

Background

The 2010 Federal Patient Protection and Affordable Care Act mandates that fast food/chain restaurants with over 19 outlets clearly display calorie content of all menu items. The impact of calorie menu labeling on adolescents is unclear, especially when comparing communities with significant differences in rates of overweight/obesity and access to healthy food choices.

Demographics					
	Total (n = 528)	SLA (n = 119)	ELA (n = 105)	CC (n = 196)	MB (n = 105)
Age (Mean ± SD)	15.59 ± 1.20	15.53 ± 1.26	16.01 ± 1.27	15.49 ± 1.15	15.41 ± 1.09
Gender					
Male	56.2%	52.9%	49.5%	52.8%	73.1%
Female	43.8%	47.1%	50.5%	47.2%	26.9%
Race/Ethnicity					
Black	31.0%	57.1%	0%	45.3%	5.8%
Native Am.	0.6%	0%	1.0%	0.5%	1.0%
Asian/PI	5.8%	0%	10.5%	2.6%	13.5%
Hispanic	35.6%	31.1%	84.8%	26.6%	7.7%
Caucasian	13.3%	0%	1.0%	6.2%	53.8%
Mixed Race	10.2%	1.9%	0.6%	5.4%	2.3%
Other	3.7%	3.4%	0%	4.2%	6.7%
Born outside US	5.8%	3.4%	11.8%	3.7%	6.9%

Personal spending money by neighborhood					
	Total (508)	SLA (118)	ELA (105)	CC (189)	MB (96)
Allowance	53.7%	55.5%	48.5%	50.8%	62.1%
Mean Monthly Allowance	\$105	\$114	\$94	\$115	\$85
Source of money for meal					
Money earned working	18.7%	21.0%	12.4%	21.5%	17.1%
Money given by parents	52.9%	48.7%	61.0%	50.3%	54.3%
Allowance/Gift	20.8%	24.4%	9.5%	22.6%	24.8%
Other	12.0%	10.9%	16.2%	12.3%	8.6%

Health					
	Total (513)	SLA (116)	ELA (103)	CC (191)	MB (102)
Has health condition restricting exercise	13.5%	15.3%	12.7%	11.0%	16.7%
Describe your health					
Poor	2.2%	3.4%	1.9%	1.6%	2.0%
Fair	36.6%	41.4%	51.5%	32.1%	24.5%
Good	49.1%	43.1%	40.8%	54.7%	53.9%
Excellent	12.1%	12.1%	5.8%	11.6%	19.6%

Weight assessment*		
	Male	Female
How would you describe your weight?		
Underweight	14.1% ^a	10.6% ^a
About the right weight	64.6% ^a	54.2% ^b
Slightly overweight	14.4% ^a	29.1% ^b
Overweight	5.8% ^a	6.2% ^a
Are trying to lose or gain weight		
I am trying to stay the same weight	23.0% ^a	19.9% ^a
I am not trying to do anything about my weight	28.9% ^a	29.6% ^a
Lose weight	18.6% ^a	46.0% ^b
Gain weight	28.9% ^a	4.0% ^b

*p = .001, p < .001

Methods

Venue exit surveys assessed the impact of menu labeling on 528 adolescent consumers of two fast food chain restaurants in four diverse socio-demographic Los Angeles County communities including: East Los Angeles (ELA), South Los Angeles (SLA), Culver City (CC) and Manhattan Beach (MB).

How important were the following factors in choosing where to eat today (very important/somewhat important)				
Taste	Price	Friends would be there	Commercial/Promotion	Coupons
92.4%	56.7%	63.2%	20.6%	8.4%

Calorie information noticed by community					
	Total (n = 528)	SLA (n = 119)	ELA (n = 104)	CC (n = 193)	MB (n = 104)
Noticed calorie information	56.5%	53.8%	67.3%	51.3%	58.7%
Info was confusing*	15.4%	10.9%	20.0%	15.3%	14.8%
Influenced order*	13.5%	13.6%	14.3%	9.1%	19.7%

* Of those who noticed the calorie information



Calorie Knowledge – How many calories do you think you should eat per day?					
	Total (422)	SLA (88)	ELA (87)	CC (158)	MB (89)
Mean Calories	1848.37	1631.67	1476.32	1406.87	3210.11
Don't Know	19.5%	26.1%	17.1%	19.0%	15.2%

Calorie information noticed by gender and venue				
	Male (289)	Female (227)	McDonalds (339)	Taco Bell (166)
Noticed calorie information	56.3%	56.6%	57.7%	53.6%
Info was confusing*	13.4%	17.8%	16.0%	13.8%
Influenced order*	12.3%	15.0%	16.1%	7.1%
Ordered lower calorie food/bev**	15 (75.0%)	12 (57.1%)	22 (62.9%)	5 (83.3%)
Other change**	3 (15.0%)	3 (14.3%)	6 (17.1%)	0 (0%)

* Of those who noticed the calorie information ** Of those whose order was influenced

Key Survey Findings

The majority of respondents ate fast food ≤ once a week (SLA - 86%, ELA - 78%, CC - 89% and MB - 87%) with over half considering the purchase a snack between meals. Many (< 51%) noticed the menu labeling with over 15% finding the information confusing. Noticing information was similar among gender and by venue, however, females were more likely to be confused by the menu labeling and have their order influenced. Overall, only 14% of those who noticed the calorie information were influenced enough to make order changes. Though slight variance by community, nearly 20% of respondents stated they did not know how many calories they should eat (range: 200-16,000; mean: 1,848). The mean caloric intake was not significantly different for those who regarded their food purchased a snack (522.7 ± 305.7) vs. a meal (762.8 ± 332.9). When asked about weight, 20% of males and 35% of females reported being slightly overweight or over weight with a significant amount of females trying to lose weight.

How often do you eat fast food per week? Breakdown by neighborhood*					
	Total (524)	SLA (118)	ELA (105)	CC (189)	MB (96)
≥3 times per month	9.8%	10.9%	16.2%	7.2%	7.6%
Once a week	18.5%	16.0%	22.9%	19.0%	16.2%
Twice a week	25.8%	27.7%	22.9%	27.2%	23.8%
3-6 times a week	38.1%	37.9%	31.4%	39.5%	42.8%
Daily	2.9%	4.2%	1.0%	2.6%	3.8%

The meal you just ate represents:					
	Total (522)	SLA (119)	ELA (105)	CC (193)	MB (95)
Only Meal for the Day	4.0%	5.0%	5.7%	3.1%	2.9%
Snack in between meals	57.3%	56.3%	59.0%	53.9%	63.1%
One of several meals	38.7%	38.7%	35.2%	43.0%	34.0%

Total Sum of Calories by Location (Descriptives)					
	Total (225)	SLA (21)	ELA (82)	CC (65)	MB (57)
Only Meal for the Day	863.3 ± 363.6	440 ± 0	1078 ± 252.3	510 ± 0	715 ± 473.8
Snack in between meals	522.7 ± 305.7	547.8 ± 247.3	537.4 ± 324.3	543.2 ± 288.8	473.8 ± 318.6
One of several meals	762.8 ± 332.9	824.1 ± 366	776.2 ± 373	743.7 ± 303.3	729.5 ± 299.5

Conclusions

Calorie posting does not appear to significantly impact purchasing behavior. Limited knowledge of appropriate calorie intake likely impacts the meaning of posted calories. More calorie education and clearer posting is needed to adequately inform consumers.

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