

bridging the gap

Research Informing Policies & Practices
for Healthy Youth

Availability of Nutritional Information in a National Sample of Fast Food Restaurants

Leah Rimkus, Lisa M. Powell, Zeynep Isgor, Oksana Pugach,
Dianne C. Barker, Frank J. Chaloupka

**American Public Health Association 139th Annual Meeting
Washington, D.C., November 1, 2011**

Presenter Disclosure

Leah Rimkus

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

Bridging the Gap is...

- A collaborative effort to assess the impacts of policies, programs and other environmental factors on a variety of adolescent health-related behaviors
- A Robert Wood Johnson Foundation-funded initiative which was created in 1997 with a focus on adolescent alcohol, tobacco, and other drug use and related outcomes
- Expanded to include youth eating practices, physical activity, sedentary activity, and weight outcomes
- Linked to the ongoing, NIDA-funded, *Monitoring the Future* study

Learning Objectives

- Describe the frequency of availability of nutritional information in a national sample of chain and non-chain fast food restaurants
- Explain differences in the availability of nutritional information in fast food restaurants by community demographics
- Discuss the content and readability of printed nutritional materials supplied by fast food restaurants

Background

- In observational research conducted in Washington DC, 40% of McDonald's outlets did not provide nutrition info for all standard menu items at the point of purchase.
- Survey research demonstrated that 56% of the 287 largest chain restaurants did not provide nutrition information for the majority of their standard menu items.
- Several cities, counties, and states have adopted menu labeling legislation, requiring the posting of calorie information on restaurant menus, and other provisions.
- Patient Protection and Affordable Care Act of 2010 requires restaurants with 20 or more units to post calories on menu boards and provide other nutrient information to consumers on site.

(Wootan, et al. *Prev Med* 2006; Wootan & Osborn, *Am J Prev Med* 2006)

Bridging the Gap Community Obesity Measures Study

bridging the gap

BTG - Community Obesity Measures Study

- Collection of local policy and environmental data in a national sample of communities
- Systematic observation by trained data collectors
 - Food stores
 - Fast food restaurants
 - Parks
 - Physical activity facilities
 - Street segments
- Community sample defined by the catchment areas for schools participating in the University of Michigan's *Monitoring the Future* study
- Data collected in 154 communities in spring/summer 2010

BTG-COMP Fast Food Restaurant Sample

- Fast food sampling frame developed from two commercial sources
 - Dun & Bradstreet
 - InfoUSA
- Phone screening conducted to confirm business name, location, and eligibility/classification
- Sampling frame was supplemented with fast food outlets discovered in the field
- Goals for # of field-discovered businesses were set based on sensitivity rates from a field validation study

Characteristics of Fast Food Sample (Completes and Partial Completes)

	N	%
All Restaurants	2,243	100.0
Chain	1,105	49.3
Independent	1,138	50.7
Urban	892	39.8
Suburban	1,057	47.1
Rural	294	13.1
Predominantly White	1,259	56.1
Non-White	984	43.9
Low income	632	28.2
Medium income	715	31.9
High income	896	39.9

Fast Food Observation Form

- Restaurant features/amenities
- Availability of food/beverage items
- Pricing of food/beverage items
- Marketing and signage
- Availability of nutritional information
 - Menu board
 - Food display tags
 - Posted material
 - Printed material
 - Printed menu
 - Drive-thru menu board
 - Obtained upon request

BTG-COMP FAST FOOD OBSERVATION FORM 2009 SETTING ID: _____

BUSINESS NAME: _____ STAFF ID: _____

ADDRESS: _____ START TIME: ____:____:____ END TIME: ____:____:____ MO/DA/Y: ____/____/____

IF SHARED BUILDING, OTHER BUSINESS NAME: _____ SETTING ID: _____

FINAL STATUS CODE: _____ NOTES: _____

COMPLETE 01

Business Name: _____ Setting ID: _____ Staff ID: _____

SECTION G. FOOD ITEMS

	G1. Is item available?			G2. Record Price
	NO	YES	N/A	
a. French Fries (select smallest available and specify below) <input type="checkbox"/> Small <input type="checkbox"/> Other:	0	1	8	\$
b. French Fries (select largest available and specify below) <input type="checkbox"/> Large <input type="checkbox"/> Other:	0	1	8	\$
c. Hamburger, 1/2 lb. with cheese	0	1	8	\$
d. Chicken sandwich, with roasted/grilled chicken	0	1	8	\$
e. Entree salad, with roasted/grilled chicken	0	1	8	\$
f. Fried Chicken, 1 leg/drumstick and 1 thigh	0	1	8	\$
g. Cheese Pizza, thin crust, 10-12"	0	1	8	\$
h. Taco, crunchy/shredded with ground beef	0	1	8	\$
i. Sub Sandwich, 6-inch with turkey and cheese	0	1	8	\$

SECTION H. KIDS MENU REVIEW

	NO	YES
H1. Kids' menu or kids' meal available. IF NO, SKIP TO SECTION J	0	1
H2. Kids' meal offers a healthy beverage option (i.e., low-fat milk or 100% juice). IF NO, SKIP TO H3	0	1
a. Healthy option is the default beverage	0	1
H3. Kids' meal offers a healthy side dish option (i.e., fruit, vegetable or yogurt). IF NO, SKIP TO H4	0	1
a. Healthy option is the default side dish	0	1
H4. Toppings or other child-oriented garnishes included with kids' meal	0	1

SECTION I. NUTRITION INFORMATION

	I1. Is item available at the POINT OF PURCHASE?		I2. Provides calorie info for menu items?			I3. Has statement on suggested daily calories?			I4. Has "nutrition info on request" statement?		
	NO	YES	NO ITEMS	SOME ITEMS	ALL ITEMS	NO	YES	NO	YES	NO	YES
a. Menu board	0	1	0	1	2	0	1	0	1	0	1
b. Food display tags	0	1	0	1	2	0	1	0	1	0	1
c. Posted material	0	1	0	1	2	0	1	0	1	0	1
d. Printed material	0	1	0	1	2	0	1	0	1	0	1
e. Printed menu	0	1	0	1	2	0	1	0	1	0	1

I5. Asked employee for nutrition information:
 Available at POP
 No nutrition information available
 Referred to posted material
 Referred to printed material
 Saw printed material from behind the counter
 Ran out of printed material
 Referred to website
 Does not know
 Other, explain: _____

SECTION J. RECORD FINAL RESPONSE FROM EMPLOYEE(S):

	NO	YES
a. Record final response from employee(s):	0	1

Does the restaurant have...

	NO	YES
A sidewalk present on street? # of sidewalks	0	1
1. Sidewalk lighting?	0	1
Parking on-site? # of spaces	0	1
1. Parking lot lighting?	0	1
Bicycle parking?	0	1
Bars on windows?	0	1

Are there graffiti on building and/or exterior signs?

	NO	YES
1. Virtually none	0	1
2. In a few areas	0	1
3. In some areas	0	1
4. In most areas	0	1

Number of exterior walls visible from parking lot or street. # of walls

	NO	YES
1. 0 walls	0	1
2. 1 wall	0	1
3. 2 walls	0	1
4. 3 walls	0	1
5. 4 walls	0	1

Percentage of restaurants with calorie info at point of sale

Source (% available at point of sale)	Calorie info posted (%)		
	No items	Some items	All items
Menu board (89%)	95.9	1.6	2.5
Food display tags (17%)	99.0	0.8	0.2
Printed material (33%)	92.6	1.4	5.9
Posted material (65%)	87.0	7.9	5.1
Printed menu (19%)	99.6	0.3	0.1
Drive-thru menu board (33%)	94.9	3.7	1.4

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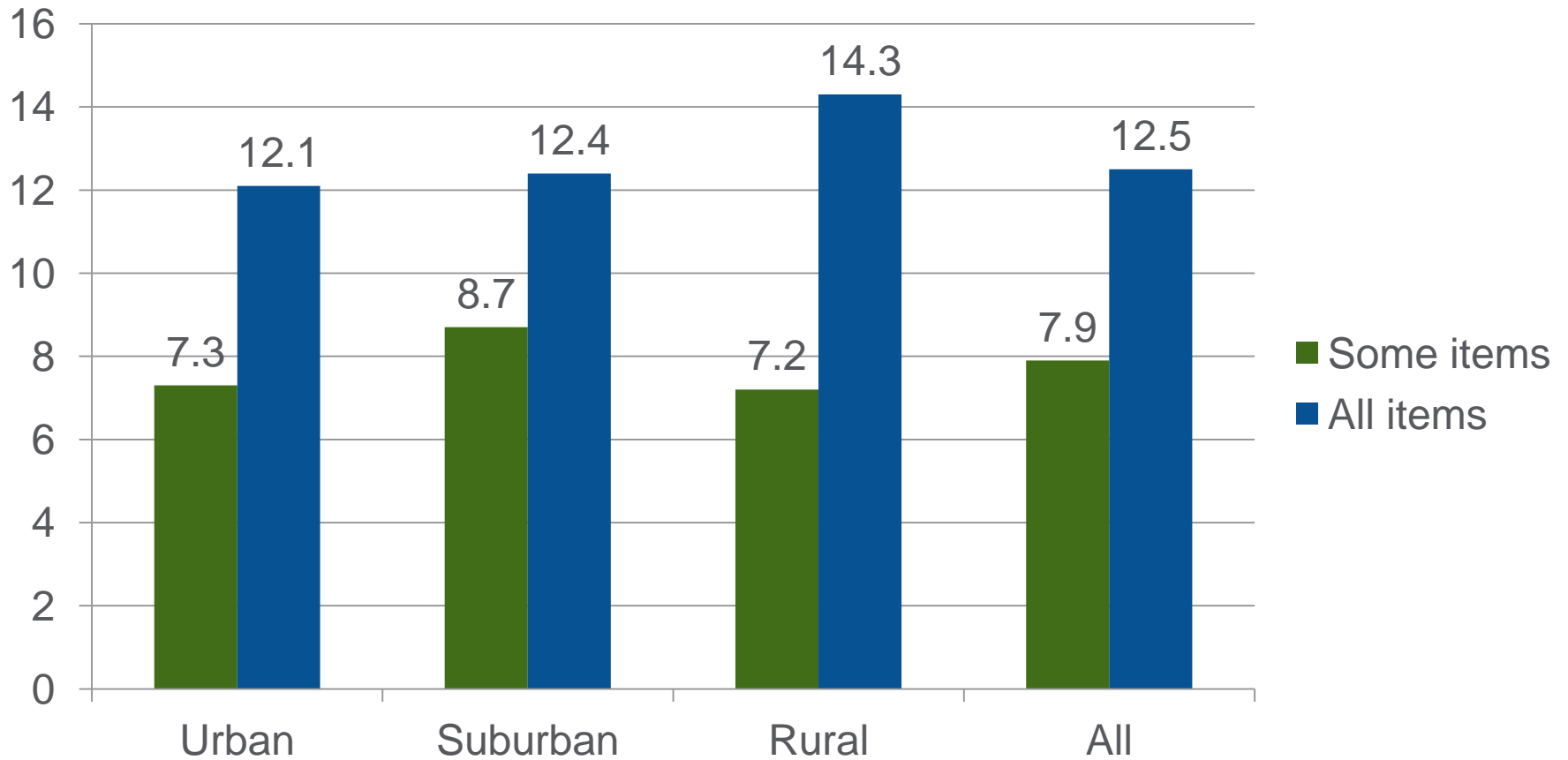
Percentage of restaurants with calorie information on any of the five sources at point of sale

Outcome	
	ALL
No calorie info	79.5
Calories for only some items	7.9
Calories for all items	12.5

Percentage of restaurants with calorie information on any of the five sources at point of sale

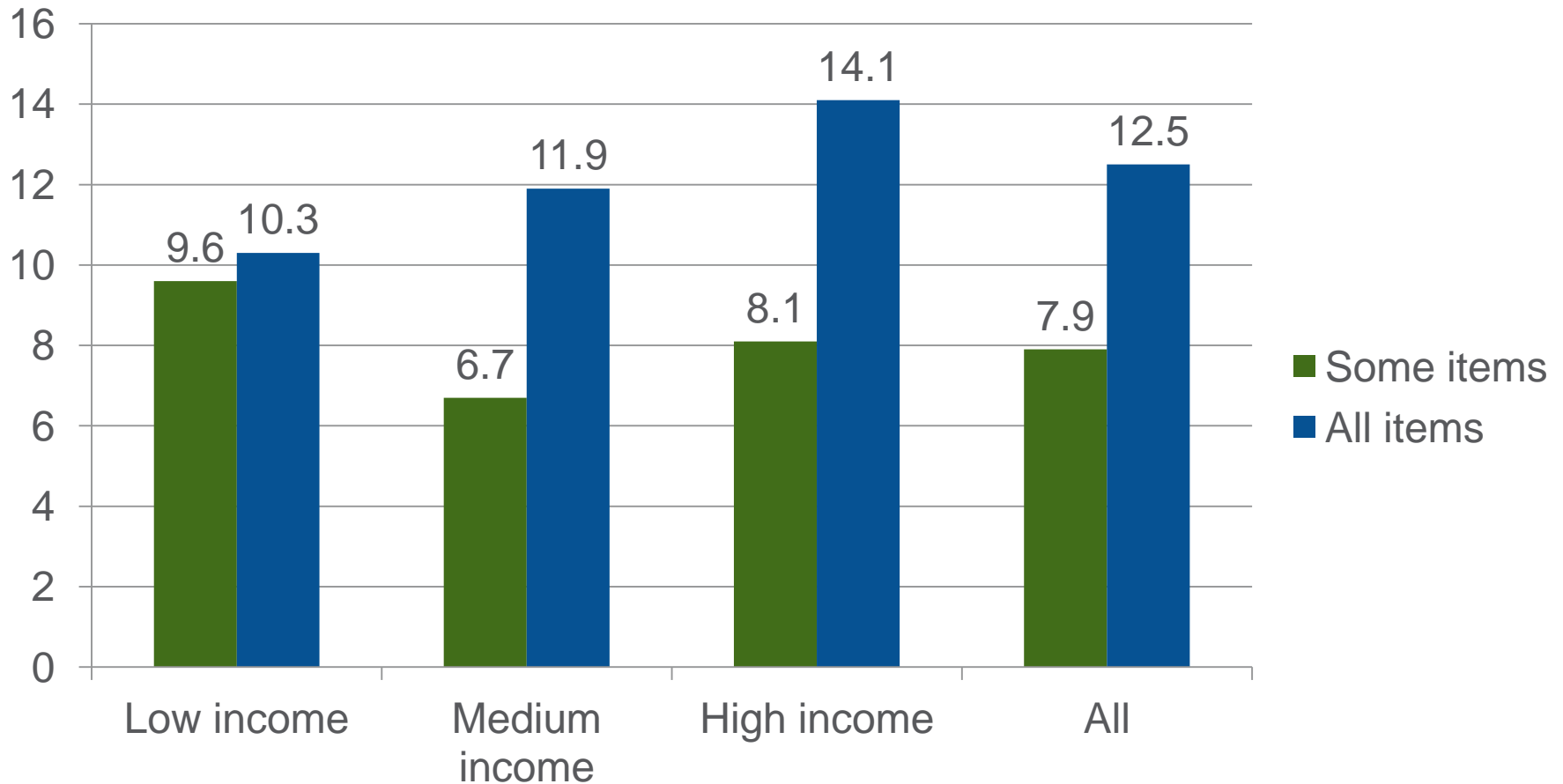
Outcome	Restaurant Type		
	ALL	Non-Chain	Chain
No calorie info	79.5	89.3	71.3
Calories for only some items	7.9	6.4	9.2
Calories for all items	12.5	4.3	19.5

Percentage of restaurants with calorie information at point of sale, by locale type

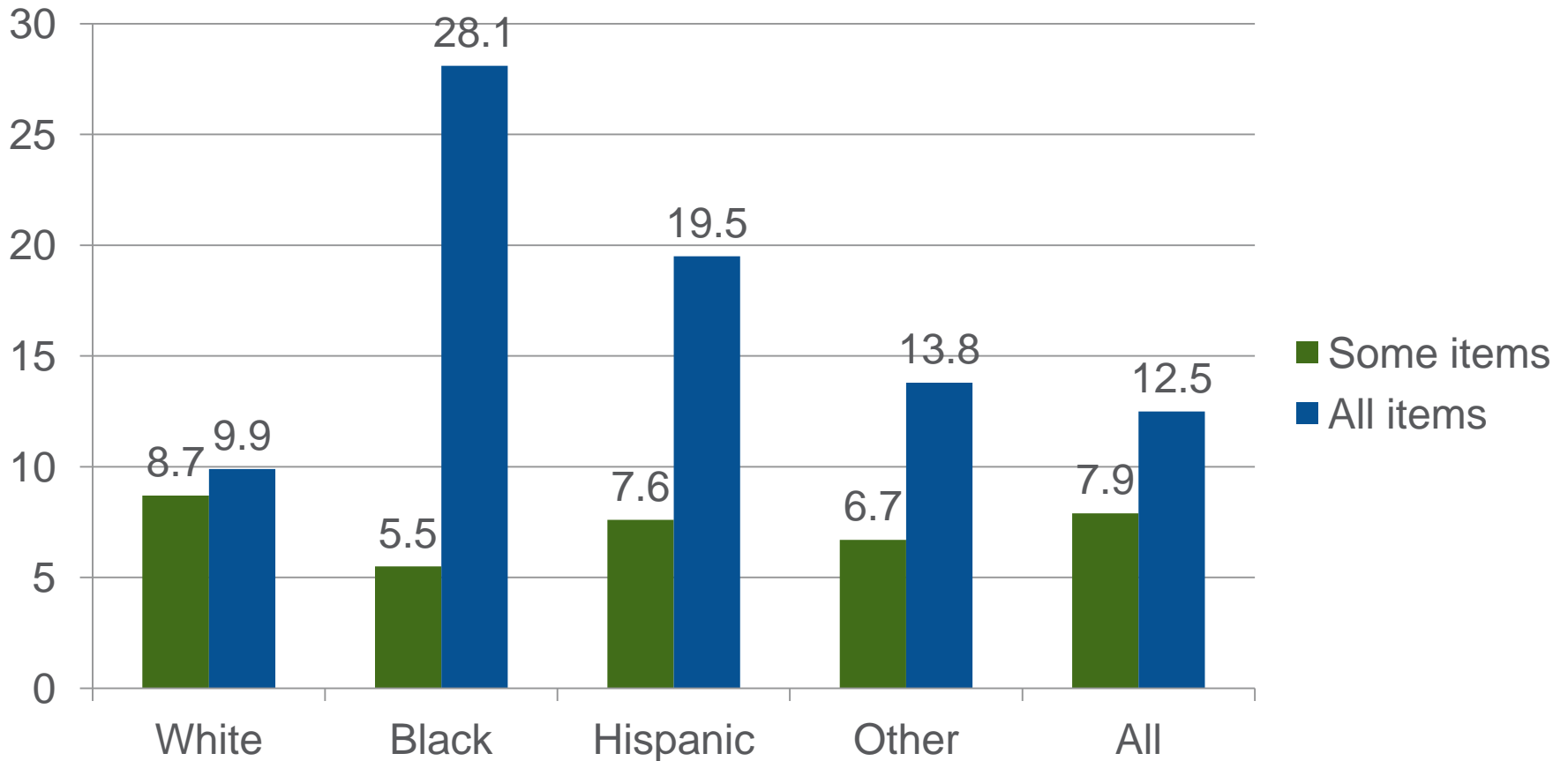


p = 0.817

Percentage of restaurants with calorie information at point of sale, by median household income



Percentage of restaurants with calorie information at point of sale, by predominant race



$p = 0.0004$

Odds of providing calorie information for all items via any source at the point of sale

	All Outlets
Chain fast food restaurant	6.14***
Predominantly White	0.40***
Middle-income	1.31
High-income	1.88*
Suburban	1.33
Rural	1.31

* $p \leq 0.10$
** $p \leq 0.05$
*** $p \leq 0.01$

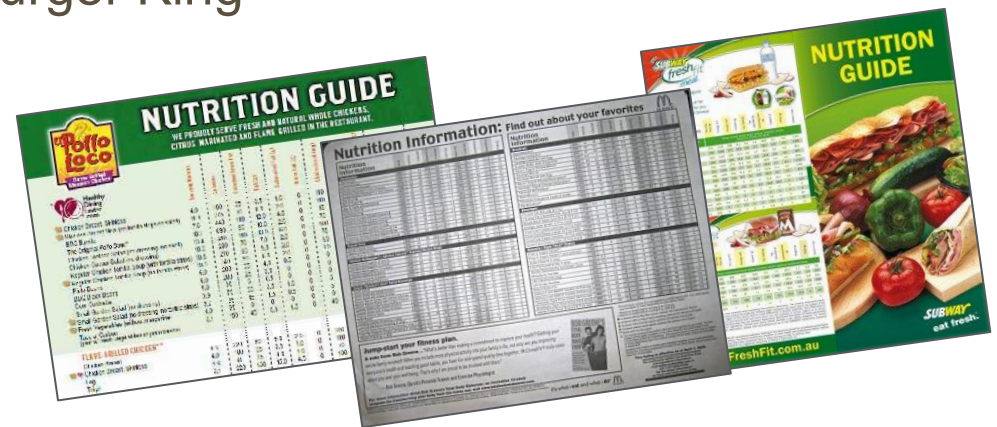
Odds of providing calorie information for all items via any source at the point of sale

	All Outlets	Policy Present	No Policy Present
Chain fast food restaurant	6.14***	12.35***	6.41***
Predominantly White	0.40***	0.30**	0.97
Middle-income	1.31	2.82	1.11
High-income	1.88*	2.66	1.03
Suburban	1.33	1.41	1.69*
Rural	1.31	0.82	1.51

*p ≤ 0.10
 **p ≤ 0.05
 ***p ≤ 0.01

Printed Nutrition Material Collection

- Printed nutritional material collected from fast food restaurants, where available
 - Readily available at the point of purchase
 - Provided or referred to after request
- Total of 736 items collected in the field
 - Materials represented over 70 fast food chains
 - 53% of items collected were from four chains -- McDonald's, Subway, Taco Bell, and Burger King



Printed Nutrition Material Coding

- Printed nutritional material coded for the following:
 - **Nutritional content** (serving size, calorie and other nutrient content, total daily calorie statement)
 - **Completeness** (nutrition info for food items & beverage items)
 - **Readability** (font size, margin size, use of color, use of bullets)
 - **Health promotion** (healthy item section/icon, nutrition reference/tips, physical activity reference/tips, MyPyramid)
- Training and informal reliability testing done with 4 coders
- Created a weighted score for each restaurant and an average score for each restaurant chain (max score = 90)

Average Scores for Printed Nutrition Materials

	N	Nutrition (max = 65)	Complete (max = 4)	Readability (max = 12)	Health (max = 9)	Score (max = 90)
All Materials	736	52.8	3.5	4.6	2.8	63.6
Brochures	384	54.6	3.5	5.4	3.6	67.2
Booklets	115	54.9	3.6	4.5	3.1	66.0
Packets	20	53.3	2.9	4.7	0.7	61.6
Flyers	56	52.1	3.3	4.9	0.1	60.3
Tray liners	138	52.6	3.9	2.0	1.5	60.0
Postcards	10	19.5	0.4	5.0	2.9	27.7
Napkins	13	10	0.0	8.8	1.5	20.3

Average Scores for Printed Nutrition Materials

	N	Nutrition (max = 65)	Complete (max = 4)	Readability (max = 12)	Health (max = 9)	Score (max = 90)
All Materials	736	52.8	3.5	4.6	2.8	63.6
KFC	41	59.6	4.0	6.0	8.8	78.4
Taco Bell	60	59.9	3.4	6.8	5.4	75.5
Jack in the Box	28	55.2	4.0	7.6	3.6	70.4
Arby's	32	60.0	4.0	5.4	0.1	69.5
Dairy Queen	24	59.2	3.8	4.6	1.6	69.5
Pizza Hut	29	59.8	4.0	3.1	2.4	69.3
McDonald's	133	55.5	4.0	2.6	1.7	63.7
Subway	146	49.7	3.4	5.2	3.1	61.4
Burger King	57	49.6	4.0	3.4	3.4	60.4
Domino's Pizza	14	47.1	2.3	4.4	1.1	54.9

Summary/Conclusions

- **12.5%** of all fast food outlets visited (and **19.5%** of chain outlets, specifically) provided calorie info for all menu items at the point of sale.
- **20.4%** of all fast food outlets visited (and **28.7%** of chain outlets, specifically) provided calorie info for at least some menu items at the point of sale.
- The most common way that calorie info was provided for all menu items was via printed material.
- Chain restaurants were much more likely to provide calorie info for all menu items, as were restaurants in non-white and higher-income communities.
- When considering existing menu labeling laws, this income effect was no longer significant. However, restaurants in communities with policies were still more likely to have calorie info at the point of sale if they were non-white.
- Printed nutrition materials from fast food chains provided adequate nutrition information, but scored low in the areas of readability and health promotion.

Next Steps

- Examine differences for each of the top 20 chains in the availability of calorie information at the point of sale, as well as the manner in which this information is provided
- Further explore differences in provision of calorie information at the point of sale when taking into account existing menu labeling laws
- Field third wave of BTG-COMP data collection in 2012 and assess trends in provision of nutrition information in fast food restaurants from 2010 to 2011 and 2012

Thanks!

Leah Rimkus

lriskus@uic.edu

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