IMPACT AND EFFECTIVENESS
TABLE 34

Neighborhood Availability of Restaurants

EFFECTIVENESS TABLES

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
United States				
Author Li, Harmer (2009); Li, Harmer (2008); Li, Harmer (2009) Oregon **Design** Association One prospective cohort study and two cross-sectional studies In cohort study participants completed a health survey at baseline (2006-2007) and one year follow-up (2007-2008). In the same years the built environment (e.g., land use mix, fast-food density, street connectivity) were assessed; however, no intervention was implemented. **Duration** Not Applicable Only cross-sectional data provided.	**Measures** *Access to heathy food options and healthy living environments* (density of fast food restaurants, distribution of commercial and residential destinations, neighborhood walkability, and access to public transportation stations) **Outcome(s) Affected** Overweight/obesity (researcher measured height and weight, survey)	**Positive Association for Overweight/obesity in the Study Population (Neighborhood Availability of Restaurants)** **(Assumption: Greater access to fast food restaurants leads to greater access to unhealthy foods which leads to increased consumption of unhealthy foods resulting in higher body mass index and overweight/obesity.)** **Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. (cross-sectional data) Residents living in high density fast food outlet neighborhoods who visited fast food or buffet restaurants 1 or 2 times weekly or more, were 1.878 (95% CI: 1.063,3.496; p<0.05) times more likely to be obese than those who lived in low density fast food outlet neighborhoods. 2. (N=1145) Multi-level analyses show that after adjustment for neighborhood- and resident-level socio-demographic characteristics, a high density of fast-food outlets was associated with an increase of 3.09 pounds in weight and 0.81 inches in waist circumference among residents who frequently ate at fast-food restaurants (p<0.05). 3. (cross-sectional data) A one standard deviation increase in the density of fast-food outlets was associated with a 7% increase in the prevalence of overweight/obesity (p<0.01). 4. (cross-sectional data) Similar results for likelihood of being obese in areas with high density fast food outlets compared to those with low density fast food outlets were found for residents who did not meet recommended levels of physical activity, OR=1.792 (95%, CI:1.006, 3.190, p<0.05).	**Positive Association for Overweight/obesity in the Study Population** Study design = Association Effect size = Positive association for overweight/obesity in the study population	**Maintenance** Not Applicable Only cross-sectional data provided. **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Mehta, Chang (2008) United States **Design** Association Cross-sectional study **Duration** Not Applicable Only cross-sectional data provided.	**Measures** *Access to healthy food options* (density and mix of fast food and full-service restaurants) **Outcome(s) Affected** Overweight/obesity (BRFSS data)	**Positive Association for Overweight/obesity in the Study Population (Neighborhood Availability of Restaurants)** **(Assumptions: 1) Greater access to fast food restaurants leads to greater access to unhealthy foods which leads to increased consumption of unhealthy foods resulting in higher body mass index and overweight/obesity. 2) Greater access to full-service or sit-down restaurants leads to greater access to healthy foods which leads to increased consumption of healthy foods resulting in lower body mass index and overweight/obesity.)** **Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. Higher total restaurant density is significantly associated with lower weight status. The BMI difference between the 25th and 75th percentiles of total restaurant density is -0.22 kg/m^2 (95% CI= -0.30, -0.14). Results from the logistic regression model indicate a 6% decrease in the odds of being obese between the 25th and 75th percentiles of total restaurant density ($p<0.001$). 2. Higher full-service restaurant density is significantly associated with lower weight status. The BMI difference between the 25th and 75th percentiles of full-service restaurant density is -0.32 kg/m^2 (95% CI= -0.40, -0.24). Results from the logistic regression model indicate an 11% decrease in the odds of being obese between the 25th and 75th percentiles of full-service restaurant density ($p<0.001$). 3. Higher fast-food restaurant density is significantly associated with higher weight status. The BMI difference between the 25th and 75th percentiles of fast-food restaurant density is 0.09 kg/m^2 (95% CI= 0.02, 0.16). Results from the logistic regression model indicate a 5% increase in the odds of being obese between the 25th and 75th percentiles of fast-food restaurant density ($p<0.01$). 4. BMI difference between 25th and 75th percentiles of fast-food/full-service ratio distribution is 0.20 kg/m^2 ($p<.001$). Results from the logistic regression model show an 8% increase ($p<.001$) in the odds of being obese between the 25th and 75th percentiles of the fast/full ratio distribution, and a 21% increase between the 5th and 95th percentile of distribution.	**Positive Association for Overweight/obesity in the Study Population** Study design = Association Effect size = Positive association for overweight/obesity in the study population	**Maintenance** Not Applicable Only cross-sectional data provided. **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Davis, Carpenter (2009) California **Design** Association Cross-sectional study **Duration** Not Applicable Only cross-sectional data provided.	**Measures** *Access to healthy food options* (availability of fast food restaurants near schools) **Outcome(s) Affected** Overweight/obesity and dietary consumption (California Healthy Kids Survey)	**Positive Association for Overweight/obesity in the Study Population (Neighborhood Availability of Restaurants)** **Positive Association for Nutrition in the Study Population (Neighborhood Availability of Restaurants)** **(Assumption: Greater access to fast food restaurants leads to greater access to unhealthy foods which leads to increased consumption of unhealthy foods resulting in higher body mass index and overweight/obesity.)** **Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. Youth who attended schools located near fast food restaurants (at least 1 outlet within .5 mi.) were heavier than students with similar observable characteristics who attended schools not located near fast food restaurants. Models predicting youths' overweight and obesity show that a youth had 1.06 times the odds of being overweight (95% CI= 1.02, 1.10) and 1.07 times the odds of being obese (95% CI= 1.02, 1.12) if the youth's school was near a fast food establishment. 2. Attending a school within one half mile of a fast food establishment was associated with a 0.10 unit increase in BMI (95% CI=0.03, 0.16) compared with youth whose schools were not near a fast food restaurant. A 0.10 unit increase in BMI translates to 0.56 lb. for a 5'3" 110 lb 14 year old. 3. Attending schools that have a fast food restaurant within 1/4 mile (β=0.12, 95% CI: 0.04, 0.20; p<0.01) and between 1/4 and 1/2 mile (β= 0.14 95% CI: 0.06, 0.23; p<0.01) also showed a statistically significant association with weight status. The distance "within 1/2 mile to 3/4 mile" was not statistically associated with youth's weight status. 4. There was no statistically significant relationship between the number (4 vs.3) of fast-food restaurants within .5 mile of school and a students' BMI, suggesting that the density of fast food restaurants near schools may not be relevant to youth's obesity. 5. Attending a school located near a fast-food restaurant was associated with a 0.13 unit increase (95% CI: 0.05, 0.20) in BMI after controlling for the presence of nearby gas stations, motels and grocery stores. 6. Among black students, but not other race/ethnic populations, the associations between being near a fast food restaurant and BMI were larger than were baseline associations representing all students (β=0.20; 95% CI=0.04, 0.36). 7. The associations between proximity of a fast food restaurant & weight status for students at urban schools (β=0.16; 95% CI=0.06, 0.25) were larger than were baseline associations representing all students. NUTRITION: 8. Youth attending schools located near a fast food restaurant had significantly lower odds of reporting that they consumed vegetables (adjusted OR = 0.97, CI=0.93, 1.00, p <0.10) or juice (adjusted OR = 0.97, CI=0.94, 1.00, p <0.10) on the day prior to the survey than did other youth. 9. Attending a school near a fast food restaurant was associated with significantly higher odds of reporting soda consumption on the day before the survey (adjusted OR=1.05, 95% CI=1.00, 1.11). 10. When the analysis was restricted to limited service restaurants that were classified as "burger" establishments, a significantly higher likelihood of reporting fried potato consumption was reported (OR= 1.02; 95% CI= 1.00, 1.04).	**Positive Association for Overweight/obesity in the Study Population** **Positive Association for Nutrition in the Study Population** Study design = Association Effect size = Positive associations for overweight/obesity and nutrition in the study population	**Maintenance** Not Applicable Only cross-sectional data provided. **Sampling / Representativeness** High Sample is representative at the school-district level (statistical analyses not reported)
Author Burdette, Whitaker (2004) Ohio **Design** Association Cross-sectional study **Duration** Not Applicable Only cross-sectional data provided.	**Measures** *Access to healthy food options and healthy living environments* (residential proximity to fast food restaurants, and number of serious crimes in an area, and residential proximity to nearest playground) **Outcome(s) Affected** Overweight/obesity (height and weight measured at most recent WIC visit)	**No Association for Overweight/obesity in the Study Population (Neighborhood Availability of Restaurants)** **(Assumption: Greater access to fast food restaurants leads to greater access to unhealthy foods which leads to increased consumption of unhealthy foods resulting in higher body mass index and overweight/obesity.)** **Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. There was no difference in mean distance to the nearest playground or fast food restaurant when comparing children with a BMI ≥95th percentile to those with a BMI< 95th percentile (both, p=0.77; fast food: t=0.70 and 0.69, respectively, p=0.91) and when comparing children with a BMI ≥ 85th percentile to those with a BMI < 85th % (both, p=0.32, fast food: t=0.69 and 0.70, respectively, p=0.43). 2. There was no significant correlation between children's BMI z scores and distance to the nearest fast food restaurant. 3. When comparing overweight and non-overweight children, there was no difference in the percentage living in neighborhoods without fast food restaurants (44.0% vs. 44.5%, p=0.84). 4. After controlling for poverty ratio (as a measure of SES), child race, and child sex, fast food restaurant proximity was still not significantly associated with childhood overweight.	**No Association for Overweight/obesity in the Study Population** Study design = Association Effect size = No association for overweight/obesity in the study population	**Maintenance** Not Applicable Only cross-sectional data provided. **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Maddock (2004) United States **Design** Association Cross-sectional study **Duration** Not Applicable Only cross-sectional data provided.	**Measures** *Access to healthy food options* (proximity to fast food restaurants) **Outcome(s) Affected** Overweight/obesity (survey - Behavioral Risk Factor Surveillance System)	**Positive Association for Overweight/obesity in the Study Population (Neighborhood Availability of Restaurants)** **(Assumption: Greater access to fast food restaurants leads to greater access to unhealthy foods which leads to increased consumption of unhealthy foods resulting in higher body mass index and overweight/obesity.)** **Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. The correlation between residents per fast food restaurant and obesity was r=-0.53, p<0.001. In general, states that ranked low in obesity tended to have more residents per fast-food restaurant. 2. The correlation between square miles per restaurant and obesity was r=-0.20, p=0.16. States that ranked low in obesity tended to have more square miles per restaurant, but this finding was not significant. 3. The addition of the square miles per fast food restaurant and residents per fast food restaurant accounted for 6% of the variance in state obesity rates after controlling for population density, ethnicity, age, gender, physical inactivity, and F&V intake ($F[11,49]=8.0$, $p<0.001$, $R^2=0.70$ [adjusted $R^2=0.61$]).	**Positive Association for Overweight/obesity in the Study Population** Study design = Association Effect size = Positive association for overweight/obesity in the study population	**Maintenance** Not Applicable Only cross-sectional data provided. **Sampling / Representativeness** High Representative sample of each state's noninstitutionalized civilian residents age 18 and older (statistical analyses not reported).
Author Jeffery, Baxter (2006) Minnesota **Design** Association Cross-sectional study **Duration** Not Applicable Only cross-sectional data provided.	**Measures** *Access to healthy food options* (residential and workplace proximity to fast food restaurants) **Outcome(s) Affected** Overweight/obesity, eating at fast food and non-fast food restaurants, and physical activity (telephone survey)	**Positive Association for Overweight/obesity in the Study Population (Neighborhood Availability of Restaurants)** **No Association for Overweight/obesity in Men (Neighborhood Availability of Restaurants)** **Positive Association for Nutrition in the Study Population (Neighborhood Availability of Restaurants)** **Positive Association for Physical Activity in the Study Population (Neighborhood Availability of Restaurants)** **(Assumption: Greater access to fast food restaurants leads to greater access to unhealthy foods which leads to increased consumption of unhealthy foods resulting in higher body mass index and overweight/obesity.)** **Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. There was a significant positive association between BMI and frequency of reported eating at "fast food" restaurants ($\beta=0.301$; $p=0.02$). 2. There was no association between BMI and frequency of reported eating at "non-fast food" restaurants ($\beta=-0.034$; $p=0.71$). 3. There was no relationship between BMI and restaurant proximity to home addresses for either men or women. 4. For men only, a significant inverse relationship between BMI and workplace restaurant proximity was found for both "fast" and "non-fast" food ($\beta=-0.029$; $p=0.008$ and $\beta=-0.022$; $p=0.01$, respectively). Men with more restaurants close to their places of work were leaner. NUTRITION: 5. Reporting a higher fat intake (OR=1.128, 95%CI: 1.09-1.16; p=0.001) was associated with significantly higher rates of reported eating at "fast food" restaurants. 6. Vegetable intake (OR=0.837, 95% CI: 0.75-0.93; p=0.001) was inversely related to frequency of reported "fast food" restaurant use. 7. Proximity (< 2 miles) of "fast-food" restaurants to people's homes was not significantly related to the frequency with which they reported eating at these restaurants. 8. Proximity of "non fast-food" restaurants to people's homes was not significantly associated with the frequency with which they reported eating at these restaurants ($\beta=-0.034$, $p=0.71$). PHYSICAL ACTIVITY: 9. The frequency of participating in physical activity (OR=0.916, 95% CI: 0.85-0.99; p=0.03) was inversely related to frequency of reported "fast food" restaurant use.	**Positive Association for Overweight/obesity in the Study Population** **No Association for Overweight/obesity in Men** **Positive Association for Nutrition in the Study Population** **Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive associations for overweight/obesity, nutrition, and physical activity in the study population, no association for overweight/obesity in men	**Maintenance** Not Applicable Only cross-sectional data provided. **Sampling / Representativeness** Low The sample was older than the population average, more female and of higher education. However, it is believed that there was a fairly broad representation of individuals in the geographic area (statistical analyses not reported).

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Powell, Auld (2006) United States **Design** Association Cross-sectional study **Duration** Not Applicable Only cross-sectional data provided.	**Measures** *Access to affordable, healthy food options* (density of full service and fast food restaurants, prices of fruits and vegetables and fast food) **Outcome(s) Affected** Overweight/obesity (BMI), risk for overweight, and dietary consumption (Monitoring the Future survey data; Dun and Bradstreet density measures; American Chamber of Commerce Researchers Association price data)	**No Association for Overweight/obesity in the Study Population (Neighborhood Availability of Restaurants)** **Positive Association for Nutrition in the Study Population (Neighborhood Availability of Restaurants)** **(Assumptions: 1) Higher cost of fast food leads to reduced consumption of fast food which leads to lower body mass index and overweight. 2) Higher cost of fruits and vegetables leads to reduced consumption of fruits and vegetables which leads to higher body mass index and overweight. 3) Increased availability of full-service restaurants leads to higher fruit and vegetable consumption which leads to lower body mass index and overweight. 4) Increased availability of fast food restaurants leads to higher consumption of unhealthy fast food which leads to higher body mass index and overweight.)** **Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. BMI is higher when there are fewer full service restaurants, more fast food restaurants, or higher fruit and vegetable prices, but none of the results are statistically significant. NUTRITION: 2. Increased availability of full service restaurants has a statistically significant relationship with frequent fruit and vegetable consumption. Ten more full service restaurants per capita in the region were associated with a 1.9 percentage point increase in the probability of frequent consumption (p=0.01).	**No Association for Overweight/obesity in the Study Population** **Positive Association for Nutrition in the Study Population** Study design = Association Effect size = No association for overweight/obesity in the study population and nutrition in the study population	**Maintenance** Not Applicable Only cross-sectional data provided. **Sampling / Representativeness** Not Reported
Author Wen, Zhang (2009) Illinois **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Access to healthy food options and healthy living environments* (proximity to restaurants and bars, distance to subway and parks, proximity to restaurants and bars, and access to neighborhood amenities) **Outcome(s) Affected** Physical activity (Metropolitan Chicago Information Center-Metro Survey [MCIC-MS])	**Positive Association for Physical Activity in the Study Population (Neighborhood Availability of Restaurants)** **(Assumption: Greater land-use diversity and access to restaurants, bars, subway, and parks will lead to increased access to places to be active which leads to greater levels of physical activity.)** **Neighborhood Availability of Restaurants** PHYSICAL ACTIVITY: 1. Respondents who lived in neighborhoods that had more access to restaurants and bars were more likely to report one to three times of weekly workout/exercise (OR=1.08; 95% CI; 0.99-1.19; p<0.01) and four times or more weekly workout/exercise (OR=1.14; 95% CI; 1.03-1.26; p<0.05) compared with those who lived in neighborhoods that had less access to restaurants and bars (OR=1.24; 95% CI; 1.05-1.46; p<0.01) and neighborhood social environment (OR=1.37; 95% CI; 1.11-1.69; p<0.05) both were significantly associated with the likelihood of reporting regular exercise in the past year.	**Positive Association For Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
International				
Author Pearce, Hiscock (2008) New Zealand **Design** Association Cross-sectional study **Duration** Not Applicable Only cross-sectional data provided.	**Measures** *Access to healthy food options* (residential proximity to multi-national or local operated fast food restaurants) **Outcome(s) Affected** Overweight/obesity and dietary consumption (survey)	**Negative Association for Overweight/obesity in the Study Population (Neighborhood Availability of Restaurants)** **No Association for Nutrition in the Study Population (Neighborhood Availability of Restaurants)** **(Assumption: Greater access to fast food restaurants leads to greater access to unhealthy foods which leads to increased consumption of unhealthy foods resulting in higher body mass index and overweight/obesity.)** **Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. Contrary to expectations, the odds ratio of being overweight was greater in neighborhoods with poorer access to multi-national fast-food outlets (OR=1.17, 95% CI: 1.03-1.32) compared to neighborhoods with the closest access. [Adjusted model]. 2. There was no association between access to the closest locally operated fast-food outlet, with the most accessible neighborhoods having an OR of being overweight close to the null & CI's that included 1.0. NUTRITION: 3. Consumption of the recommended daily intake of fruit was not associated with neighborhood access to multi-national or locally operated fast-food outlets (OR=1.05 and OR=1.02 respectively, 95% CI's included 1.0). 4. Consumption of the recommended daily intake of vegetables was associated with access to multi-national fast-food outlets. After adjustment for individual SES, neighborhood deprivation and type, neighborhoods with poorer access to multi-national fast-food outlets than the national median had a 17% higher odds of eating the recommended vegetable intake compared to neighborhoods with the best access (OR=1.17, 95% CI: 1.00-1.37). 5. There was no association between neighborhood access to locally operated fast-food outlets and vegetable consumption (OR=0.98, 95% CI: 0.85-1.14).	**Negative Association for Overweight/obesity in the Study Population** **No Association for Nutrition in the Study Population** Study design = Association Effect size = Negative association for overweight/obesity in the study population and no association for nutrition in the study population	**Maintenance** Not Applicable Only cross-sectional data provided. **Sampling / Representativeness** High Evaluation sample was nationally representative of New Zealand (data not reported)
Author Simmons, McKenzie (2005) Australia **Design** Association Cross-sectional study **Duration** Not Applicable Only cross-sectional data provided.	**Measures** *Access to healthy food options* (access to take-out and dine-in restaurants) **Outcome(s) Affected** Overweight/obesity (researcher measured height and weight)	**Positive Association for Overweight/obesity in the Study Population (Neighborhood Availability of Restaurants)** **(Assumptions: 1) Greater access to fast food restaurants leads to greater access to unhealthy foods which leads to increased consumption of unhealthy foods resulting in higher body mass index and overweight/obesity. 2) Greater access to full-service or sit-down restaurants leads to greater access to healthy foods which leads to increased consumption of healthy foods resulting in lower body mass index and overweight/obesity.)** **Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. There was no relationship between availability of restaurants and prevalence of obesity. A similar pattern was found when plotting with availability of eating places and using mean waist and BMI circumference and when dividing eating places into eat-in and take-away establishments. 2. BMI was not significantly related to take-away consumption. 3. Waist circumference was significantly lower among those who never ate take-aways (p=0.0256), but was otherwise similar whether take-aways were eaten <1 time per month or ≥1 time per week.	**Positive Association for Overweight/obesity in the Study Population** Study design = Association Effect size = Positive association for overweight/obesity in the study population	**Maintenance** Not Applicable Only cross-sectional data provided. **Sampling / Representativeness** Low Those who did not participate in the study were younger (49±18 vs. 53±16y, p<0.001), less likely to own their own home (67 vs. 79%, p<0.001), have health insurance (41 vs. 48%, p=0.001), have completed university (13 vs. 17%, p=0.006) or to be in full-time employment (34 vs. 38%, p=0.037) than those who participated. However, the 2 groups were similar in regard to gender and ethnicity.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Crawford, Timperio (2008) Australia **Design** Association Cross-sectional study **Duration** Not Applicable Only cross-sectional data provided.	**Measures** *Access to healthy food options* (density of and proximity to fast food restaurants) **Outcome(s) Affected** Overweight and obesity (researcher measured height and weight)	**Negative Association for Overweight/obesity in the Study Population (Neighborhood Availability of Restaurants)** **(Assumption: Greater access to fast food restaurants leads to greater access to unhealthy foods which leads to increased consumption of unhealthy foods resulting in higher body mass index and overweight/obesity.)** **Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. Among older children, those with at least one fast food outlet within 2km had lower BMI z scores (boys β=-0.49, 95% CI: -0.95,-0.03; girls β=-0.35, 95% CI: -0.69,-0.02; p<0.05 for both). 2. Among fathers, the further they lived from a fast food outlet, the higher their BMI. (β=0.16, 95% CI: 0.06, 0.27; p<0.05). 3. Among older girls, the likelihood of being overweight or obese was reduced by 81% if they had one or more fast food outlets within 2 km of their residential address (OR=0.19, 95% CI: 0.09, 0.41), and by 14% with each additional outlet within 2 km (OR=0.86, 95% CI: 0.74, 0.99). 4. Among fathers, 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 (OR=0.50, 95% CI: 0.31, 0.81), and increased by 13% for each additional kilometer to the nearest fast food outlet (OR=1.13, 95% CI:1.06, 1.20).	**Negative Association for Overweight/ obesity in the Study Population** Study design = Association Effect size = Negative association for overweight/ obesity in the study population	**Maintenance** Not Applicable Only cross-sectional data provided. **Sampling / Representativeness** High Except for the mothers, the prevalence of overweight and obesity in the study sample compares favorably with the most recent population data from the 1995 National Nutrition Survey.

IMPACT TABLES

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
United States						
Author Li, Harmer (2009); Li, Harmer (2008); Li, Harmer (2009) Oregon	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults aged 50-75, 27% lower income 92% White 57% male (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Density of neighborhood fast food outlets MULTI-COMPONENT: 1. Land-use mix and total number of neighborhood locations 2. Neighborhood walkability (street connectivity) 3. Density and access to public transit stations **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** OVERWEIGHT/OBESITY: 1. (cross-sectional data) Using Poisson regression model analyses, a 10% increase in the even distribution of square footage across all land uses (i.e., residential, public [offices and institutions], commercial) was associated with a 25% reduction in prevalence of overweight/obesity ($p<0.01$). 2. (N=1145) Multi-level analyses show that after adjustment for neighborhood- and resident-level socio-demographic characteristics, high walkability was associated with a decrease in 2.65 pounds in weight and 0.62 inches in waist circumference among residents who increased their levels of vigorous physical activity ($p<0.05$). PHYSICAL ACTIVITY: 3. (cross-sectional data) A one unit increase in mixed land use was associated with a 5.76 times increase in walking for transportation ($p<0.001$), a 4.066 times increase in neighborhood walking ($p<0.001$), 1.495 increase in walking for errands ($p<0.047$) and 1.463 times increase for meeting physical activity recommendations ($p=0.025$). 4. (cross-sectional data) The density of public transit stations was associated with more walking for transportation (estimated prevalence = 1.147, $p=0.011$) and meeting physical activity guidelines (estimated prevalence = 1.069, $p=0.03$). 5. Among boys, access to the total number of neighborhood destinations (0.35, $p=0.03$) was positively associated with weekly walking frequency. Total number of accessible destinations score remained significantly positively associated with walking frequency in the multiple regression model ($p<0.05$). 6. (cross-sectional data) Green and open spaces for recreation was also associated with more neighborhood walking (estimated prevalence = 1.119, $p=0.032$) and meeting physical activity requirements (estimated prevalence = 1.065, $p<0.001$). **Street Design** PHYSICAL ACTIVITY: 1. (cross-sectional data) A one standard deviation increase in street connectivity increased walking prevalence by 16% for neighborhood walking ($p=0.034$), 20% for transportation ($p=0.004$) and 11% for errands ($p=0.025$). 2. Among girls, the perceptions of nice houses in the neighborhood ($\beta=2.98$, $p=0.003$); having an easily walkable/cyclable neighborhood ($\beta=2,75$, $p=0.0001$) was significantly positively associated with walking frequency. Easy to walk/cycle remained significantly associated with walking frequency in the multiple regression model ($p<0.05$). **Transportation** PHYSICAL ACTIVITY: 1. (cross-sectional data) The density of public transit stations was associated with more walking for transportation (estimated prevalence = 1.147, $p=0.011$) and meeting physical activity guidelines (estimated prevalence = 1.069, $p=0.03$).	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Mehta, Chang (2008) United States	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 49% Female 67% Non-Hispanic White, 11% Non-Hispanic Black, 15% Hispanic (all races), 7% Other race/ ethnicity (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Restaurant mix (fast-food, full-service) and density **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported
Author Davis, Carpenter (2009) California	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 11-18 year olds, 34% lower- income, 31% White, 10% Asian, 4% Black, 2% Hawaiian, 31% Hispanic, 1% American Indian, 14% Multiple, 7% Other	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Availability of fast-food restaurants near schools **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Burdette, Whitaker (2004) Ohio	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided 3-4 year-olds, 100% lower-income, 76% Black, 23% White (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided Residential proximity to nearest fast food restaurant MULTI-COMPONENT: 1. Residential proximity to nearest playground 2. Neighborhood safety **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Availability of Parks, Playgrounds, Recreation Facilities, and Trails** OVERWEIGHT/OBESITY: 1. There was no difference in mean distance to the nearest playground when comparing children with a BMI ≥95th percentile to those with a BMI<95th percentile (playground: t=0.31; p=0.91) and when comparing children with a BMI ≥ 85th percentile to those with a BMI < 85th percentile (playground: t=0.31; p=0.43). 2. There was no significant correlation between children's BMI z scores and distance to the nearest playground. 3. When comparing overweight and non-overweight children, there was no difference in the percentage living in neighborhoods without playgrounds (3.3% vs. 4.1%, p=0.29). 4. After controlling for poverty ratio (as a measure of SES), child race, and child sex, playground proximity was still not significantly associated with childhood overweight. **Safety-Interpersonal** OVERWEIGHT/OBESITY: 1. The prevalence of children with BMI ≥ 95th percentile and BMI ≥ 85th percentile did not differ statistically across the quintiles of neighborhood crime rate, but did differ significantly for 911 call rate. % BMI ≥95th percentile ranged from 10.7% in the lowest quintile to 9.4% in the highest quintile (p=0.04). %BMI ≥85th percentile ranged from 22.7% in the lowest quintile of call rate to 22.1% in the highest quintile (p=0.02). There was no clear trend suggesting that lower levels of neighborhood safety were associated with a higher prevalence of overweight. 2. After controlling for poverty ratio (as a measure of SES), child race, and child sex, neighborhood safety was still not significantly associated with childhood overweight.	Not Reported
Author Maddock (2004) United States	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided Adults General population	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided Proximity of fast food restaurants **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. Among the covariates, income (-0.55), physical inactivity (0.62), fruit and vegetable consumption (-0.39), percentage of African-Americans (0.39), and males per 100 females (-0.29) all had significant bivariate correlations with obesity (p<0.01 for all). 2. In the multilevel analyses, only median income and males per 100 females were significant predictors of obesity. Multicollinearity among the variables reduced prediction for the individual variables.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Jeffery, Baxter (2006) Minnesota	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided Adults	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided Residential and workplace proximity to fast food restaurants **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported
Author Powell, Auld (2006) United States	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 12-17 year olds	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Restaurant outlet density MULTI-COMPONENT: 1. Access to food and food pricing **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Food Pricing** OVERWEIGHT/OBESITY: 1. When year effects are not considered, fast food and F&V prices both statistically significantly impact BMI (p=0.01). BMI is lower when fast food prices are higher and when F&V prices are lower. 2. When year effects are included, the magnitude of the F&V price effect on BMI drops by more than half and loses statistical significance. The estimated effect on BMI of a $1 change in the price of a fast food meal falls by almost half to 0.31 m/kg^2, but remains statistically significant (p=0.05). 3. BMI is higher when there are fewer full service restaurants, more fast food restaurants, or higher F & V prices, but none of the results are statistically significant. 4. Controlling for year effects, a $1 increase in fast food reduces prevalence of overweight by 2.2 percentage points (p=0.05). 5. A 10% increase in the price of a fast food meal leads to a 0.4% decrease in BMI and a 5.9% decrease in prevalence of overweight. NUTRITION: 6. A $1 increase in the price of fast food is statistically significantly associated with a reduction in frequent consumption of F&V, by 7.3 percentage points when year effects are not included (p=0.01) and by 6.7 percentage points when year effects are included (p=0.01). 7. A $1 increase in the price of F&V is estimated to decrease F & V consumption by 6.3 percentage points (z=2.05, p=0.05), but loses some statistical significance when year effects are included (z=1.79, p=0.10). 8. Increased availability of full service restaurants has a statistically signification relationship with frequent F&V consumption. Ten more full service restaurants per capita in the region were associated with a 1.9 percentage point increase in the probability of frequent consumption (p=0.01).	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Wen, Zhang (2009) Illinois	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. Adults, General Population, 56.29% non-white respondents (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Access to restaurants and bars MULTI-COMPONENT: 1. Residential density, land-use mix, neighborhood amenities (access to health and human services) COMPLEX: 1. Social environment (trust, social capital, norms of reciprocity) **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. Respondents who lived in neighborhoods that had more access to restaurants and bars were more likely to report one to three times of weekly workout/exercise (OR=1.08; 95% CI 0.99-1.19; p<0.01) and four times or more weekly workout/exercise (OR=1.14; 95% CI; 1.03-1.26; p<0.05) compared with those who lived in neighborhoods that had less access to restaurants and bars. 2. Access to restaurants and bars (OR=1.24; 95% CI; 1.05-1.46; p<0.01) was significantly associated with the likelihood of reporting regular exercise in the past year.	1. Correlation analyses (data not shown) suggested that an advantaged neighborhood social environment was positively correlated with access to neighborhood amenities, such as restaurants, bars, libraries, and museums, and to lower pedestrian injury rates, whereas it was negatively correlated with mixed land use, access to subway stations and parks, and access to services. Meanwhile, neighborhoods with more mixed land use had better access to subway and amenities but also had higher pedestrian injury rates. 2. The beneficial effect of neighborhood social environment was significantly stronger for women (data not shown). 3. Access to neighborhood social environment (OR=1.37; 95% CI 1.11-1.69; p<0.05) was significantly associated with the likelihood of reporting regular exercise in the past year.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
International						
Author Pearce, Hiscock (2008) New Zealand	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 15 years and older	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Neighborhood access (proximity) to multinational and locally-operated fast food outlets **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported
Author Simmons, McKenzie (2005) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. General population Adults	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to take-out and dine-in restaurant foods **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported
Author Crawford, Timperio (2008) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Parents, 8-9 year olds, 13-15 year olds, 35.8% Children (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Density of and proximity to fast food outlets **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. 26% of the younger boys and girls, 32% of the older boys and 27% of the older girls were classified as overweight or obese. Among the adults, 63% of fathers and 38% of mothers were overweight or obese.