Perspectives in Practice

Why Eat at Fast-Food Restaurants: Reported Reasons among Frequent Consumers

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ABSTRACT

A convenience sample of adolescents and adults who regularly eat at fast-food restaurants were recruited to participate in an experimental trial to examine the effect of nutrition labeling on meal choices. As part of this study, participants were asked to indicate how strongly they agreed or disagreed with 11 statements to assess reasons for eating at fast-food restaurants. Logistic regression was conducted to examine whether responses differed by demographic factors. The most frequently reported reasons for eating at fast-food restaurants were: fast food is quick (92%), restaurants are easy to get to (80%), and food tastes good (69%). The least frequently reported reasons were: eating fast food is a way of socializing with family and friends (33%), restaurants have nutritious foods to offer (21%), and restaurants are fun and entertaining (12%). Some differences were found with respect to the demographic factors examined. It appears that in order to reduce fast-food consumption, food and nutrition professionals need to identify alternative quick and convenient food sources. As motivation for eating at fast-food restaurants appears to differ somewhat by age, sex, education, employment status, and household size, tailored interventions could be considered.

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During the past 20 years, the prevalence of overweight and obesity in the US population has increased (1), raising concern about the associated adverse health outcomes and health care costs (2-6). The rise in prevalence is believed to be attributable, in part, to changes in eating habits. National dietary survey (7) and food disappearance (8) data indicate that the energy intake of the US population has risen during the past decades, which may be related to the trend of eating more meals and snacks away from home (8,9). The proportion of total food expenditures spent on food-away-from-home increased from 34% in 1972 to 49% in 2006 (10,11). The proportion of these expenditures at fast-food restaurants alone has risen from 21% to 38% during this same time period, with an estimated one in four Americans currently visiting a fast-food restaurant each day (12,13).

Foods available at restaurants and other away-from-home eating locations tend to be higher in calories and fat compared to foods from home (10,14). Results from both cross-sectional and prospective studies indicate a positive association between meals eaten away-from-home and energy intake (15-18). Frequency of fast-food restaurant use also has been found to be associated with increased body weight in two prospective studies of adults (15,19). Thus, public health strategies to either reduce consumption of fast food or improve food choices at fast-food restaurants would likely be helpful.

A number of studies have examined the demographic characteristics of those who eat at fast-food restaurants (15,16,20-27). Results from these studies indicate that those who are younger (15,20-26), employed (15,16,22,26) and living in larger households (21) are more likely to report consuming fast food. Results for sex, body mass index (BMI; calculated as kg/m^2), education level, and race/ethnicity are equivocal. Some studies have shown men (16,21,24,25), those with a higher BMI (15,26), those with less education (21,23), and non-whites (15,16,24,27) more likely to consume fast food, whereas others have found no association with sex (23,26,27), BMI (22,23), education level (15,22,25,26), or race/ethnicity (23). Disparate results have also been found with respect to income. Some have found more frequent consumption among those with lower incomes (15,22,24), whereas others have found more frequent consumption among those with higher incomes (21,25).

While identifying demographic characteristics associated with frequent fast-food consumers is helpful in determining the target audience of potential interventions to reduce or modify consumption, examining the reasons for frequenting these restaurants may be useful in designing effective intervention strategies. To our knowledge, no previous studies have examined the reasons people cite for frequenting fast-food restaurants. Thus, as part of an experimental trial involving adolescents and adults who eat regularly at fast-food restaurants, we

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asked participants a series of questions to examine reasons they eat at fast-food restaurants. In addition, we sought to determine whether these reasons differ by demographic factors such as age, sex, and education level.

METHODS

Data for this study were collected as part of an experimental trial to evaluate whether the addition of calorie information to a fast-food restaurant menu would influence food choices, and to evaluate whether the elimination of value pricing (pricing larger-sized food items at a lower price per ounce than smaller-sized food items) would lead to selection of a lower-calorie meal. Participation involved purchasing a dinner meal from one of four randomly assigned fast-food restaurant menus. These menus varied with respect to whether calorie information was provided for menu items and whether value pricing was in place for foods with more than one portion size option.

Sample

Participants were recruited from several urban and suburban communities in the Minneapolis/St Paul, MN metropolitan area using advertisements placed in community and high school newspapers, and fliers posted in local shops and community centers. A $25 discount store gift card was offered as an incentive.

Those who called the recruitment phone number provided in study advertisements were screened for the following eligibility criteria: age 16 years or older; eat at fast-food restaurants at least once a week; and able to read and speak English. Non-English speakers were excluded because funds were not available to translate materials and hire bilingual interviewers. Those who met eligibility criteria were told participation would involve completing a 2-hour evening study session at which they would be required to purchase a fast-food restaurant meal and complete several questionnaires. Participants were blinded to the true intent of the study, with the study purpose described as learning more about fast-food meal choices. Those who indicated they were interested in participating were assigned to a study session. The University of Minnesota Institutional Review Board approved the study procedures.

A total of 605 participants enrolled in the study. Eleven respondents reported knowing the true intent of the study prior to participation, and thus were excluded from analyses.

Measures

Study sessions were held between October 2005 and April 2006. Upon arrival at a study session, participants were consented, administered a brief questionnaire, and asked to order their dinner from a randomized study menu. After ordering, participants were seated in a dining area and asked to complete a second questionnaire. After meals were delivered and consumed, participants were escorted to an exit interview area, where a final questionnaire was administered by trained interviewers.

The second questionnaire, which was self-administered, included 11 questions to assess reasons for eating at fast-food restaurants. Responses to these questions are the focus of the study described here. These questions, which were developed by the study investigators, asked participants to indicate whether they strongly agreed, agreed, neither agreed nor disagreed, disagreed, or strongly disagreed with each of the following statements regarding the reasons they eat at fast-food restaurants: they are easy to get to; they are quick; they are inexpensive; they are fun and entertaining; I like the taste of fast food; it is a way of socializing with friends or family; I don't like to prepare foods myself; I'm too busy to cook; they have many nutritious things to offer; it is a way to "treat" myself; and my family and/or friends like them. The study investigators identified these reasons by considering current quick service marketing strategies that are likely shaped by consumer needs and influence consumer attitudes and perceptions.

Demographic information collected included race/ethnicity (which was collapsed into a dichotomous variable, white vs nonwhite, because of the small number of nonwhite participants), age, sex, education completed (highest parental education level was queried for adolescents aged 16 to 19 years), work status, and number of individuals living in their home. Self-reported height and weight information were used to calculate BMI.

Analysis

All analyses were conducted using SAS statistical software (version 9.1.2, 2004, SAS Institute, Cary, NC). Mean and frequencies were calculated to describe the survey sample. Logistic regression was conducted to examine whether reasons for eating at fast-food restaurants differed by: age, sex, race/ethnicity, education level, work status, household size, body weight, and frequency of eating fast food. For all analyses, responses to the reasons for eating at fast-food restaurant questions were collapsed into two categories: agreed, which included the responses of agreed and strongly agreed, and all other responses. Because of the large number of statistical comparisons conducted, an approximate Bonferroni correction was used so that results were considered statistically significant where $P<0.001$.

RESULTS

Demographics characteristics of the participants are displayed in Table 1. More females (59.4%) than males (40.6%) participated. Approximately three fourths of participants were non-Hispanic white. Most reported eating at fast-food restaurants three or more times per week.

As shown in Table 2, the percent agreeing to each of the 11 stated reasons for eating at fast-food restaurants varied. The reasons with which participants agreed most frequently were that fast-food restaurants are quick (92%), easy to get to (80%), and serve good-tasting food (69%). Participants agreed least frequently with the reasons: eating fast food is a way of socializing with family and friends (33%), they have nutritious foods to offer (21%), and they are fun and entertaining (12%).

Overall, few significant differences in the proportion who reported various reasons for eating at fast-food restaurants were found across the demographic factors ex-

Table 1. Demographic characteristics of adolescent and adult participants from the Fast Food Meals Study (n=594)

	n	%
Age (y)		
16-24	138	23.2
25-44	183	30.8
45-54	130	21.9
≥55	143	24.1
Sex		
Male	241	40.6
Female	353	59.4
Race/ethnicity		
Non-Hispanic white	454	76.4
Black	65	10.9
Native American	28	4.7
Hispanic	15	2.5
Asian/Pacific Islander	11	1.9
Other	21	3.5
Education level[a]		
≤High school graduate	150	25.3
Some college/associate's degree	230	38.8
≥Bachelor's degree	213	35.9
Work status		
Full-time	206	34.7
Part-time	136	22.9
Not working	252	42.4
Number in household		
1	127	21.5
2	177	30.0
3-4	182	30.8
5+	105	17.8
Body weight[b]		
Normal weight	249	42.6
Overweight	163	27.9
Obese	173	29.6
Fast-food frequency		
≤2 times per week	198	33.3
3 times per week	150	25.3
4 times per week	119	20.0
5+ times per week	127	21.4

[a]For participants 16 to 19 years of age, the reported education level is that of their parent with the highest degree or level of education.
[b]For those 16 to 19 years of age: Centers for Disease Control and Prevention growth charts were used to calculate percentiles for sex and age. In this table, those <85th percentile were classified as normal weight; 85th-94th percentile were classified as overweight; and ≥95th percentile were classified as obese; for those ≥20 years of age: body mass index <25 was classified as normal weight; 25-29.9 was classified as overweight; and ≥30 was classified as obese.

amined (Table 3). After adjusting for all other demographic variables assessed, no significant differences were found between white and nonwhites. Likewise, no significant differences were found across BMI strata. However, differences among subgroups were found for other demographic variables. When compared to the referent group aged 55 years and older, those aged 16 to 24 years were less likely to agree that they eat at fast-food restaurants because they have many nutritious offerings ($P=0.001$), but were more likely to agree that they eat fast food because family and/or friends like it ($P=0.0005$).

Table 2. Percentage of adolescent and adult participants from the Fast Food Meals Study who agree with 11 stated reasons for eating at fast-food restaurants (n=594)

Reasons for eating at fast-food restaurants	% Who strongly agree/agree	% Who strongly disagree/disagree, or indifferent
They're quick	92.3	7.8
They're easy to get to	80.1	19.9
I like the taste of fast food	69.2	30.8
They're inexpensive	63.6	36.4
I'm too busy to cook	53.2	47.3
It's a "treat" for myself	50.1	49.9
I don't like to prepare foods myself	44.3	55.7
My friends/family like them	41.8	58.3
It is a way of socializing with friends and family	33.1	67.0
They have many nutritious foods to offer	20.6	79.4
They're fun and entertaining	11.7	88.3

Compared to men, women were significantly more likely to agree that they eat fast food because family and/or friends like it ($P=0.0005$). Those with a Bachelor's degree or higher level of education were more likely to agree that they eat fast food because they are too busy to cook food compared to those with less education ($P=0.004$). Those not working were more likely to agree that they eat at fast-food restaurants because they are fun and entertaining, as compared to those working full-time ($P=0.001$). Those not working were also significantly more likely to agree that they eat at fast-food restaurants as a way of socializing with friends or family ($P=0.0002$) and because family and/or friends like eating at them ($P=0.0002$). Interestingly, those working part-time were more likely than those not working to agree that they eat at fast-food restaurants as a way of socializing ($P=0.003$) and because others like eating there ($P=0.002$). Compared to single-person households, those with five or more people were significantly more likely to agree that they eat at fast-food restaurants because friends and/or family like eating at them ($P<0.0001$). Compared to those who reported eating fast food less than or equal to two times per week, those who reported eating fast food five or more times per week were more likely to agree that they eat at fast-food restaurants because they are easy to get to ($P=0.002$) and significantly more likely to agree that they eat at fast-food restaurants because they are too busy to cook ($P=0.0002$).

DISCUSSION

Results suggest that adolescents and adults who eat regularly at fast-food restaurants do so because they are

Table 3. Percentage of adolescent and adult participants from the Fast Food Meals Study who agree with 11 stated reasons for eating at fast-food restaurants by demographic characteristics (n=594)

	Easy to get to	Quick	Inexpensive	Fun and entertaining	Like taste of food	Social activity	Don't like to cook	Too busy to cook	Nutritious offerings	Treat to self	Family/ friends like
	← % (n) →										
Age (y)											
16-24	79.7 (110)	92.0 (127)	61.6 (85)	11.0 (15)	73.2 (101)	50.0 (69)	44.2 (61)	40.6 (56)	8.7 (12)**	40.6 (56)	34.8 (48)*
25-44	80.9 (148)	94.0 (172)	65.0 (119)	13.7 (25)	74.3 (136)	27.5 (50)	42.1 (77)	63.9 (117)	22.1 (40)	55.5 (101)	50.3 (92)
45-54	76.2 (99)	93.1 (121)	64.6 (84)	8.5 (11)	62.3 (81)	29.2 (38)	46.2 (60)	58.5 (76)	19.2 (25)	50.8 (66)	45.4 (59)
≥55[a]	83.2 (119)	89.5 (128)	62.7 (89)	12.7 (18)	65.0 (93)	27.3 (38)	45.5 (65)	46.9 (67)	31.5 (45)	51.8 (74)	34.3 (49)
Sex											
Male	76.8 (185)	89.6 (216)	61.4 (148)	12.1 (29)	68.9 (166)	32.9 (79)	44.0 (106)	51.0 (123)	20.8 (50)	42.1 (101)	33.6 (81)*
Female[a]	82.4 (291)	94.1 (332)	65.1 (229)	11.3 (40)	69.4 (245)	33.1 (117)	44.5 (157)	54.7 (193)	20.5 (72)	55.5 (196)	47.3 (167)
Race/ethnicity											
White	82.6 (375)	92.5 (420)	64.9 (294)	10.2 (46)	69.6 (316)	31.1 (141)	45.4 (206)	53.3 (242)	20.3 (92)	48.5 (220)	41.2 (187)
Non-white[a]	72.1 (101)	91.4 (128)	59.3 (83)	16.6 (23)	67.9 (95)	39.3 (55)	40.7 (57)	52.9 (74)	21.7 (30)	55.4 (77)	43.6 (61)
Education level[b]											
≤High school graduate	74.0 (111)	89.3 (134)	58.4 (87)	18.2 (27)	74.0 (111)	40.7 (61)	44.7 (67)	44.0 (66)	27.3 (41)	58.4 (87)	45.3 (68)
Some college/assoc. degree	80.0 (184)	93.0 (214)	61.7 (142)	9.1 (21)	68.7 (158)	31.0 (71)	41.3 (95)	56.5 (130)	19.2 (44)	49.1 (113)	42.2 (97)
≥Bachelor's degree[a]	84.5 (180)	93.4 (199)	69.0 (147)	9.9 (21)	66.2 (141)	30.1 (64)	47.4 (101)	56.3 (120)	17.5 (37)	45.5 (97)	39.0 (83)
Work status											
Full-time	83.5 (172)	94.2 (194)	61.2 (126)	5.4 (11)**	64.6 (133)	20.0 (41)*	45.2 (93)	66.5 (137)	19.5 (40)	43.7 (90)	35.0 (72)*
Part-time	77.2 (105)	93.4 (127)	64.7 (88)	14.7 (20)	74.3 (101)	43.4 (59)**	39.7 (54)	47.8 (65)	15.6 (21)	48.9 (66)	51.5 (70)**
Not working[a]	79.0 (199)	90.1 (227)	64.9 (163)	15.1 (38)	70.2 (177)	38.1 (96)	46.0 (116)	45.2 (114)	24.2 (61)	55.6 (141)	42.1 (106)
Number in household											
1	80.3 (102)	90.6 (115)	70.1 (89)	10.2 (13)	64.6 (82)	24.4 (31)	47.2 (60)	55.9 (71)	30.2 (38)	55.9 (71)	29.1 (37)*
2	81.9 (145)	93.2 (165)	63.8 (113)	13.6 (24)	67.2 (119)	26.6 (47)	45.8 (81)	52.0 (92)	20.3 (36)	47.5 (84)	39.6 (70)
3-4	80.2 (146)	90.1 (164)	60.1 (111)	10.5 (19)	72.0 (131)	37.0 (67)	44.0 (80)	52.2 (95)	16.0 (29)	54.1 (98)	47.3 (86)
5+[a]	76.2 (80)	96.2 (101)	58.7 (61)	11.5 (12)	72.3 (76)	48.6 (51)	40.0 (42)	54.3 (57)	17.1 (18)	40.0 (42)	52.4 (55)
Body weight[c]											
Normal	82.3 (205)	91.6 (228)	67.3 (167)	12.1 (30)	67.1 (167)	69.8 (99)	43.0 (107)	51.8 (129)	16.9 (42)	51.2 (127)	40.2 (100)
Overweight	71.8 (117)	93.3 (152)	58.3 (95)	9.3 (15)	71.2 (116)	22.8 (37)	42.3 (69)	55.2 (90)	24.1 (39)	47.9 (78)	41.1 (67)
Obese[a]	85.0 (147)	91.9 (159)	63.0 (109)	13.9 (24)	70.5 (122)	33.5 (58)	49.1 (85)	53.8 (93)	23.8 (41)	50.9 (88)	45.7 (79)
Fast-food frequency											
≤2 times per week	75.8 (150)**	91.9 (182)	66.0 (130)	10.2 (20)	64.1 (127)	33.8 (67)	40.4 (80)	43.9 (87)*	17.8 (35)	57.6 (114)	39.4 (78)
3 times per week	80.7 (121)	92.0 (138)	61.3 (92)	8.7 (13)	69.3 (104)	30.0 (45)	38.0 (57)	52.7 (79)	19.5 (29)	47.3 (71)	42.7 (64)
4 times per week	84.0 (100)	92.4 (110)	62.2 (74)	10.9 (13)	70.6 (84)	30.3 (36)	42.9 (51)	57.1 (68)	19.3 (23)	45.4 (54)	38.7 (46)
≥5 times per week[a]	82.7 (105)	92.9 (118)	63.8 (81)	18.1 (23)	75.6 (96)	38.1 (48)	59.1 (75)	64.6 (82)	27.6 (35)	46.0 (58)	47.2 (60)

[a]Referent group for multivariate logistic regression analyses.
[b]For those 16 to 19 years of age, the reported education level is that of their parent with the highest degree or level of education.
[c]For those 16 to 19 years of age: Centers for Disease Control and Prevention growth charts were used to calculate percentiles for sex and age. In this table, those <85th percentile were classified as normal weight; 85-94th percentile were classified as overweight; and ≥95th percentile were classified as obese; for those ≥20 years of age: body mass index <25 was classified as normal weight; 25-29.9 was classified as overweight; and ≥30 was classified as obese.
*Significantly different than referent group ($P<0.001$) in multivariate logistic regression analysis in which age, sex, race/ethnicity, education level, work status, number in household, body weight, and fast-food frequency were adjusted for.
**Marginally significantly different than referent group ($P<0.005$) in multivariate logistic regression analysis in which age, sex, race/ethnicity, education level, work status, number in household, body weight, and fast-food frequency were adjusted for.

quick and convenient. Taste and the inexpensive price of the food appear to be other common reasons. Thus, interventions targeted at reducing fast-food meal frequency may need to focus on quick and accessible alternatives.

Reasons people frequent fast-food restaurants appear to vary somewhat, depending on age, sex, education, employment status, household size, and frequency of eating at fast-food restaurants. These findings, together with those from other studies that examined fast-food restaurant frequency by demographic factors (15,16,20-27), suggest that interventions to reduce fast-food meal consumption may need to be targeted by market segment. For example, along with eating at fast-food restaurants because they are quick and easy to get to, a notable proportion of adolescents and young adults reported eating at fast-food restaurants as a way of socializing with friends and family. Consequently, interventions targeted at adolescents and young adults, a group that eats at fast-food restaurants more frequently than other age groups (15,20-26), may need to encourage alternative socializing avenues.

Several limitations of this study should be noted. First, the reasons for eating fast food were assessed through 11 closed-ended questions developed by the study investigators. The validity and reliability of these questions have not been evaluated and it is possible that these questions do not encompass all of the major reasons people choose to eat at fast-food restaurants. Another weakness of the study is that we were unable to assess reasons for eating at fast-food restaurants among adolescents because a limited number of 16- to 19-year-olds participated in the study. Rather, we examined reasons for use among those aged 16 to 24 years. It is possible that adolescents' reasons for eating at fast-food restaurants differ from those of young adults. Also, the representativeness of the study sample and the ability to generalize study findings are limited because participants were a convenience sample

of English-speaking individuals aged 16 and older in one metropolitan area.

CONCLUSIONS

In order to reduce fast-food consumption, food and nutrition professionals may need to identify alternative quick and convenient food sources that are also more nutritious. Motivations for eating at fast-food restaurants that differ by age, sex, education, employment status, and household size may need to be considered in identifying those food sources.

It is perhaps also important to consider focusing on improving the nutritional quality of fast-food meal choices, given the challenge inherent in identifying alternative food sources that are both quick and convenient.

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