CALIFORNIA
RESTAURANT
ASSOCIATION

September 18, 2014

Mr. Bill Shoe
Santa Clara County Planning Department
70 West Hedding Street, East Wing, 7th Floor
San José, CA 95110

RE: Health Element Public Review Draft Public Review

Mr. Shoe:

The California Restaurant Association is the definitive voice of the food service industry in California and is the oldest restaurant trade association in the nation. On behalf of the 22,000 members of the California Restaurant Association (CRA), we want to raise our voice in favor of choice by asking the County of Santa Clara to make certain that all the facts are presented and objectively analyzed before making decisions that could have a negative impact on the landscape of Santa Clara County communities. The *Health Element Public Review Draft* report makes some concerning statements and recommendations regarding quick service restaurants (QSRs).

While the issue of obesity is one of great concern, often the emotional pitch and rhetoric around the issue—from news headlines to political debate—has the ability to obscure the facts around this topic.

This much we know: the topic of obesity is complex. No single behavior or organization can be either held accountable or capable of solving this epidemic in our community. Bottom line, weight issues and obesity are caused by energy imbalance—we take in more calories than we burn. The underlying causes of that imbalance are many.

Robert Wood Johnson Foundation, in a report filed in 2012, stated that childhood obesity rates are declining in several cities and states and that business incentives are a better approach than misguided bans. (See Attachment "A")

Consider this:

Assuming that QSRs are unhealthy food providers and lumping them in the same category as liquor and convenience stores is inaccurate. While fast food restaurants have been one of the easy targets to unfairly blame the obesity issue on, the county should acknowledge the significant improvements made by QSRs that positively enhance the nutrition profile of the food they offer. These include a variety of fresh fruits, vegetables, low-fat/fat-free dairy, whole grains, plus reductions in sodium, added sugar and saturated fats.

In actuality, the National Health and Nutrition Examination Survey (NHANES) shows that the vast majority of all meals are prepared at home or eaten at home—not purchased or consumed in restaurants or street corners. (See Attachment "B") Even so, all restaurants are NOT alike. Bestselling author David Zinczenko (<u>"Eat This, Not That"</u>) wrote, "The idea that fast food is bad for us has been beaten into our heads for a generation."

An exhaustive and thorough 30-year study by four academics in New England arrived at the conclusion that "existing evidence linking residential proximity to food establishments with body mass index (e.g., weight- to- height ratio) has been inconclusive." Further the same study "did not find a consistent relation between access to fast-food restaurants and individual BMI." (See Attachment "C") *Preventative Medicine* published an article that noted "there was no difference in the BMI (of individuals studied) relative to the distance from a fast food restaurant." (See Attachment "D")

The County should continue to expand on its efforts to work with local jurisdictions and organizations to implement strategies that attract and/or expand healthy options, such as grocery stores, farmer's markets, corner markets, produce stores, etc. in underserved communities instead of considering restricting certain types of businesses that offer healthy nutritious options from locating in communities in unincorporated parts of Santa Clara County.

Quick service restaurants, in fact, in addition to being a good source of nutrients are also philanthropic members of the community. Most are operated by independent local business men and women, who contribute to the local area through civic engagement, community goodwill and donations, economic development and support of non-profit organizations. They offer training and jobs, especially for students, seniors, and women—many of whom chose flexible schedules. The wages, salaries and benefits they pay have significant multiplier impacts throughout the community.

Policymakers who have the ability to shape our community must think comprehensively before making decisions that could have a detrimental impact upon the community businesses and local residents. The longer view is advocacy for more education about how to balance diets, engage in exercise and create a local environment that encourages and incentivizes healthful choices. Whether it's more public parks and recreational areas or improved in-school opportunities for physical education, these are all areas where local government can make a positive statement about our children and their future in our community.

We appreciate your consideration on this critically important topic.

Respectfully,

Javier M. González
Director, Government Affairs + Public Policy

ATTACHMENT "A"

Robert Wood Johnson Foundation

# Health Policy Snapshot

Childhood Obesity

www.rwjf.org/healthpolicy

**ISSUE BRIEF**
*September 2012*

# Declining childhood obesity rates—where are we seeing the most progress?

## Takeaways:

- Several cities and states throughout the country have recently reported declines in their childhood obesity rates.
- The places that are reporting declines are those that are taking comprehensive action to address the childhood obesity epidemic.
- Despite signs of progress, socioeconomic, geographic, and racial and ethnic disparities in obesity rates are persisting in many places.

## Overview

In recent years, the national childhood obesity rate has leveled off. However, some cities and states have reported modest declines in their rates, following peaks in the early 2000s.

### SIGNS OF PROGRESS

Philadelphia,[1] New York City,[2] Mississippi,[3] and California[4] are among the places reporting declining childhood obesity rates. (See table on page 2)

### CITIES, STATES TAKE ACTION

While many U.S. cities are working to address the obesity epidemic, Philadelphia and New York City have emerged as leaders.

- Since 1992, The Food Trust has been working in Philadelphia to help corner stores offer fresh foods, connect schools with local farms, bring supermarkets to underserved areas, and ensure that farmers' markets accept food stamps.[5]
- New York City requires chain restaurants to post calorie information on menus and licensed day care centers to offer daily physical activity, limit screen time, and set nutrition standards.[6] During the past 10 years, the city established active design guidelines for architects and planners and created the Green Cart and Healthy Bucks initiatives to help lower-income families buy local produce.[7]
- Philadelphia and New York City also committed to long-term changes in public schools. In the mid-2000s, both cities implemented strong nutrition standards to improve the foods and beverages available to students.[8,9]

Mississippi and California are leading efforts to reduce obesity rates at the state level. Both states have focused on creating healthier schools.

- In 2006, the Mississippi State Board of Education set nutritional standards for foods and beverages sold in school vending machines. The Healthy Students Act of 2007 required the state's public schools to provide more physical activity time, offer healthier foods and beverages, and develop health education programs.[10]
- In 2007, California set strong nutrition standards for school snacks, and in 2009 it prohibited sugar-sweetened beverages in high schools. A study published in 2012 found that students in California were consuming 158 fewer calories per day than students in states with weaker standards.[11]

| Place | Ages | Time 1 | Obesity Rate at Time 1 | Time 2 | Obesity Rate at Time 2 | Percent Decline |
|---|---|---|---|---|---|---|
| Philadelphia | K–12 | 2006-07 school year | 21.5% | 2009-10 school year | 20.5% | -4.7% |
| New York City | K–8 | 2006-07 school year | 21.9% | 2010-11 school year | 20.7% | -5.5% |
| Mississippi | K–5 | Spring 2005 | 43%† | Spring 2011 | 37.3%† | -13.3% |
| California | Grades 5, 7, 9 | 2005‡ | 38.44%† | 2010‡ | 38%† | -1.1% |

† Combined rates of overweight and obesity
‡ Data calculated from the 2005 and 2010 California Physical Fitness Test, California Department of Education

Both states also support initiatives and policies that promote physical activity and healthy eating in communities.

- Starting in 2008, Mississippi's Childcare Licensure Division helped facilitate the Color Me Healthy program and training classes to create a healthier environment in childcare centers. Mississippi's Fruits and Veggies–More Matters program reached more than 15,000 residents in 2009 through worksite wellness programs, health fairs, and school events.[12]
- In 2008, the California Department of Public Health released an obesity-prevention plan and the state passed two laws, one requiring localities to support walking and bicycling in their transportation plans and another requiring large chain restaurants to post nutrition information.[13]

## DISPARITIES PERSIST

To date, only Philadelphia has reported progress in closing the disparities gap. The city achieved the most significant declines in obesity rates among African-American males and Hispanic females, two groups at high risk for obesity.[1] Philadelphia also reported significant reductions in obesity rates among students from lower-income families.

Other places have not been as successful in addressing disparities. Mississippi reported a significant drop in overweight and obesity only among White students. However, rates for Black students appear to be leveling off, which is a major shift after years of steady increases.[3] In New York City, obesity rates decreased among all ages, races, and family income levels of K–8 public school students, but decreases were smaller among populations at high risk for obesity, including Black or Hispanic children and students in high-poverty schools.[2] And despite a statewide decline in California's rates of overweight and obesity, 31 of its 58 counties reported increases.[4]

## CONCLUSION

Growing evidence suggests that strong, far-reaching changes—those that make healthy foods available in schools and communities and integrate physical activity into people's daily lives—are working to reduce childhood obesity rates. More efforts are needed to implement these types of sweeping changes nationwide and to address the health disparities gap that exists among underserved communities and populations.

### WANT TO KNOW MORE?

- F as in Fat: How Obesity Threatens America's Future 2011 (TFAH)
- State Actions to Promote Healthy Communities and Prevent Childhood Obesity (NCSL)

1 www.cdc.gov/pcd/issues/2012/12_0118.htm
2 www.cdc.gov/mmwr/preview/mmwrhtml/mm6049a1.htm
3 http://stage.mshealthpolicy.com/wp-content/uploads/2012/06/RWJFYear3Report2012.pdf
4 www.publichealthadvocacy.org/research_patchworkprogress.html
5 www.thefoodtrust.org/pdf/TFTbrochure.pdf
6 www.nyc.gov/html/doh/html/cdp/cdp_pan_gcc.shtml
7 www.nyc.gov/html/om/pdf/2012/otf_report.pdf
8 Www.nyc.gov/html/om/pdf/2012/otf_report.pdf
9 http://webgui.phila.k12.pa.us/offices/n/nutrition/policies--procedures
10 www.healthyschoolsms.org/ohs_main/MShealthystudentsact.htm
11 www.rwjf.org/childhoodobesity/product.jsp?id=74383
12 http://www.msdh.state.ms.us/msdhsite/_static/resources/3433.pdf
13 www.cdph.ca.gov/programs/COPP/Pages/default.aspx

ATTACHMENT "B"

# Eating Trends among US children under the age of 13 years from National Eating Trends (NET®) and NHANES 2005-2006 and 2007-2008

Summary of analyses conducted by the NPD Group and
the Center for Public Health Nutrition
University of Washington School of Public Health

# About NPD Group – National Eating Trends (NET®)

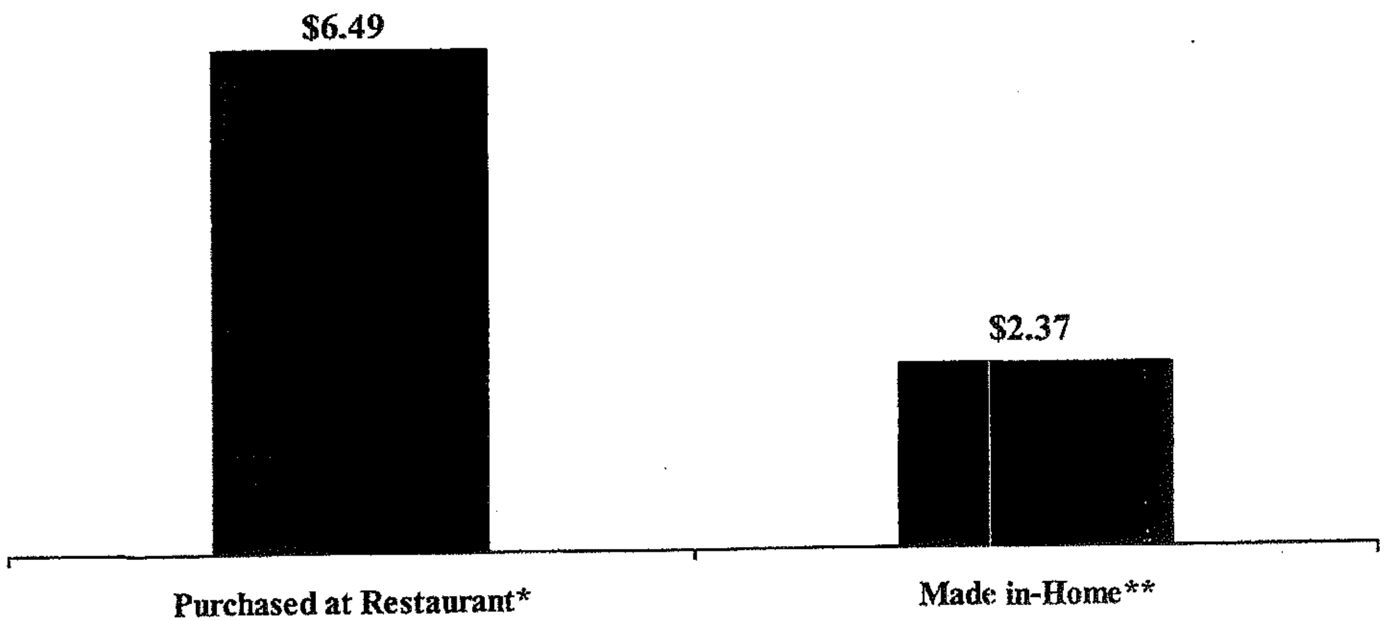
- The NPD Group, founded in 1966, is an independent market research company and a leading global provider of consumer and retail market research information for a wide range of industries. They provide critical consumer behavior and point-of-sale (POS) information and industry expertise across more industries than any other market research company.
  - Through their consumer panel, retail sales tracking services, special reports, and custom research, they help our clients understand and profit from consumer and retail trends. Their data tells them who is buying, what, where, and why at the international, national, and store levels.
  - NPD's clients include manufacturers, retailers, and service companies. They provide market research information to foodservice operators, technology distributors, and financial services providers that track the industry sectors they monitor. NPD has over 1,800 clients, ranging from Fortune 100 leaders to smaller businesses.
- The National Eating Trends (NET®) is a database – owned and run by NPD – that has been continuously tracking the eating and drinking habits of U.S. consumers since 1980. The sample reflects U.S. Census data balancing factors that include: Family vs. Non-family. Family are balanced on Household income, Household size, age and employment status of female homemaker (or male homemaker if female not present), race and census region. Non-families are balanced on age, gender, household income, and census region.

Source: http://www.npd.com

A "typical" restaurant meal cost nearly $6.50 in 2010. The "typical" meal made in home cost under $3.00. Therefore, food expenditures will overstate the number of meals "consumed" from out of home.

*Note: This is the average for ALL meals bought at restaurants and ALL meals made in-home.*

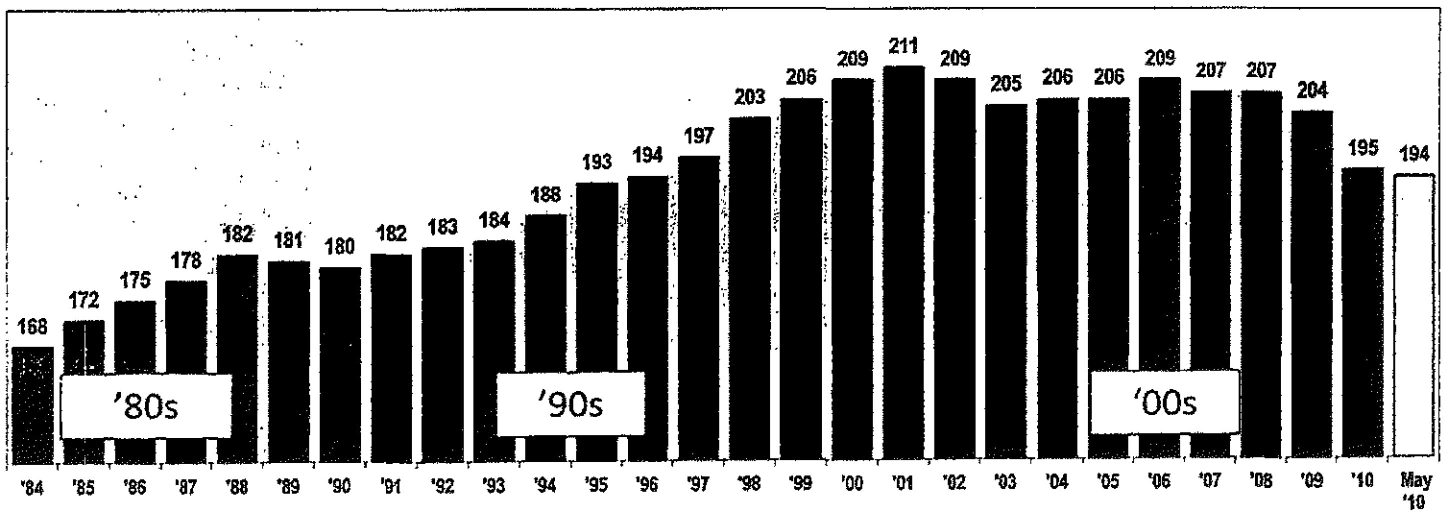
Average Cost of Meal per Person
12 Months Ending February 2010




*Source: The NPD Group's CREST® service
** Source: Calculation based on information from The NPD Group's National Eating Trends® service, Census Bureau and USDA Economic Research Services

Does food expenditures translate to more meals purchase away from home? While the annual number of meals purchased at a restaurant per person increased since the mid-1980s, it reached a plateau in 2001. Dining out has remained flat and actually decreased in the last decade.

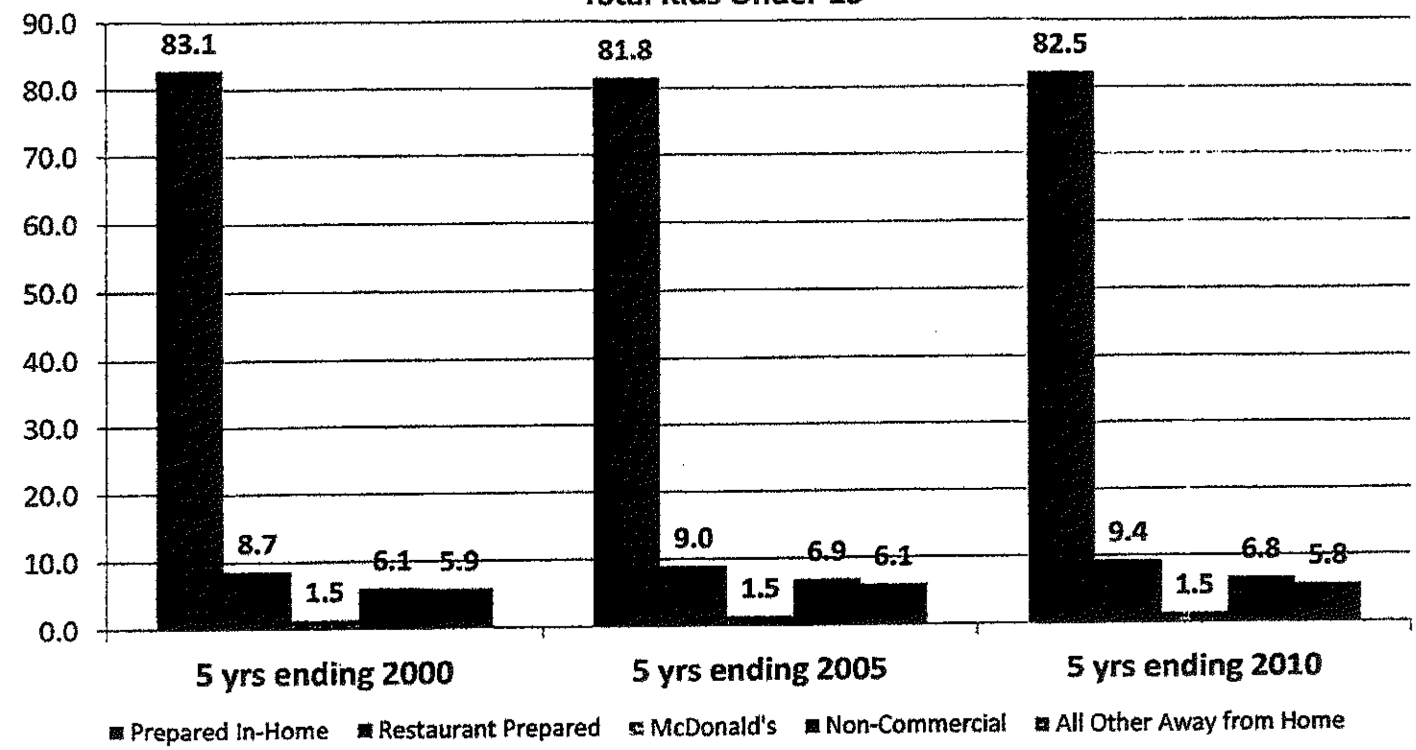
Annual Meals Purchased at a Restaurant per Person




Source: The NPD Group/ Foodservice/ CREST®, years ending Feb, except latest data point

Looking closer at children's meals... While the percentage of food expenditures spent away from home has increased, the number of meals consumed away from home has only slightly changed over the past decade.

**Share of Meals Consumed by Where Sourced over time among Total Kids Under 13**



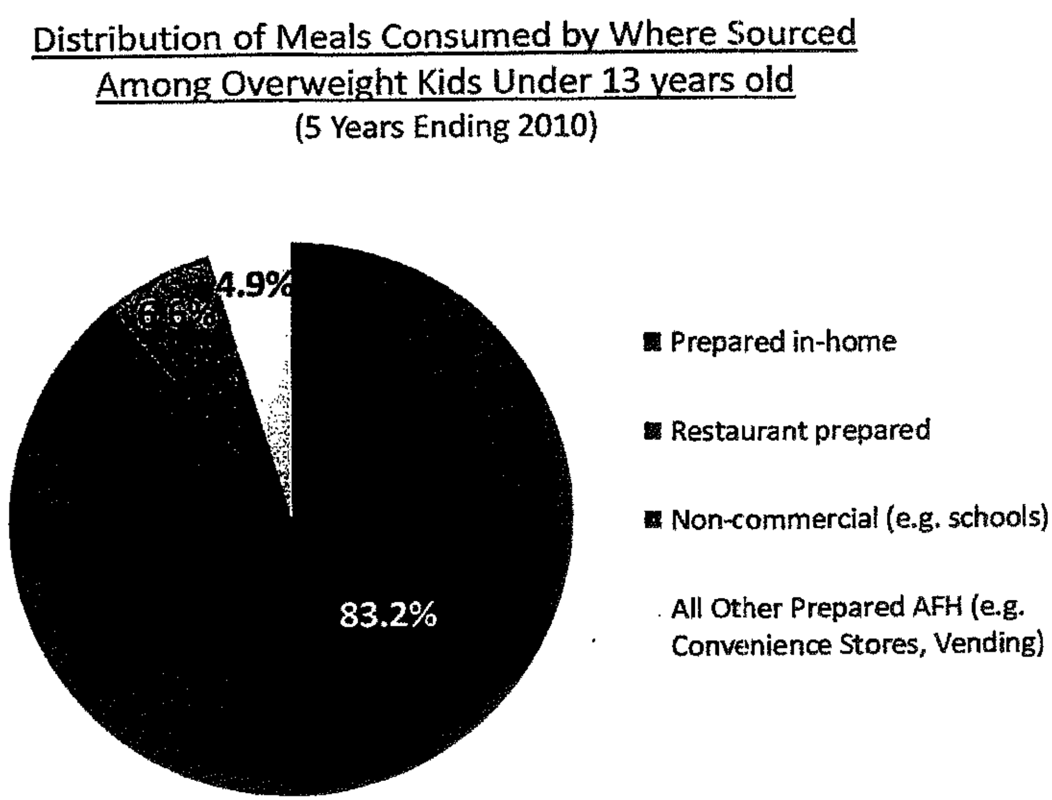

Source: The NPD Group/ US National Eating Trends (NET)
May add to over 100% due to some foods at the same meal sourced at different locations

# Public Health Hypothesis: QSR Consumption correlated to obesity

- "Strong and consistent evidence indicates that children and adults who eat fast food are at increased risk of weight gain, overweight and obesity. The strongest documented relationship between fast food and obesity is when one or more fast food meals are consumed per week. There is not enough evidence at this time to similarly evaluate eating out at other types of restaurants and risk of weight gain, overweight and obesity."

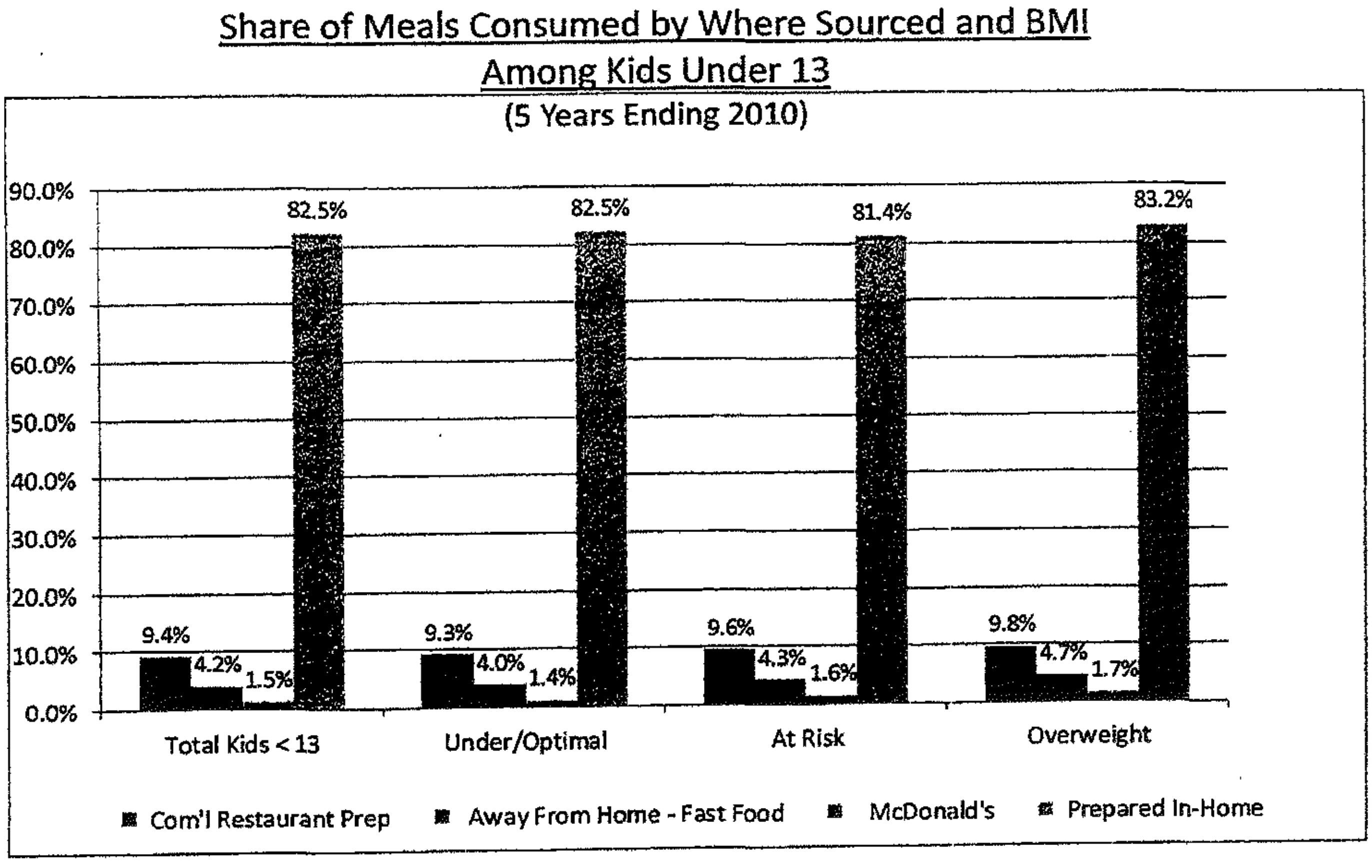
*Source: USDA, Nutrition Evidence Library*

# This is consistent among overweight kids under 13 with the majority of their meals sourced from home




Source: The NPD Group/ US National Eating Trends (NET)
May add to over 100% due to some foods at the same meal sourcing to different locations

# The share of meals from food sources are consistent among children of all BMI levels




Away from Home Fast Food does not include fast food brought home to eat; represents food eaten away from home classified as Fast Food by the respondent
Source: The NPD Group/ US National Eating Trends (NET)
*BMI calculated off of self-reported height and weight; "under/optimal", "at risk" and "overweight" segments are based off of age and gender CDC guidelines

# NHANES Analysis of proposed NYC Nutrition Criteria

- **Based on the NHANES analysis, the proposed nutrition standards included as part of the New York City are strict and unrealistic given current eating behaviors**
  - Percentage of meals consumed by children 6-11 years old that failed the proposed nutrition standards:
    - 98.6% of all lunches
    - 99.8% of school lunches
    - 96.5% of all dinners

- **Most meals fail the proposed nutrition standards because of multiple requirements**
  - Breakfast = fruit (79.1%), vegetables* (96.9%) or whole grains (91.4%)
  - Lunch = sodium (83.7%), fruit (76.2), vegetables* (74.1%) or whole grains (97.9%)
  - Dinner = sodium (85.5%), fruit (88.2%) or whole grains (97.5%)

*Includes fried potatoes

Source: Nutritional quality of meals consumed by children ages 6-11y in the National Health and Nutrition Examination Survey data 2005-6 and 2007-8. Analysis conducted by the Center for Public Health Nutrition School of Public Health, University of Washington – May 23, 2011

ATTACHMENT "C"

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## Original Contribution

# Proximity to Food Establishments and Body Mass Index in the Framingham Heart Study Offspring Cohort Over 30 Years

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Existing evidence linking residential proximity to food establishments with body mass index (BMI; weight (kg)/height (m)$^2$) has been inconclusive. In this study, the authors assessed the relation between BMI and proximity to food establishments over a 30-year period among 3,113 subjects in the Framingham Heart Study Offspring Cohort living in 4 Massachusetts towns during 1971–2001. The authors used novel data that included repeated measures of BMI and accounted for residential mobility and the appearance and disappearance of food establishments. They calculated proximity to food establishments as the driving distance between each subject's residence and nearby food establishments, divided into 6 categories. The authors used cross-classified linear mixed models to account for time-varying attributes of individuals and residential neighborhoods. Each 1-km increase in distance to the closest fast-food restaurant was associated with a 0.11-unit decrease in BMI (95% credible interval: −0.20, −0.04). In sex-stratified analyses, this association was present only for women. Other aspects of the food environment were either inconsistently associated or not at all associated with BMI. Contrary to much prior research, the authors did not find a consistent relation between access to fast-food restaurants and individual BMI, necessitating a reevaluation of policy discussions on the anticipated impact of the food environment on weight gain.

body mass index; fast foods; longitudinal studies; multilevel analysis; obesity; weight gain

Abbreviations: BMI, body mass index; SD, standard deviation.



The rapid increase in weight in the United States over the last 30 years has been posited to be driven by changes in environmental conditions, above other factors (1–3). A key environmental factor that has received considerable attention is the role of the food environment, specifically the role of fast-food restaurants (1). The increase in away-from-home food expenditures (4), increased consumption of fast food and sugar-sweetened beverages (5), and rising portion sizes (6) are several potential mechanisms through which the food environment could contribute to higher body mass index (BMI).

Evidence regarding the association between people's food environments and their BMIs remains inconclusive. Most prior studies have found associations between BMI and proximity to fast-food restaurants (7–14), convenience stores (10, 15), full-service restaurants (7), or supermarkets and grocery stores (10, 15–21). Other studies have found no relation between food establishments and BMI (21–24) or findings pointing in the direction opposite of what would be expected (17, 25). However, most of these studies were limited by the cross-sectional nature of the analysis, incomplete or poor ascertainment of proximity to food establishments, or both. To examine the association between proximity to food establishments and BMI, we linked data from a longitudinal cohort study to novel data regarding the food environment at each of several measurement points over a period of 30 years.

## MATERIALS AND METHODS

### Sample

The Framingham Heart Study Offspring Cohort was created in 1971. The Offspring Cohort enrolled 5,124 subjects who were either the children of Original Cohort members or

the children's spouses (26). Subjects have been examined and surveyed repeatedly since enrollment. We used the first 7 waves of data collection (1971–2001) for this study. The prespecified objective of this study was to analyze the association of proximity to food establishments and BMI in a longitudinal fashion, which required detailed collection of historical information on food establishments. Therefore, our sample included only subjects living in a small, concentrated geographic area composed of the 4 principal towns of the Offspring Cohort: Framingham, Natick, Ashland, and Holliston, Massachusetts (which allowed us to personally visit the towns and collect the necessary data). At enrollment, 55.1% of subjects of the Offspring Cohort lived in this area; at wave 7 (1998–2001), 40.2% lived in this area. We excluded observations with missing data on BMI, smoking status, or alcohol intake and those in which a subject was under 21 years of age or living in a nursing home. These criteria resulted in a final sample of 3,113 subjects and 13,423 observations (Figure 1).

#### Outcome and exposure variable

Time-varying individual BMI was the outcome variable, calculated from measured height and weight (weight (kg)/height (m)$^2$). The primary exposure variables were 1) the driving distance between each subject's residential address and the nearest restaurant or food store, divided into specific categories of establishments, and 2) the mean driving distance to the 5 closest restaurants or food stores, again divided by category at each wave. We calculated distances using ArcGIS, version 9.3 (Esri, Redlands, California). Measuring actual driving distances to food establishments is a more realistic method of determining exposure to establishments than the more commonly used neighborhood density measures. Actual driving distance captures how far it is for a subject to drive to a given establishment rather than simply measuring how many food establishments are located nearby.

We defined the restaurant and food store categories according to the definitions of the North American Industry Classification System, the system used by US federal agencies. Our restaurant categories were fast-food restaurants, full-service restaurants, and bakeries/coffee shops. Our food store categories were chain supermarkets, grocery stores, and convenience stores.

We compiled food establishment names, addresses, category, and years of operation from several sources: files of open and closed food establishments maintained by local boards of health, which inspect food establishments in Massachusetts; historical Framingham-area telephone book yellow pages for selected years from each wave; a targeted search of historical Framingham-area telephone book white pages; and a commercial database compiled by Dun & Bradstreet (Short Hills, New Jersey) for selected years from each wave (16). We collected and geocoded all data for the 4-town primary geographic area, as well as for the 10 additional towns that surround the primary geographic area and could be a source of food establishment exposure for subjects living near the borders of these towns. (Maps of food establishments are available as Web Figures 1 and 2 (http://aje.oxfordjournals.org/).) We validated the final database of food establishments through site

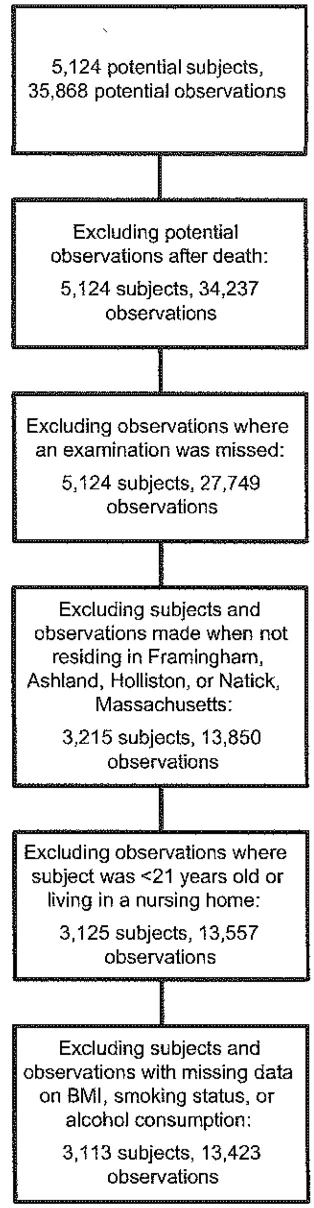


**Figure 1.** Selection of subjects and observations for an analysis of proximity to food establishments and body mass index (BMI), Framingham Heart Study Offspring Cohort, 1971–2001. A total of 5,124 subjects were enrolled in the Framingham Heart Study Offspring Cohort from 1971 to 1975, and subjects have been examined and surveyed repeatedly. The current study included completed observations made when subjects were living in Framingham, Natick, Ashland, and Holliston, Massachusetts, from 1971 to 2001. The final sample included 13,423 observations from 3,113 subjects.

visits to presently open establishments and by review of local boards of health and Framingham Heart Study staff. (Further details on the search strategy and food establishment classification are available in Web Methods Note 1.)

### Covariates

Individual-level covariates included time-varying attributes (marital status, smoking status, and alcohol consumption) and time-invariant attributes (age at enrollment, sex, and education). Residential addresses for subjects were collected in each wave and subsequently geocoded using ArcGIS. US Census tracts served as our definition of a neighborhood (27, 28). Each address was assigned to one of 24 census tracts contained within the 4-town geographic area at each wave to allow for linkage to neighborhood-level covariates. Because the boundaries of census tracts changed over time, we took the tract boundaries of Census 2000 as fixed across time and geocoded subjects within these boundaries.

We included several US Census-measured neighborhood-level covariates in the models: percentage of residents in the census tract living in poverty, median household income in the census tract, and percentages of census tract residents who were black and Hispanic. We used US Census data from 1970, 1980, 1990, and 2000 to assign these covariates to census tracts, and we used data from the commercial vendor GeoLytics (East Brunswick, New Jersey) to adjust all census data to the 2000 census tract boundaries. We assigned census data to subjects by wave according to the date of their study examination. If the examination occurred between the beginning of the decade and the midpoint of the decade, assignment was made to census data from the beginning of the decade. We included 1 measure of neighborhood walkability in our models: the number of intersections per mile. Using ArcGIS, we calculated the number of street intersections per square mile (per 1.6 $km^2$) for each block group for each subject at each wave.

### Analysis

Because some persons moved frequently, no clear nested hierarchy between all observations, individuals, and neighborhoods existed. To account for these repeated measures with changing neighborhood membership over time, we used a cross-classified, multilevel model for the analysis. Observation occasion served as level 1, and individual and neighborhood were separate cross-classified levels for level 2 (Web Figure 3), with a random intercept that was allowed to vary across all combinations of individual and neighborhood. We included a random slope for time indexed by individual subject to ensure that individual weight trajectories were accommodated in the models, and we also included a fixed effect for time. (Further details on the modeling are available in Web Methods Note 2.)

We examined the association between food establishment distance measures for each establishment category and BMI in separate models, with and without adjustment for the individual and neighborhood-level covariates. Neighborhood-level, US Census covariates did not change results appreciably, were not significant in any models, and were excluded from the final analyses. Because interaction terms between the food establishment distance measures and sex were significant in most models, we conducted additional sex-stratified analyses. We analyzed models with BMI as a measure that was *contemporaneous* to the exposure and covariates. Beta coefficient parameters represent the difference in BMI units ($kg/m^2$) for every 1-km (0.6-mile) increment in the distance to the closest food establishment of each type or the mean distance to the 5 closest food establishments of each type. This 1-km distance is approximately equivalent to 1 standard deviation of the driving distances to establishments across all subjects.

We conducted sensitivity analyses to examine the robustness of the relation between BMI and distance to food establishments. First, we examined the relation between distance and *lagged* BMI, capturing the relation between distance at each wave and BMI at the following wave. The associated parameter estimates represent the BMI difference for every 1-km incremental difference in the distance to food establishments at the prior wave. Second, to isolate the independent association of each restaurant and food store category with BMI, we created a set of summary variables to capture the relative closeness of food establishment categories to which a subject was exposed at each wave. These measures represent the degree to which a person is closer to one type of food establishment compared with the other types (details are available in Web Methods Note 3). We calculated these relative closeness measures because inclusion of measures of the distance to all types of food establishments in the same model was affected by collinearity, due to high correlations between distances for food establishment categories (Web Tables 1 and 2).

Models were analyzed using Markov chain Monte Carlo methods in MLWin, version 2.12 (Centre for Multilevel Modelling, University of Bristol, Bristol, United Kingdom), to generate multiple iterative samples from the joint posterior distribution of the parameters, from which parameter estimates could be constructed (29). We report parameter estimates from models with 95% credible intervals that reflect the posterior distribution of actual population parameter estimates. Significant findings are defined as those predictors with estimated parameters whose 2-sided 95% credible intervals did not include 0. We generated descriptive results using SAS statistical software, version 9.1 (SAS Institute Inc., Cary, North Carolina). The institutional review board of Harvard Medical School approved this study.

## RESULTS

The mean number of observations per subject was 4.31. In terms of residential mobility, 42.9% of subjects never moved throughout the course of their follow-up, and 26.1% moved twice or more. Mean BMI for women increased from 24.2 at wave 1 to 28.0 by wave 7; for men, it increased from 26.7 at wave 1 to 28.9 by wave 7 (Table 1, Web Tables 3–6). For women, the mean driving distance from the residential address to the closest fast-food restaurant decreased from 1,325 m (standard deviation (SD), 934) at wave 1 to 1,140 m (SD, 774) at wave 7. The mean driving distance to the nearest chain supermarket decreased from 4,223 m (SD, 2,405) at wave 1 to 2,599 m (SD, 1,565) at wave 7 (Web Tables 3–6). The values for men were similar.

In adjusted models comprising all subjects, close residential proximity to the nearest fast-food restaurant was associated with higher BMI (Table 2). Each 1-km increase (approximately a 1-SD increase) in driving distance to the closest

**Table 1.** Characteristics of the Study Sample, Framingham Heart Study Offspring Cohort, 1971–2001

| Characteristic | Women (n = 7,043[a]) | | | Men (n = 6,380) | | |
|---|---|---|---|---|---|---|
| | Across Waves | Wave 1 | Wave 7 | Across Waves | Wave 1 | Wave 7 |
| Mean body mass index[b] | 26.0 | 24.2 | 28.0 | 27.6 | 26.7 | 28.9 |
| Mean age, years | 50.8 | 37.9 | 63.1 | 50.9 | 38.9 | 62.9 |
| Education, % | | | | | | |
| High school or less | 53.6 | 48.2 | 53.2 | 47.2 | 42.2 | 46.0 |
| More than high school | 42.2 | 39.3 | 43.4 | 48.8 | 44.6 | 52.1 |
| Missing data | 4.2 | 12.6 | 3.4 | 4.0 | 13.2 | 1.9 |
| % married | 75.2 | 84.7 | 64.4 | 83.4 | 84.2 | 81.7 |
| % current smokers | 30.8 | 47.2 | 16.4 | 31.4 | 47.4 | 15.4 |
| Alcohol consumption (drinks/day), % | | | | | | |
| 0 | 35.5 | 17.5 | 45.6 | 22.5 | 9.8 | 31.6 |
| 1–2 | 59.4 | 76.2 | 50.8 | 53.7 | 61.4 | 50.8 |
| >2 | 5.2 | 6.3 | 3.6 | 23.9 | 28.8 | 17.6 |

[a] Number of observations across all waves.
[b] Weight (kg)/height (m)$^2$.

fast-food restaurant was associated with a 0.11-unit decrease in BMI. In sex-stratified analyses, this effect was present only for women, such that each 1-km increase in driving distance to the closest fast-food restaurant was associated with a 0.19-unit decrease in BMI. In adjusted models with BMI lagged by 1 wave, the relation between close proximity to the nearest fast-food restaurant and BMI remained, both in the pooled analysis and in the sex-stratified analysis of women. For every 1-km increase in driving distance to the closest fast-food restaurant, BMI in the subsequent wave decreased by 0.10 units in the pooled analysis and 0.17 units for women (data are shown in Web Tables 7–9). Controlling for the relative closeness of all establishments produced similar results (Web Tables 7–9).

Close residential proximity to grocery stores was associated with higher BMI in pooled adjusted analyses and for women (Table 2). For every 1-km increase in driving distance to the closest grocery store, BMI decreased by 0.06 units in the pooled analysis. For every 1-km increase in the mean driving distance to the 5 closest of these stores, BMI decreased by 0.08 units in the pooled analysis and by 0.11 units for women in the sex-stratified analysis. In adjusted models with BMI lagged by 1 wave, no significant association between BMI and distance to grocery stores remained (Web Tables 7–9). In models controlling for the relative closeness of all establishments, a significant association between BMI and mean distance to the 5 closest grocery stores was present in the pooled analysis only (Web Tables 7–9). When examining all remaining types of establishments, we noted no significant associations between food establishment proximity and BMI (Web Tables 7–9).

Among other covariates, predictors of higher BMI for both men and women included time, older age, being married, not smoking, and consuming more than 2 alcoholic drinks per day. A high school education or less and consumption of 1–2 alcoholic drinks daily also were associated with higher BMI for women. These results were consistent in models controlling only for covariates and models controlling for the relative closeness of each food establishment category (Web Tables 10 and 11).

## DISCUSSION

In a longitudinal cohort study, we performed a comprehensive assessment of the association between the commercial food environment and individual BMI over a period of 30 years. Contrary to much prior research, we did not find a consistent relation between access to fast-food restaurants and individual BMI. For every 1-km increase in driving distance to the closest fast-food restaurant, BMI decreased by 0.11 units in the overall sample and 0.19 units among women. On the basis of these results, a woman of average height in the Framingham Heart Study Offspring Cohort (63.6 inches or 161.5 cm) would weigh 0.50 kg less for every 1-km increase in driving distance to the nearest fast-food restaurant (or 50 g less for every 100-m increase in driving distance). This small association between distance to fast-food restaurants and BMI for women only is concordant with prior research that has found sex differences in the associations between neighborhood characteristics and BMI (30–33). Such sex differences could arise because women are more aware of their residential neighborhood environments than men (34, 35).

Prior research on the association of weight status with proximity to food establishments has been inconclusive. These prior studies had several limitations that we attempted to surmount in the present study. Most studies have been limited by the use of cross-sectional analyses. Only 4 of the 19 studies we discovered on this topic had any longitudinal component for the outcome (9, 21, 24, 36). Only 2 of these

**Table 2.** Multilevel, Cross-Classified, Multivariable Regression Parameter Estimates for the Adjusted Change in Body Mass Index[a] for Every 1-km Increase in Distance to Food Establishments, Framingham Heart Study Offspring Cohort, 1971–2001[b]

| Variable | Total[c] | | Women[d] | | Men[d] | |
|---|---|---|---|---|---|---|
| | β[e] (n = 13,423[f]) | 95% CrI | β (n = 7,043) | 95% CrI | β (n = 6,380) | 95% CrI |
| Distance to closest food establishment | | | | | | |
| Closest fast-food restaurant | −0.11[g] | −0.20, −0.04 | −0.19[g] | −0.32, −0.06 | −0.05 | −0.14, 0.05 |
| Closest full-service restaurant | 0.02 | −0.07, 0.11 | 0.08 | −0.06, 0.21 | −0.05 | −0.14, 0.05 |
| Closest bakery/coffee shop | −0.02 | −0.08, 0.04 | −0.04 | −0.12, 0.05 | −0.01 | −0.07, 0.05 |
| Closest convenience store | 0.02 | −0.06, 0.09 | 0.00 | −0.12, 0.12 | 0.00 | −0.08, 0.08 |
| Closest grocery store | −0.06[g] | −0.10, −0.01 | −0.07 | −0.15, 0.001 | −0.04 | −0.08, 0.01 |
| Closest chain supermarket | −0.02 | −0.06, 0.01 | −0.03 | −0.08, 0.02 | 0.01 | −0.03, 0.05 |
| Mean distance to closest 5 food establishments | | | | | | |
| Closest 5 fast-food restaurants | −0.03 | −0.10, 0.05 | −0.05 | −0.16, 0.07 | 0.00 | −0.08, 0.08 |
| Closest 5 full-service restaurants | −0.04 | −0.13, 0.06 | −0.01 | −0.16, 0.14 | −0.04 | −0.15, 0.05 |
| Closest 5 bakeries/coffee shops | −0.03 | −0.08, 0.03 | −0.02 | −0.10, 0.06 | −0.01 | −0.07, 0.05 |
| Closest 5 convenience stores | 0.01 | −0.06, 0.08 | −0.03 | −0.12, 0.09 | 0.03 | −0.05, 0.10 |
| Closest 5 grocery stores | −0.08[g] | −0.15, −0.03 | −0.11[g] | −0.21, −0.01 | −0.06 | −0.12, 0.01 |
| Closest 5 chain supermarkets | −0.01 | −0.06, 0.02 | 0.00 | −0.06, 0.06 | 0.00 | −0.04, 0.04 |

Abbreviation: CrI, credible interval.
[a] Weight (kg)/height (m)$^2$.
[b] Results were adjusted for age, time (as both a categorical fixed effect and a linear random effect), education, and time-varying marital status, smoking status, alcohol consumption, and number of intersections per square mile (per 1.6 km$^2$).
[c] Adjusted for sex, in addition to the other covariates.
[d] Sex-stratified analyses were conducted because the interaction between sex and distance to food establishments was significant in most models.
[e] Change in body mass index units (kg/m$^2$).
[f] Number of observations across all waves.
[g] Two-sided 95% credible interval does not contain 0.

had time-varying exposure data on proximity to food establishments (9, 21). Among the studies that incorporated longitudinal data on both the outcome and exposure, investigators used only 1 source of data on food establishments, which is likely to have limited the number of establishments found, and the researchers measured the proximity to food establishments through crude measures (i.e., number of food establishments per land area or per number of residents) which failed to capture the exact distance between individual residences and food establishments. For example, using birth certificates for over 1.5 million pregnant women who had 2 or more children in Texas, Michigan, and New Jersey from 1989 to 2003, Currie et al. (9) found that the presence of contemporaneous chain fast-food restaurants within 0.5 miles (0.8 km) of the residential address was associated with an increased risk of gestational weight gain (mean increased weight gain of 49 g). In our study, we addressed each of these limitations by including longitudinal data on both BMI and exposure to food establishments, using multiple sources of data on food establishments, and precisely measuring the distances between residential addresses and food establishments in each wave of data collection, accounting for both residential moves by subjects and the opening and closing of establishments across time.

The study findings should be considered with the following caveats. First, we undertook a comprehensive approach to the identification of food establishments across time and combined multiple resources from a discrete geographic area. However, no ideal historical record of food establishments exists. We could have missed some establishments or misclassified their type. If any misclassification occurred in neighborhoods where subjects experienced greater weight gain, the results could be biased. We also could not measure workplace proximity to food establishments, a possible source of unmeasured confounding between BMI and residential proximity to food establishments. Second, because of the extensive effort to identify historical food establishments, the geographic area of the study included only the 4 major towns of the Offspring Cohort. We were not able to follow subjects if they moved out of this area. This limits the generalizability of the study, as does the lack of racial diversity in the Offspring Cohort. However, this limitation in generalizability also strengthens the plausibility of the association's being causal by removing confounding by design. Because all of the subjects were living in the Framingham area, neighborhoods were more similar than those of diffuse areas, and neighborhoods primarily differed with regard to the exposure rather than other, unobserved factors. The lack of racial diversity is an unavoidable limitation of all research done within the Framingham Heart Study for the past 50 years. Third, the restricted geographic area of our subjects and the ascertainment of food establishment locations limited the range of

distances over which subjects could be exposed to food establishments. We cannot extrapolate our associations beyond this limited range. Fourth, we presently lack data on actual food consumption and physical activity in each wave with which to determine whether consumption of specific types of foods or exercise was associated with weight gain in this population and whether these factors might have mediated the relation between close proximity to fast-food restaurants and weight gain; this will be the subject of future research. However, with a weak, inconsistent association found between proximity to fast-food restaurants and BMI, it is doubtful that any mediation of this association, which might result from the inclusion of additional variables, would change the interpretation of our results. Fifth, income data were only available for 1 wave, and there was a high percentage of missing data. As a result, education was the only measure of individual socioeconomic status in this study. The weak association between close proximity to fast-food restaurants and BMI could be accounted for by unobserved income; however, research has demonstrated a high correlation between education and income (37).

In summary, in a large cohort followed over a period of 30 years, after accounting for residential mobility and the appearance and disappearance of food establishments, we did not find a consistent relation between access to fast-food restaurants and a person's BMI. This will necessitate a reevaluation of policy discussions on the anticipated impact of the food environment on weight gain. This study shows that the food environment's contribution to reducing or controlling the obesity epidemic may be limited.

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ATTACHMENT "D"



Foundation for Advertising Research

# SCHEDULE OF STUDIES: PROXIMITY OF FAST FOOD OUTLETS HAS NO CORRELATION WITH OBESITY

1. This research examined the relationship between overweight and obese 3 and 4 year olds of low income areas in and near Cincinnati and proximity to playgrounds and fast food outlets and neighborhood crime. There was no difference in BMI relative to the distance from a fast food restaurant. The authors concluded "In this population of urban, low-income 3- and 4-year-old children, we found no association between overweight and measures of neighborhood safety or the proximity of children's households to either playgrounds or fast food restaurants. Furthermore, the association between child overweight and playground proximity did not differ by neighborhood safety."

*"Neighborhood Playgrounds, Fast Food Restaurants, and Crime: Relationships to Overweight in Low-Income Preschool Children"* Hillary L Burdette et al, Preventative Medicine (2004) 38, 57-63

2. The study examined the relationship between the choice and availability of takeaway food and restaurant food in a rural community in Australia and the rate of obesity. In Regional centres where there is a high concentration of food outlets the average rate of obesity was 25.5%, in large rural towns where there are fewer outlets it was 28.9% and in small rural towns where there are minimal outlets the average was 30.8%. Those who consumed the fewest takeaways were in small rural towns.

The study found:

- "BMI was not significantly related to takeaway consumption"
- "There was no relationship between availability of eating places and prevalence of obesity"
- "In the towns we studied, even those in small rural communities with no major takeaway presence, and few bakeries and other sources of fast food, the population were more obese than the national average shown in AusDiab. In these disparate towns no relationship between availability of takeaway foods and the prevalence of obesity was found."

"Older subjects (aged >52 y) were 81% more likely to be obese as defined by waist circumference than those who were younger. This group was less likely to consume takeaways, which was more common among younger people, suggesting that their obesity is related to other lifestyle factors."

*"Choice and Availability of Takeaway and Restaurant Food is not Related to the Prevalence of Adult Obesity on Rural Communities in Australia"* D. Simmons et al, Int Journal of Obesity, (2005) 29, 703-710

3. Increases in BMI by children in kindergarten to grade 3 from over 1000 US schools were examined as to whether higher food prices and food outlet density influenced an increased rate in BMI. The study found "relative food prices are associated with changes in the BMI and obesity rates, and the relationship is significant and robust for fruit and vegetable prices: higher fruit and vegetable prices predict greater BMI increase."

However with regard to food outlets the study concluded, "We initially expected food outlets to play an important role, but no association was found." This applied to fast food restaurants, full service restaurants, convenience stores and grocery stores both individually and as a set.

*"Body Mass Index in Elementary School Children, Metropolitan Area Food Prices and Food Outlet Density"* R Sturm et al, Journal of the Royal Institute of Public Health, (2005) 119, 1059-1068

4. The objective of the study was to examine whether living or working near fast food restaurants is associated with body weight. The research was conducted in the state of Minnesota. The main findings were:

- There was an association between BMI and frequency of eating at restaurants and this association was significant with fast food restaurants.

- There was "no relationship between BMI and restaurant proximity to home addresses for either women or men. For men only, however, we found a significant inverse relationship between BMI and restaurant proximity (both "fast" and "non-fast" food). Men with more restaurants close to their places of work were leaner."

- "that the accessibility of restaurants, defined as the number of restaurants within a 2-mile radius of home addresses, was predictive of frequency of reported overall restaurant usage, although not frequency of reported "fast food" restaurant usage."

- With regard to the density of restaurants the study found, the "Number of restaurants near people's homes was not associated with BMI. For men only, the number of restaurants near to work addresses was inversely associated with BMI."

*"Are Fast Food Restaurants an Environmental Risk factor for Obesity"* Robert W Jeffery et al, International Journal of Behavioral Nutrition and Physical Activity, (2006) 3:2

5. This study researched the BMI of 3400 4th, 5th and 6th grade children in US mid-western schools from urban areas, small cities and rural areas. It did

not examine proximity to fast-food outlets but children from rural areas would not have easy access to fast-food restaurants. The study found that 25.1% of the rural children were overweight compared with 19.4% of urban children and 17.6% from small cities. The difference is quite significant.

*"Rural-Urban Differences in Physical Activity, Physical Fitness, and Overweight Prevalence of Children"* Roxanne Joens-Matre et al, The Journal of Rural Health, (2008) Vol 24, No 1

6. This Australian study examined the relationship between the density of and proximity to fast food outlets and the weight of adults and children. The study involved 137 children aged 8 to 9 years, 243 aged 13 to 15 years, 322 fathers and 362 mothers.

The study found that both children and adults who lived within 2 km of a fast food outlet had lower rates of obesity and overweight than those outside the 2 km. Some of the results were dramatic - among older girls "the likelihood of being overweight/obese was reduced by 81% if they had one or more fast food outlet within 2 km of their residential address". Among adult males, "the likelihood of being overweight or obese was reduced by 50% if they had one or more fast food outlet within 2 km of their residential address".

It concluded there is "no association between weight or weight change and exposure to fast food outlets."

*"Neighbourhood Fast Food Outlets and Obesity in Children and Adults: The CLAN Study"*, David A. Crawford et al, International Journal of Pediatric Obesity, (2008), 3:4. 249-256

7. This was a national survey in which the addresses of all multi-national and local fast-food outlets in New Zealand were collected. They were then coded into two groups - multinational fast-food outlets (McDonald's, KFC, Pizza Hut, etc) and locally operated outlets such as fish and chip shops.
The geographical access to the outlets was calculated for all 38,550 meshblocks in New Zealand. This was then compared with the national survey of adults of various factors including diet and BMI. The study found that "Contrary to expectations, ... the odds ratio of being overweight was greater in neighbourhoods with poorer access to multinational fast-food outlets compared to neighbourhoods with the closest access." Additionally there was no association between access to the closest locally operated outlet of being overweight. The authors concluded, "the current research found little evidence that neighbourhood access to fast-food retailing was associated with a poorer diet and being overweight at the individual level."

*"A National Study of the Association Between Neighbourhood Access to Fast-Food Outlets and the Diet and Weight of Local Residents"*, Jamie Pearce et al, Health & Place (2009) 15, 193-197

8. A working paper by Michael Anderson was published in January 2008 and revised in June 2009 on the Social Science Research Network. The authors compared the prevalence of obesity in rural communities located immediately adjacent to Interstate Highways, where restaurants are located, with the prevalence of obesity in communities located slightly farther away. They found "The distributions of BMI in highway and non-highway areas are virtually identical, and point estimates of the causal effect of restaurants on the prevalence of obesity are close to zero and precise enough to rule out any meaningful effects." They then concluded, "The results presented above suggest that access to restaurants has no appreciable causal effect on BMI or the prevalence of obese individuals" and "policies targeted at restaurants are unlikely to lower the prevalence of obesity."

*"Are Restaurants Really Supersizing America"* Michael Anderson et al, 2009, Available at SSRN: http://ssrn.com/abstract=1079584

9. This study examines the effect of an intervention strategy to limit the number of fast food restaurants. In July 2008 an ordinance was adopted that prohibited the establishment of new fast food restaurants in South Los Angeles. This was done as the rate of obesity of residents of South LA is higher (25.5%) than West LA (18.4%) and the belief there was an "over-concentration of fast-food restaurants in the South Los Angeles region."

This study found "There are fewer restaurants of any type (not just major fast-food chains) per capita in South Los Angeles than in Los Angeles County overall." There were 19 fast-food restaurants per 100,000 residents in South LA compared to the LA County average of 30. Fruit and vegetable consumption was about the same. There was higher calorie consumption in South LA for sodas, snacks, cookies and candies.

The authors comment "One of the stated goals of the ban was the hope that sit-down restaurants would replace fast-food outlets, reflecting the misconception that sit-down restaurants provide "healthier" food. At Romano's Macaroni Grill, for example, the average lunch sandwich has 1,680 calories - more than the combined calories of three Big Macs; many dinner choices have more than 2,000 calories and cover the energy needs of a full day; the appetizers average 800 calories, and the desserts average 1,000 calories." The article concludes that focus on fast-food chains "is a misleading picture of actual differences."

*"Zoning for Health? The Year-Old Ban on New Fast-Food Restaurants in South LA",* Roland Sturm and Deborah A. Cohen, Health Affairs (2009) 28, No. 6, w1008-w1097

10. The BMI and food consumption from fast food outlets of 552 high school students from 11 Maine schools were examined. 10 schools had an outlet selling soda within 1 km and 8 schools had a quick service restaurant within 1 km.

The study found "This study found no correlation between the presence of stores with unhealthful food choices near their schools." It concluded, "This study reports that the consumption of sweetened drinks and fast food among Maine high school students is high. One-half consumed sweetened soda weekly, and over two-thirds consumed fast food monthly, and students access these food items at a myriad of different locations. However, the proximity or density of stores with unhealthful food near Maine high schools does not predict the risk of overweight for students at these schools. This finding suggests that high school nutrition programs that focus on student behavior may be more effective than programs that focus on the built environment near the school, at least in a predominantly nonurban setting such as Maine."

*"Location of Food Stores Near Schools Does Not Predict the Weight Status of Maine High School Students"*, David E. Harris et al, Journal of Nutrition Education and Behavior, (2011) Volume 43, Number 4

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## *Dietary Guidelines for Americans, 2015*

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Anita Boddie PhD, RD *Comment ID #124*
Submitted 09/24/2013

Part II - Proximity to Quick Service Restaurant (QSR) Locations and Child Body Mass Index (BMI)

McDonald's is committed to the health and well-being of kids and families. Core to that commitment is our contribution to the communities we serve. This is reflected in a wide variety of initiatives, including our menu offerings for children. For example in 2012 we updated our Happy Meal®, which now automatically includes fruit, a kids-size fry, and beverage options that include low-fat or fat-free milk. Since then, we have served more than 770 million individual packages of apple slices.

Examples of our progress will be given during oral testimony and can be viewed at this link: www.mcdonalds.com/changing.

The 2010 Dietary Guidelines report suggested a relationship between increased geographic density of fast food restaurants and increased BMI. Further, the Committee recommended consideration of zoning policies for the location of fast food restaurants near schools and places where children play as one means of childhood obesity prevention. These comments are in response to those statements and supplement our Part I written comments on adult BMI and proximity to QSR locations.

As with adults, the evidence examining any association between BMI and proximity to QSRs is inconclusive and we ask the Committee to evaluate the literature published since 2010.

Some studies report no relationship:
•Data from 6260 participants with BMI measurements in the Early Childhood Longitudinal Study-Kindergarten Class collected in 5th grade (2004) and 8th grade (2007) found no consistent evidence to support that greater exposure to QSR increased BMI [1].
•In grade 5, 7 and 9 students attending 1,694 Los Angeles County schools with a QSR within ½ mile, no association was observed in prevalence of overweight [2].
•Fitnessgram data from 94,348 New York City public high school students found the greater the number of QSR the lower the odds of obesity, particularly among boys [3].
•Fitnessgram data from 879 California public schools with at least 100 ninth grade students found nearby QSR and supermarkets were not associated with school rates of overweight [4].
•A study of 702 children age 3-18 years from low-income families in four New Jersey cities showed that child weight status was associated with a convenience store within ¼ mile but there were no associations with other types of food outlets, including QSR [5].

Other studies demonstrate a complex set of environmental factors that impact BMI:

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## *Dietary Guidelines for Americans, 2015*

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Anita Boddie PhD, RD *Comment ID #120*
Submitted 09/24/2013

Part I - Proximity to Quick Service Restaurant (QSR) Locations and Adult Body Mass Index (BMI)

Making a positive contribution to the communities we serve is a core value and commitment at McDonald's. Our food is central to that. We continue to evolve our menu and offer many choices that are consistent with recommendations made in the 2010 Dietary Guidelines.

Examples of our progress will be given during oral testimony and can be viewed at this link: www.mcdonalds.com/changing.

These comments respond to a statement in the 2010 report: "Studies examining the relationship between the food environment and BMI have found that communities with a larger number of fast food or quick-service restaurants tend to have higher BMIs." We call this statement into question, as the evidence is inconsistent.

Here we submit examples of recent literature illustrating a lack of agreement regarding any relationship in adults between BMI and QSR locations. We urge the 2015 Dietary Guidelines Advisory Committee to reevaluate the literature and consider a question on this issue.

Some studies report no relationship:
• The Framingham Offspring Cohort Heart Study found no consistent relationship between proximity to QSR and individual BMI over 30 years in 3,113 subjects [1].
• A survey of 97,678 Californians showed no association between food outlets within a one-mile walking distance and dietary intake, BMI or probability for a BMI within the range for either overweight or obesity [2].
• Zip code data from 164 postal codes for 48,014 respondents to five New York City Community Health Surveys between 2002 and 2006 found seven of ten NYC residents have at least one QSR establishment within ¼ mile of their residence, yet total QSR were not associated with obesity [3].

Yet others yield conflicting findings:
• Respondents (n=1345) to a survey in Genessee County (Flint), Michigan reported an average of eight QSR within two miles of their home [4]. The authors suggest a closer proximity is related to higher BMI, therefore programs are required to help consumers choose healthy QSR meals.
• In a survey of African American adults, primarily overweight females, attending a large church in Houston, Texas, a higher BMI was reported for those both living near a QSR and earning less than $40,000 per year [5].
•In New York City a survey of 48,482 adults found BMI more associated with proximity to "BMI-unhealthy"

fast food or bodegas in lower poverty (higher income) zip codes than in high-poverty zip codes [6].

America's food supply is complex and changing.
•A study of the Seattle area noted both "healthy" and "unhealthy" foods are available in large supermarkets, locations which coding schemes would typically classify as "healthy" although various departments, such as the bakery, snack, coffee shop or deli, would be "unhealthy" if classified as a separate business [7].
•Based on 2003-2010 NHANES data, the vast majority of calories come from supermarkets, grocery, convenience and specialty stores [8].
•In urban areas, additional grocery stores rather than fewer QSR have been suggested [3], although in non-metro areas obesity rates were positively associated with per capita grocery stores and negatively associated with QSR [9].

The body of evidence currently available does not unequivocally support the idea that living near a QSR is associated with higher BMIs in American adults. Based on these examples, we respectfully request reevaluation of the totality of literature and ask the committee to include a research question regarding QSR proximity and BMI.

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**Topic:**

- Food Environment

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