



MICHIGAN BRFS SURVEILLANCE BRIEF

Michigan BRFS

A NEWSLETTER FROM THE CHRONIC DISEASE EPIDEMIOLOGY SECTION, MDCH

Prevalence of Fast Food Consumption and Related Behaviors

Background

Fast food consumption has been associated with poor diet quality, with higher intakes of calories, fat, and saturated fat.¹ Fast food consumption has also been associated with higher prevalence of obesity,² higher mean body mass index (BMI),³ weight gain,⁴ and less successful weight loss maintenance.⁵

The purpose of this brief is to describe the prevalence of fast food consumption and related behaviors among Michigan adults and to investigate the relationship between regular fast food consumption and obesity.

Methods

A set of 12 questions on fast food consumption was developed by Michigan BRFS staff and included on the 2005 Michigan Behavioral Risk Factor Survey (n = 5,897). Data were analyzed using SAS-Callable SUDAAN®.

BMI was calculated from self-reported body weight and height, and obesity was defined as BMI ≥ 30 . In addition to univariate and bivariate prevalence estimates and 95% confidence intervals, logistic regressions were generated with obesity (BMI) as the dependent variable, regular fast-food consumption or related behaviors as the independent variable, and age, sex, race-ethnicity, education, household income, and adequate physical activity as confounding variables.

Results

Nearly 15% of Michigan adults (14.6%) were estimated to never go to fast food restaurants, while 10.5% on average went less than once a month, 28.3% less than once a week, 21.6% one to less than two times/week, 12.3% two to less than three times/week, 6.0% three to less than four times/week, and 6.6% four or more times/week. Nearly one-in-four (24.9%) regularly went to a fast food restaurant, defined as two or more times/week. This prevalence of regular fast food consumption decreased with age from 36.5% of 18-24 year-olds to 11.3% of those aged 65 and older, was higher among males compared with females ($p < .0001$), and was higher among blacks compared with whites ($p = .02$). Although the prevalence estimate for Hispanics was the highest among race-ethnic groups, the difference between whites and Hispanics was not statistically significant ($p = .06$). There were no differences by education, nor was there a difference in the prevalence of regular fast food consumption between those with and without children in their household (29.2% vs. 30.0%) among those aged 18-54 years.

Figure 1. Frequency of Fast Food Consumption Among Michigan Adults, 2005

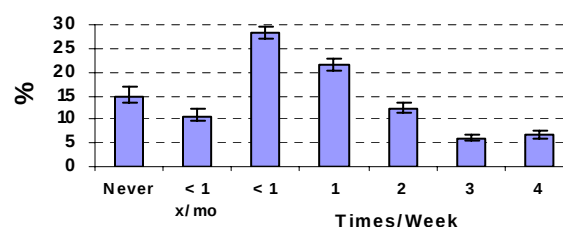


Table. Prevalence of Regular Fast Food Consumption* Among Michigan Adults, 2005

Demographics	%	95% CI
Total	24.9	23.5-26.4
18-24	36.5	30.7-42.8
25-34	31.8	27.8-36.1
35-44	29.1	25.9-32.4
45-54	23.8	21.2-26.6
55-64	18.2	15.8-20.8
65+	11.3	9.7-13.2
Males	30.4	28.0-32.8
Females	20.0	18.4-21.7
White, non-Hispanic	23.9	22.4-25.5
Black, non-Hispanic	30.3	25.4-35.8
Other, non-Hispanic	22.3	16.3-29.7
Hispanic	34.4	24.4-45.9
< High school	26.9	21.8-32.8
HS graduate	24.4	21.9-27.0
Some college	26.5	23.9-29.3
College graduate	23.3	21.0-25.8

* ≥ 2 times/week

MiBRFS News: 2008 in the field

- The 2008 MiBRFS questionnaire includes 3 splits of state-added questions on topics including: binge drinking, child asthma, care giving, diabetes management, access to oral health care, tobacco-related issues, sexual and intimate partner violence, fruits and vegetables, physical

activity, newborn screening, dementia, and cancer risk.

- In addition to the 2008 MiBRFS based on landline telephones, we are also conducting a pilot study using a sample of cell phone numbers to conduct the survey.
- Preliminary 2007 estimates will be available by June 2008 on our website at www.michigan.gov/brfs.

Fast Food Consumption (continued)

The main reasons reported for choosing a fast food restaurant were speed and convenience (62.7%), taste of the food (17.1%), sociability (8.1%), cost (6.1%), convenient location (3.3%), or something else (2.6%). The most frequently consumed fast food meal was lunch (47.5%), followed by dinner (36.2%), breakfast (6.8%), snacks or beverages (5.7%), and combinations thereof (3.7%). Nearly half (47.8%) reported they usually go to fast food restaurants with family, 11.4% with friends, 7.0% with co-workers, and 31.4% by themselves. Among those who usually go with family, the highest proportion reported that they usually go for dinner (48.9%); statistically similar proportions who usually go with friends reported the most frequent meal was lunch (44.0%) or dinner (37.0%). The majority of those who reported most often going with coworkers or by themselves usually went to fast food restaurants for lunch (82.1%, 56.5%, respectively).

More than six-in-ten (63.9%) reported that they usually order food to take out when they go to a fast food restaurant, similar proportions of whom eat their take-out at home (45.0%) and in a car (41.8%), while 11.6% eat their take-out at work. Over four-in-ten (43.8%) reported that they usually order a meal package, and 10.7% usually order "supersize" options when available.

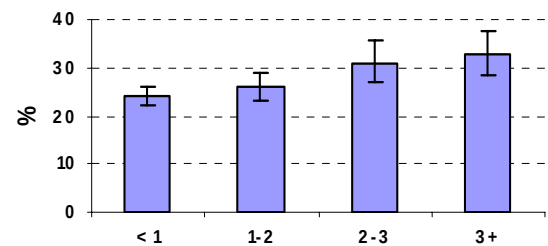
Most (68.9%) reported that information on nutritional contents of food items was available at the fast food restaurants they usually go to, while 10.9% said it was not available and 20.2% did not know. Of those who were aware of its availability, 68.3% had ever read any of it, and of those who had, about half (48.5%) reported that they used this nutritional information when they ordered at least half of the time.

The prevalence of obesity (BMI ≥ 30) increased with increasing frequency of fast food consumption, from 24.0% of those eating fast food less than once a week to 32.9% of those eating it three or more times/week (Figure 2). After adjusting for demographic characteristics and physical activity in a multiple logistic regression model, the odds of being obese were about 60% greater for those eating fast food two or more times/week compared with those consuming it less frequently (AOR = 1.58, 95% CI = 1.31-1.91). In addition, obesity was associated with ordering supersize options among frequent fast food consumers (AOR = 1.78, 95% CI = 1.09-2.89) but not among those eating fast food less than twice a week.

Conclusions

Regular fast food consumption is prevalent among Michigan adults and more so among younger adults, males, and African Americans. Fast food consumption and regularly ordering supersize options are associated with obesity. Our results may be helpful to those developing nutrition programming and education in Michigan.

Figure 2. Prevalence of Obesity by Frequency of Fast Food Consumption (times/wk)



References

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- 4French SA, Harnack L, Jeffery RW. Fast food restaurant use among women in the Pound of Prevention study: dietary, behavioral and demographic correlates. *Int J Obes Relat Metab Disord.* 2000;24:1353-9.
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The Michigan Behavioral Risk Factor Surveillance System (MiBRFSS)

The MiBRFSS comprises annual, statewide telephone surveys of Michigan adults aged 18 years and older and is part of the national BRFSS coordinated by the CDC. The annual Michigan Behavioral Risk Factor Surveys (MiBRFS) follow the CDC BRFSS protocol and use the standardized English core questionnaire that focuses on various behaviors, medical conditions, and preventive health care practices related to the leading causes of mortality, morbidity, and disability. Interviews are conducted across each calendar year. Data are weighted to adjust for the probabilities of selection and a poststratification weighting factor that adjusts for the sex, age, and race distribution of the adult Michigan population. All analyses are performed using SAS-callable SUDAAN® to account for the complex sampling design.

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