6) Fettuccine Alfredo w/ Parmigiano Cheese With Grilled Chicken | \$9.95/2940
\$11.95/3073 |
| 7) Penne w/ Fresh Tomato Sauce Fresh Mozzarella & Basil | \$8.95/2713 |
| 8) Penne w/ Grilled Chicken & Mushroom | \$11.95/1638 |
| 9) Spaghetti & Meatballs | \$8.50/680 |

From our Brick Oven

Calories

- | | |
|------------------------------------|------------|
| Mama's Favorite Lasagna | 650/\$8.95 |
| Baked Ziti w/ Mozzarella & Ricotta | 700/\$7.50 |
| Chicken Cutlet Parmigiana | 520/\$8.95 |

Salads

- | | |
|-------------|------------|
| Small Salad | 147/\$3.49 |
| Large Salad | 244/\$4.99 |

Special

- | | |
|------------------------------|-------------|
| Grilled Chicken Caesar Salad | 1415/\$6.49 |
|------------------------------|-------------|

Various Heros

Soup of The Day

Starbucks Data

- ◉ 3 months before & 11 months after
- ◉ NYC (posting starts April 1, 2008)
- ◉ Control locations—Boston & Philadelphia
- ◉ 110 million transactions
- ◉ 11,000 cardholders

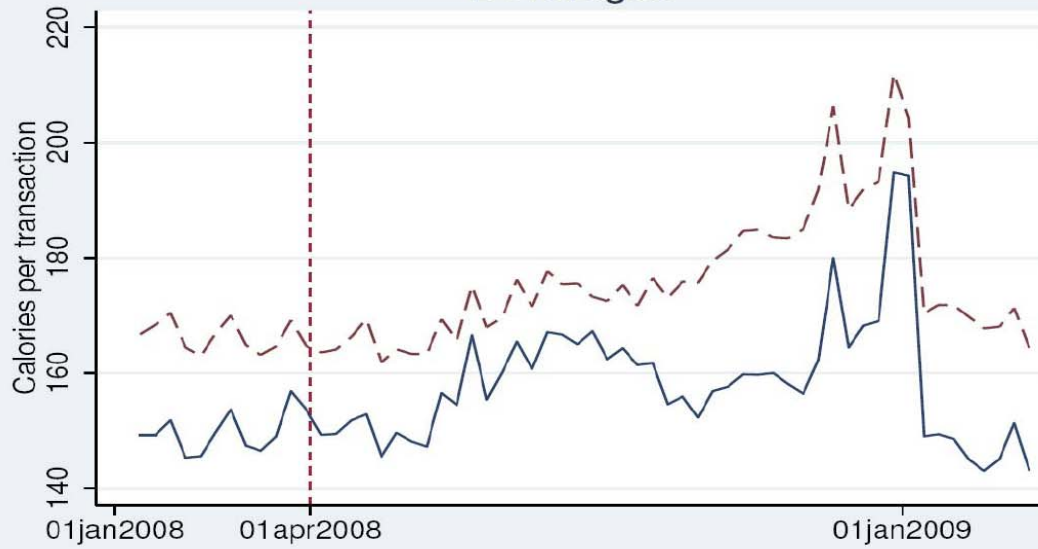
Strengths

- ◉ Deep dive on how calorie posting affects consumer behavior at Starbucks
- ◉ Can assess impact on their business
- ◉ Starbucks is one of the biggest chains

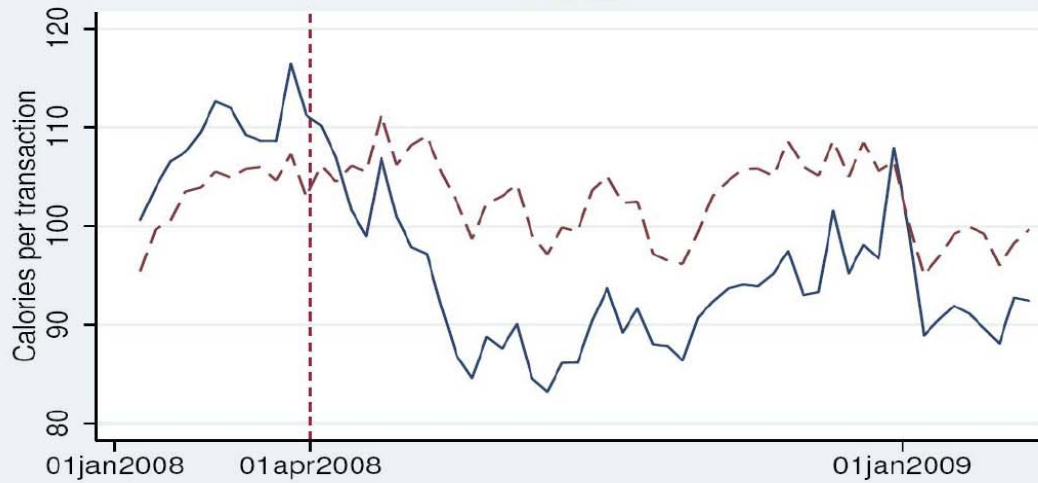
Limitations

- ◉ Starbucks not representative of all chains
- ◉ No data on total caloric intake
- ◉ No data on obesity

Beverages



Food



— New York - - - Boston & Philadelphia

Regression analysis

- ◉ We estimate the impact of calorie posting on calories per transaction
- ◉ Transactions in Boston & Philadelphia control for seasonality
- ◉ Various robustness checks (see paper)

Findings

- Ave. calories per transaction falls by 6%
 - › From 247 to 232 calories per transaction
- The impact is all from food choices
 - › Beverages choices unaffected
 - › Food calories fall by 14%

Findings

- ◉ Revenue per transaction falls slightly
- ◉ Offset by an increase in transactions
- ◉ Zero net impact on Starbucks' profit
- ◉ Revenue increases by 3% for Starbucks located within 100m of Dunkin Donuts

How big is this effect?

- 2,000 calories per day
- 25% of calories from chain restaurants
- 6% reduction in calories from ALL chain restaurants
- Implies 30 calories per day reduction

Conclusion

- ◉ Calorie posting is no silver bullet
- ◉ Effects may be larger at other chains
- ◉ How information is provided is key
- ◉ Good news – major companies understand the value of developing more nutritious food