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Supplemental Table 1. Description of food grouping system

Food Group Name	Food or Beverage Group Description
Breads – high saturated fat	Includes yeast breads and rolls, plain or as toast with >13% kcal from saturated fat.
Breads – low saturated fat	Includes yeast breads and rolls, plain or as toast with ≤13% kcal from saturated fat.
Candy	Includes candy, chocolate, and sweet snacks (fruit rollups, fruit snacks, gelatin, marshmallows, caramel-coated popcorn, and chocolate-covered pretzels or nuts).
Dairy	Includes all cheeses, refrigerated yogurts, sour cream, whipped topping, cream, condensed milk, and evaporated milk.
Desserts	Includes grain-based and dairy-based desserts, such as cookies, pastries, cakes, pies, ice cream, ice cream sandwiches or cones, frozen yogurt, pudding, and flan.
French fries	Includes french fries and fried potatoes.
Fruit	Includes fresh, frozen, canned, or dried fruit.
Legumes	Includes legumes and legume dishes (baked beans, refried beans, beans with pork or franks).
Meat – high saturated fat	Includes red meat (beef, pork, lamb, veal, game, and their organ meats), poultry (chicken, turkey, other birds, and their organ meats), processed meat and poultry (bacon, hot dogs without buns, sausages, ham, and luncheon meats), fish, and shellfish with >13% kcal from saturated fat.
Meat – low saturated fat	Includes red meat (beef, pork, lamb, veal, game, and their organ meats), poultry (chicken, turkey, other birds, and their organ meats), processed meat and poultry (bacon, hot dogs without buns, sausages, ham, and luncheon meats), fish, and shellfish with ≤13% kcal from saturated fat.
Mexican dishes – high saturated fat	Includes tortilla-based Mexican dishes (tacos, burritos, quesadillas, enchiladas, and fajitas filled with combinations of meat, poultry, beans, cheese, and/or condiments; nachos) with >13% kcal from saturated fat.
Mexican dishes – low saturated fat	Includes tortilla-based Mexican dishes (tacos, burritos, quesadillas, enchiladas, and fajitas filled with combinations of meat, poultry, beans, cheese, and/or condiments; nachos) with ≤13% kcal from saturated fat.
Milk	Includes whole, 2%, 1%, and nonfat milk (plain, chocolate, or flavored).
Mixed dishes – high saturated fat	Includes dishes containing combinations of pasta, noodles, rice, other grains, potatoes, red meat, poultry, processed meat and poultry, fish, or shellfish with >13% kcal from saturated fat. Examples: macaroni and cheese, spaghetti with meatballs, lasagna, pasta salad, fried rice, meatloaf, chicken or turkey potpie, and fish/crab cakes.
Mixed dishes – low saturated fat	Includes dishes containing combinations of pasta, noodles, rice, other grains, potatoes, red meat, poultry,

	processed meat and poultry, fish, or shellfish with ≤13% kcal from saturated fat. Examples: spaghetti with tomato sauce, rice with beans, chicken with vegetables, rice, and/or noodles.
Salty snacks	Includes savory salty snacks (tortilla chips, potato chips, corn/cornmeal chips, popcorn, pretzels, crackers, and rice cakes).
Sandwiches – high saturated fat	Includes sandwiches, rolls, wraps, breakfast sandwiches, and hot dogs with >13% kcal from saturated fat.
Sandwiches – low saturated fat	Includes sandwiches, rolls, wraps, breakfast sandwiches, and hot dogs with ≤13% kcal from saturated fat.
Sugar sweetened beverages (SSBs)	Includes sodas, fruit drinks, sports drinks, and energy drinks (regular, sugar-free, and diet).
Vegetables	Includes fresh, frozen, or canned non-starchy vegetables (plain, with breading, with added fat in cooking, and/or sauce).
All other foods	Includes eggs, nuts and seeds, meat substitutes, quick breads, ready-to-eat cereal, starchy vegetables (excluding fried potatoes), vegetable dishes, cereal and granola bars, fats and oils, salad dressings, sauces, condiments, sugars and sweeteners, dips, spreads, soup, hamburgers, pizza, frozen meals, water, coffee, tea, fruit juice, vegetable juice, milk shakes, meal replacement beverages, and alcohol.

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Supplemental Table 2. Mean *z*-score of food group intake by dietary cluster for the segment of diet obtained outside the fast food restaurant among US children[1]

| | Non-fast food dietary cluster[2] | | |
| | Prudent | Western | |
	n=2,266 (49.7%)	n=2,200 (50.3%)	Difference[3]
Food Group[4]			
Sugar sweetened beverages[5]	**-0.46 ± 0.52**[6]	**0.47 ± 1.15**	**0.93**
Salty snacks[7]	**-0.30 ± 0.66**	**0.31 ± 1.18**	**0.62**
Sandwiches - high fat	**-0.24 ± 0.67**	**0.24 ± 1.21**	0.48
Candy[8]	**-0.21 ± 0.61**	**0.22 ± 1.25**	0.43
French fries	-0.19 ± 0.55	**0.20 ± 1.28**	0.38
Desserts[9]	-0.13 ± 0.84	0.13 ± 1.13	0.26
Meat - high fat[10]	-0.13 ± 0.76	0.13 ± 1.18	0.25
Mexican dishes - high fat	-0.11 ± 0.75	0.11 ± 1.20	0.22
Mixed dishes - high fat[11]	-0.04 ± 0.91	0.04 ± 1.09	0.08
Breads - high fat	0.00 ± 0.94	0.00 ± 1.05	0.01
Milk	**0.41 ± 1.10**	**-0.42 ± 0.65**	**0.83**
Fruit	**0.35 ± 1.18**	**-0.36 ± 0.59**	**0.71**
Mixed dishes - low fat	**0.24 ± 1.14**	**-0.25 ± 0.75**	0.48
Dairy[12]	**0.21 ± 1.22**	**-0.22 ± 0.64**	0.44
Breads - low fat	0.13 ± 1.12	-0.14 ± 0.84	0.27
Vegetables[13]	0.13 ± 1.21	-0.13 ± 0.70	0.26
Legumes	0.12 ± 1.21	-0.12 ± 0.71	0.24
Mexican dishes - low fat	0.03 ± 1.02	-0.03 ± 0.98	0.05
Meat - low fat	0.02 ± 0.98	-0.02 ± 1.02	0.04
Sandwiches - low fat	-0.02 ± 0.90	0.02 ± 1.09	0.05
All other foods[14]	0.20 ± 1.02	-0.21 ± 0.93	0.41

Bold underlined text indicates within cluster mean *z*-scores of magnitude ≥0.2 and differences between mean *z*-scores for the Prudent and Western clusters ≥0.5.

[1] Data for children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010.

[2] Cluster analysis was performed to identify dietary patterns for the remainder of diet consumed outside the fast food restaurant using standardized *z*-scores (mean=0, standard error=1) for the percentage of energy intake from each food group for all items excluding those obtained from fast food restaurants.

[3] Absolute value of the difference between mean *z*-scores for the Prudent and Western clusters.

[4] Where indicated, food groups were separated by high (>13% kcal) and low (≤13% kcal) saturated fat based on cutpoints established by the International Choices Programme.

[5] Includes colas, fruit drinks, sports drinks, and energy drinks.

[6] Mean ± standard deviation *z*-score for each food group by dietary pattern (cluster), all such values.

[7] Includes savory salty snacks such as potato, tortilla, or corn chips; popcorn; pretzels; and crackers.

[8] Includes candy, chocolate, and sweet snacks such as gummy fruit snacks and caramel-coated popcorn.

[9] Includes grain-based and dairy-based desserts, such as cookies, cakes, pies, pastries, ice cream, pudding, and cheesecake.

[10] Includes red meat, poultry, processed meat, and fish.

[11] Includes dishes made with pasta, rice, grains, and/or meat, poultry, or fish.

[12] Includes cheese, yogurt, cream, sour cream, and other dairy products, excluding fluid milk and dairy-based desserts.

[13] Includes fresh, frozen, or canned non-starchy vegetables.

[14] Includes all other food and beverage groups.

Supplemental Table 3. Total dietary intake and dietary intake excluding fast food for fast food non-, low-, and high-consumers among US children based on 2 non-consecutive 24-hour dietary recalls[1]

	Total intake			Intake excluding fast food[2]		
	Fast food non-consumers[3]	Fast food low-consumers	Fast food high-consumers	Fast food non-consumers	Fast food low-consumers	Fast food high-consumers
	n=2,299 (49.9%)	n=1,683 (39.5%)	n=484 (10.5%)	n=2,299 (49.9%)	n=1,683 (39.5%)	n=484 (10.5%)
Food Groups, % kcal[4]						
Breads - high fat	0.2 ± 0.1[5]	0.2 ± 0.1	0.2 ± 0.1	0.2 ± 0.1	0.2 ± 0.1	0.3 ± 0.1
Breads - low fat	2.3 ± 0.1	2.1 ± 0.2	1.6 ± 0.3	2.3 ± 0.1	2.3 ± 0.2	1.8 ± 0.3
Candy[6]	2.7 ± 0.2	3.2 ± 0.2	2.5 ± 0.3	2.7 ± 0.2	**3.8 ± 0.2***	**4.0 ± 0.4***
Dairy[7]	2.4 ± 0.2	2.0 ± 0.1	**1.2 ± 0.2***,**	2.4 ± 0.2	2.2 ± 0.2	**1.4 ± 0.3****
Desserts[8]	9.2 ± 0.3	8.7 ± 0.4	**6.9 ± 0.6***	9.2 ± 0.3	9.5 ± 0.4	9.5 ± 1.0
French fries	0.9 ± 0.1	**3.0 ± 0.2***	**5.5 ± 0.3***,**	0.9 ± 0.1	1.1 ± 0.1	1.1 ± 0.2
Fruit	3.4 ± 0.2	2.8 ± 0.2	**1.5 ± 0.1***,**	3.4 ± 0.2	3.3 ± 0.2	2.8 ± 0.4
Legumes	0.5 ± 0.1	0.4 ± 0.1	0.3 ± 0.1	0.5 ± 0.1	0.5 ± 0.1	0.5 ± 0.2
Meat - high fat[9]	3.3 ± 0.2	3.1 ± 0.2	2.7 ± 0.3	3.3 ± 0.2	3.2 ± 0.3	2.7 ± 0.3
Meat - low fat	4.2 ± 0.2	4.5 ± 0.3	**6.4 ± 0.5***,**	4.2 ± 0.2	3.3 ± 0.3	4.4 ± 0.5
Mexican dishes - high fat	2.3 ± 0.3	2.6 ± 0.3	3.3 ± 0.5	2.3 ± 0.3	2.3 ± 0.2	3.4 ± 0.8
Mexican dishes - low fat	0.9 ± 0.1	1.0 ± 0.1	1.2 ± 0.3	0.9 ± 0.1	0.8 ± 0.1	1.2 ± 0.4
Milk	10.3 ± 0.3	**8.9 ± 0.3***	**4.8 ± 0.3***,**	10.3 ± 0.3	10.3 ± 0.4	**8.0 ± 0.5***,**
Mixed dishes - high fat[10]	3.1 ± 0.2	3.2 ± 0.3	2.3 ± 0.4	3.1 ± 0.2	3.7 ± 0.3	2.9 ± 0.6
Mixed dishes - low fat	7.7 ± 0.4	**5.4 ± 0.4***	**4.1 ± 0.5***	7.7 ± 0.4	**6.1 ± 0.4***	**4.9 ± 0.7***
Salty snacks[11]	5.5 ± 0.2	5.2 ± 0.3	**3.9 ± 0.3***,**	5.5 ± 0.2	6.1 ± 0.3	6.5 ± 0.6
Sandwiches - high fat	5.1 ± 0.2	4.8 ± 0.3	**6.7 ± 0.7****	5.1 ± 0.2	4.3 ± 0.3	4.8 ± 0.7
Sandwiches - low fat	4.8 ± 0.2	4.6 ± 0.3	5.3 ± 0.7	4.8 ± 0.2	4.5 ± 0.3	**3.6 ± 0.4***
SSBs[12]	5.6 ± 0.2	**6.7 ± 0.3***	**9.3 ± 0.6***,**	5.6 ± 0.2	**7.0 ± 0.3***	**11.1 ± 0.9***,**
Vegetables[13]	0.7 ± 0.1	0.5 ± 0.1	0.5 ± 0.1	0.7 ± 0.1	0.6 ± 0.1	**0.4 ± 0.1***
All other foods[14]	25.2 ± 0.6	27.0 ± 0.5	**29.8 ± 1.1***,**	25.2 ± 0.6	25.0 ± 0.5	24.7 ± 1.4
Total energy, kcal/d	1770 ± 18	**1985 ± 30***	**1993 ± 45***	1770 ± 18	**1672 ± 25***	**1132 ± 24***,**

* Significantly different than fast food non-consumers, ** significantly different than fast food low-consumers (*P*<0.05 with Bonferroni correction for multiple comparisons, *t* test).
[1] Data for children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010. Values are nationally representative percentages and account for complex survey design and weights.
[2] Excludes foods and beverages reported from fast food restaurants.
[3] Fast food consumers are defined by the 2-day mean percentage of total calorie intake from fast food restaurants: non-consumers, 0% kcal from fast food; low-consumers, 0.1 to 30% kcal from fast food; high-consumers, >30% kcal from fast food.

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[4] Expressed as % total kcal (total intake) or % non-fast food kcal (intake excluding fast food). Where indicated, food groups were separated by high (>13% kcal) and low (≤13% kcal) saturated fat based on cutpoints established by the International Choices Programme.

[5] Mean ± standard error, all such values.

[6] Includes candy, chocolate, and sweet snacks such as gummy fruit snacks and caramel-coated popcorn.

[7] Includes cheese, yogurt, cream, sour cream, and other dairy products, excluding fluid milk and dairy-based desserts.

[8] Includes grain-based and dairy-based desserts, such as cookies, cakes, pies, pastries, ice cream, pudding, and cheesecake.

[9] Includes red meat, poultry, processed meat, and fish.

[10] Includes dishes made with pasta, rice, grains, and/or meat, poultry, or fish.

[11] Includes savory salty snacks such as potato, tortilla, or corn chips; popcorn; pretzels; and crackers.

[12] SSBs, sugar sweetened beverages. Includes colas, fruit drinks, sports drinks, and energy drinks.

[13] Includes fresh, frozen, or canned non-starchy vegetables.

[14] Includes all other food and beverage groups.

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Supplemental Table 4. Sociodemographic predictors of fast food consumption and dietary pattern for the remainder of intake among US children[1]

	Prudent dietary pattern[2]			Western dietary pattern		
	FF non-consumer[3]	FF low-consumer	FF high-consumer	FF non-consumer	FF low-consumer	FF high-consumer
	1321	792	153	978	891	331
Age Group						
2-5 y	1.0	1.18 (0.81, 1.73)	**0.16 (0.09, 0.30)**	**0.26 (0.17, 0.39)**	**0.28 (0.18, 0.44)**	**0.06 (0.03, 0.13)**
6-11 y	1.0	0.86 (0.63, 1.18)	**0.31 (0.16, 0.60)**	**0.65 (0.49, 0.87)**	**0.62 (0.48, 0.82)**	**0.31 (0.22, 0.43)**
12-18 y	1.0	1.0	1.0	1.0	1.0	1.0
Gender						
Male	1.0	1.0	1.0	1.0	1.0	1.0
Female	1.0	1.16 (0.82, 1.63)	0.83 (0.50, 1.38)	0.93 (0.73, 1.18)	1.09 (0.81, 1.45)	1.08 (0.76, 1.52)
Race/ethnicity						
Non-Hispanic white	1.0	1.0	1.0	1.0	1.0	1.0
Non-Hispanic black	1.0	0.98 (0.67, 1.42)	1.72 (0.99, 3.01)	**1.69 (1.21, 2.35)**	**1.87 (1.23, 2.84)**	**2.45 (1.50, 4.01)**
Mexican-American	1.0	0.98 (0.63, 1.51)	0.89 (0.48, 1.65)	0.68 (0.45, 1.03)	0.61 (0.34, 1.12)	0.81 (0.37, 1.76)
Parental education						
< HS	1.0	1.0	1.0	1.0	1.0	1.0
HS[4]	1.0	0.99 (0.57, 1.74)	0.84 (0.37, 1.91)	1.03 (0.65, 1.63)	0.75 (0.49, 1.16)	0.74 (0.36, 1.50)
Some college	1.0	**0.56 (0.35, 0.89)**	1.56 (0.79, 3.04)	0.74 (0.50, 1.08)	0.76 (0.46, 1.26)	0.60 (0.27, 1.32)
College degree	1.0	**0.38 (0.23, 0.65)**	1.00 (0.47, 2.12)	**0.52 (0.30, 0.92)**	**0.36 (0.20, 0.66)**	**0.27 (0.11, 0.69)**
Household income[5]						
≤130%	1.0	1.0	1.0	1.0	1.0	1.0
131 - 185%	1.0	1.02 (0.56, 1.87)	0.96 (0.49, 1.89)	1.02 (0.64, 1.63)	1.03 (0.65, 1.63)	1.02 (0.63, 1.66)
186-350%	1.0	**1.74 (1.12, 2.73)**	1.67 (0.88, 3.17)	1.04 (0.72, 1.49)	1.12 (0.82, 1.54)	1.55 (0.90, 2.66)
>350%	1.0	**2.65 (1.56, 4.51)**	1.13 (0.58, 2.19)	1.08 (0.73, 1.61)	**1.61 (1.12, 2.32)**	1.51 (0.79, 2.86)

[1] Data for children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010. Values are relative risk ratios (95% CI) from multinomial logistic regression model of eating behavior jointly defined by fast food consumption and dietary pattern on all sociodemographic predictors simultaneously (all such values). All values account for complex survey design and weights. Ratios represent the odds of belonging to the specified eating behavior category compared to being a Prudent fast food non-consumer (reference outcome) for the specified sociodemographic group compared to the reference exposure group. Adjusted for all other sociodemographic factors, 2-day mean total energy intake (age-group specific quintiles of kcal), and weight status (non-overweight/obese, overweight, and obese). FF, fast food; HS, high school.

[2] Dietary patterns for the remainder of intake outside the fast food restaurant were determined by cluster analysis using standardized z-scores for the percentage of non-fast food energy intake from each food group.

[3] Fast food consumption is defined by the 2-day mean percentage of total calorie intake from fast food restaurants: non-consumers, 0% kcal from fast food; low-consumers, 0.1 to 30% kcal from fast food; high-consumers, >30% kcal from fast food.

[4] Graduated from high school (HS) or completed General Educational Development test.

[5] Household income expressed as a percentage of the federal poverty level.

Supplemental Table 5. Fast food intake by degree of fast food consumption among US children based on 2 non-consecutive 24-hour dietary recalls[1]

	Fast food non-consumers[2]	Fast food low-consumers	Fast food high-consumers
	n=2,299 (49.9%)	n=1,683 (39.5%)	n=484 (10.5%)
Food Groups, % fast food kcal[3]			
Pizza	0	19.5 ± 1.4[4]	17.8 ± 2.1
Hamburgers	0	10.7 ± 1.2	12.1 ± 1.5
French fries	0	11.7 ± 0.9	11.6 ± 0.9
Sandwiches - high fat[5]	0	6.6 ± 0.9	9.1 ± 1.2
Sandwiches - low fat	0	5.5 ± 0.9	7.2 ± 1.2
SSBs[6]	0	5.5 ± 0.4	7.1 ± 0.7
Chicken nuggets/tenders	0	7.9 ± 0.6	6.5 ± 0.9
Mexican dishes	0	6.3 ± 1.1	5.0 ± 1.1
Other meats[7]	0	5.2 ± 0.6	4.9 ± 0.7
Desserts[8]	0	6.6 ± 1.2	3.5 ± 0.6
Mixed dishes - low fat[9]	0	1.7 ± 0.3	2.6 ± 0.6
Milk	0	1.4 ± 0.4	0.6 ± 0.3
Fruits and vegetables[10]	0	0.8 ± 0.1	0.5 ± 0.2
All other foods[11]	0	10.6 ± 0.9	11.6 ± 1.1
Total fast food energy, kcal/d	0	313 ± 8	861 ± 31
Fat, % fast food kcal	0	40.2 ± 0.4	40.4 ± 0.5
Saturated fat, % fast food kcal	0	13.3 ± 0.3	13.0 ± 0.2

[1] Data for children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010. Values are nationally representative percentages and account for complex survey design and weights. Fast food intake includes all foods and beverages obtained from fast food restaurants.

[2] Fast food consumers are defined by the 2-day mean percentage of total calorie intake from fast food restaurants: non-consumers, 0% kcal from fast food; low-consumers, 0.1 to 30% kcal from fast food; high-consumers, >30% kcal from fast food.

[3] Expressed as the percentage of fast food energy intake (% fast food kcal). Where indicated, food groups were separated by high (>13% kcal) and low (≤13% kcal) saturated fat based on cutpoints established by the International Choices Programme.

[4] Mean ± standard error, all such values.

[5] Includes sandwiches, wraps, breakfast sandwiches, and hot dogs.

[6] SSBs, sugar sweetened beverages. Includes colas, fruit drinks, sports drinks, and energy drinks.

[7] Includes all meats excluding chicken nuggets/tenders, such as fried chicken, bacon, sausage, and battered fried shrimp or fish sticks.

[8] Includes grain-based and dairy-based desserts, such as soft serve ice cream cones, ice cream and sundaes, cookies, fried apple pies, and doughnuts.

[9] Includes dishes made with pasta, rice, grains, and/or meat, poultry, or fish containing ≤13% kcal from saturated fat, such as rice- or noodle-based Asian dishes and pasta dishes.

[10] Includes all fruit and non-starchy vegetables, including salads.

[11] Includes all other food and beverage groups, each contributing <5% of fast food energy intake, including breads, dairy, salty snacks, high-fat mixed dishes, legumes, candy, eggs, nuts and seeds, meat substitutes, quick breads, ready-to-eat cereal, starchy vegetables (excluding fried potatoes), vegetable dishes, cereal and granola bars, fats and oils, salad

dressings, sauces, condiments, sugars and sweeteners, dips, spreads, soup, frozen meals, water, coffee, tea, fruit juice, vegetable juice, milk shakes, meal replacement beverages, and alcohol.

Supplemental Table 6. Mean z-score of food group intake by dietary cluster for intake from fast food restaurants among US children[1]

	Fast food dietary cluster[2]		
	Milk	Traditional fast foods	Pizza
Food Group[3]	n=54 (2.5%)	n=788 (36.4%)	n=1,325 (61.1%)
Milk	**5.52 ± 2.79**[4]	-0.13 ± 0.21	-0.14 ± 0.16
Fruits and vegetables[5]	0.18 ± 0.95	-0.02 ± 0.70	0.01 ± 1.14
Mixed dishes - low fat[6]	-0.21 ± 0.00	-0.18 ± 0.23	0.11 ± 1.25
Sandwiches - low fat[7]	-0.26 ± 0.30	-0.14 ± 0.63	0.09 ± 1.17
Pizza	**-0.48 ± 0.28**	**-0.51 ± 0.22**	**0.32 ± 1.16**
Sugar sweetened beverages[8]	**-0.44 ± 0.26**	**0.40 ± 1.33**	-0.22 ± 0.66
Chicken nuggets/tenders	**0.53 ± 1.15**	**0.57 ± 1.41**	**-0.36 ± 0.25**
French fries	**0.34 ± 0.83**	**0.81 ± 1.19**	**-0.49 ± 0.36**
Hamburgers	0.11 ± 0.88	**0.66 ± 1.36**	**-0.39 ± 0.30**
Desserts[9]	-0.18 ± 0.47	-0.15 ± 0.46	0.10 ± 1.22
Sandwiches - high fat	-0.19 ± 0.51	-0.24 ± 0.36	0.15 ± 1.22
Mexican dishes	-0.25 ± 0.16	-0.24 ± 0.29	0.15 ± 1.24
Other meats[10]	**-0.31 ± 0.19**	-0.25 ± 0.36	0.16 ± 1.22
All other foods[11]	-0.15 ± 0.71	-0.18 ± 0.54	0.11 ± 1.19

Bold underlined text indicates within cluster mean z-scores of magnitude ≥0.3.

[1] Data for children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010.

[2] Cluster analysis was performed to identify dietary patterns for all foods and beverages consumed from fast food restaurants using standardized z-scores (mean=0, standard error=1) for the percentage of fast food energy intake from each food group.

[3] Where indicated, food groups were separated by high (>13% kcal) and low (≤13% kcal) saturated fat.

[4] Mean ± standard deviation z-score for each food group by dietary pattern (cluster), all such values

[5] Includes all fruit and non-starchy vegetables, including salads.

[6] Includes dishes made with pasta, rice, grains, and/or meat, poultry, or fish containing ≤13% kcal from saturated fat, such as rice- or noodle-based Asian dishes and pasta dishes.

[7] Includes sandwiches, wraps, breakfast sandwiches, and hot dogs.

[8] Includes colas, fruit drinks, sports drinks, and energy drinks.

[9] Includes grain-based and dairy-based desserts, such as soft serve ice cream cones, ice cream and sundaes, cookies, fried apple pies, and doughnuts.

[10] Includes all meats excluding chicken nuggets/tenders, such as fried chicken, bacon, sausage, and battered fried shrimp or fish sticks.

[11] Includes all other food and beverage groups, each contributing <5% of fast food energy intake, including breads, dairy, salty snacks, high-fat mixed dishes, legumes, candy, eggs, nuts and seeds, meat substitutes, quick breads, ready-to-eat cereal, starchy vegetables (excluding fried potatoes), vegetable dishes, cereal and granola bars, fats and oils, salad dressings, sauces, condiments, sugars and sweeteners, dips, spreads, soup, frozen meals, water, coffee, tea, fruit juice, vegetable juice, milk shakes, meal replacement beverages, and alcohol.

Supplemental Table 7. Multivariable-adjusted odds ratio (95% CI) for consuming a Western dietary pattern for the remainder of diet by weekly frequency of fast food consumption among US children[1]

	Weekly Frequency of Fast Food Consumption[2]		
	Non-consumer	**Low-consumer**	**High-consumer**
No. of participants[3]	1623 (33.8%)	2392 (55.5%)	398 (10.7%)
Fast food frequency (meals per week)[4]	0.0	1 (1, 3)	5 (4, 21)
Multivariable-adjusted OR			
Model 1[5]	1.0 (ref)	1.29 (0.98, 1.70)	2.44 (1.49, 3.99)
Model 2[6]	1.0	1.30 (0.98, 1.72)	2.31 (1.38, 3.86)
Model 3[7]	1.0	1.29 (0.97, 1.71)	2.27 (1.35, 3.79)
Multivariable-adjusted probability of Western dietary pattern[8]	44.6 ± 2.9	51.0 ± 1.7	64.6 ± 5.4

[1] Data for 4,413 children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010. All models account for complex survey design and are weighted to be nationally representative. Dietary patterns for the remainder of intake outside the fast food restaurant were determined by cluster analysis using standardized z-scores for the percentage of non-fast food energy intake from each food group.

[2] Fast food consumption is defined by the weekly frequency of fast food meals reported on the Diet, Behavior, and Nutrition Questionnaire: non-consumers, 0 meals/week; low-consumers, 1-3 meals/week; high-consumers, 4+ meals/week.

[3] Values are number in sample; percentages adjusted to be nationally representative in parentheses.

[4] Values are medians; ranges in parentheses.

[5] Odds ratios (95% CI) for Western diet comparing fast food consumers to non-consumers (reference) derived from logistic regression models of Western dietary pattern for the remainder of diet on fast food frequency, adjusted for age (age, age^2), gender, race/ethnicity (Non-Hispanic white, Non-Hispanic black, Mexican American, and other race/ethnicities), income (household income ≤130%, 131-185%, 186-350%, >350% of Federal Poverty Level), and parental education (<high school, high school, some college, college degree).

[6] Model 2 additionally adjusted for 2-day mean total energy intake (age-group specific quintiles of kcal/d).

[7] Model 3 additionally adjusted for weight status (non-overweight/obese, overweight, and obese).

[8] Adjusted predicted probability ± standard error of having a Western dietary pattern for the remainder of diet by frequency of fast food consumption from logistic regression model 3.

Supplemental Table 8. Weight status and total dietary intake by frequency of fast food consumption and dietary pattern for the remainder of diet among US children[1]

	Prudent dietary pattern[2]			Western dietary pattern			
	FF non-consumer[3]	FF low-consumer	FF high-consumer	FF non-consumer	FF low-consumer	FF high-consumer	*P* for interaction[4]
No. of participants	939	1169	130	684	1223	268	-
Overweight/obese (%)	27.8 ± 2.5[5]	26.4 ± 2.0	25.5 ± 6.0	28.7 ± 2.2	34.4 ± 2.1	37.9 ± 3.5	0.2
Food Groups (kcal/d)							
Milk	219 ± 7	210 ± 6	207 ± 16	**116 ± 7***	**114 ± 5***	**116 ± 11***	0.9
Fruit	74 ± 3	71 ± 5	**49 ± 4***	**34 ± 4***	**31 ± 2***	**26 ± 4***	0.008
Vegetables[6]	13 ± 1	14 ± 1	18 ± 4	**7 ± 1***	**8 ± 1***	**7 ± 2***	0.6
SSBs[7]	69 ± 6	74 ± 4	99 ± 12	**160 ± 9***	**174 ± 7***	**207 ± 13***	0.6
French fries	32 ± 6	32 ± 4	50 ± 16	44 ± 5	52 ± 4	**75 ± 9***	0.6
Nutrients							
Total energy (kcal/d)	1819 ± 41	1807 ± 20	1853 ± 80	1886 ± 50	1910 ± 31	**2180 ± 75***	0.1
Fat (% kcal)	31.8 ± 0.3	32.0 ± 0.3	31.2 ± 0.9	**33.2 ± 0.3***	**34.1 ± 0.3***	**34.2 ± 0.5***	0.3
Fiber (g/1000 kcal)	8.3 ± 0.2	7.9 ± 0.2	**7.4 ± 0.3***	**6.5 ± 0.1***	**6.2 ± 0.1***	**5.9 ± 0.2***	0.7
Calcium (mg/1000 kcal)	645 ± 12	639 ± 9	629 ± 26	**497 ± 12***	**492 ± 8***	**477 ± 15***	0.99

* Significantly different from Prudent fast food non-consumers (*P*<0.05 with Bonferroni correction for multiple comparisons, *t* test).

[1] Data for 4,413 children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010. All results account for complex survey design and are weighted to be nationally representative. Each outcome was included as the dependent variable in a separate logistic (overweight/obesity) or linear (dietary outcomes) regression model with frequency of fast food consumption, dietary pattern for the remainder of diet, and fast food by dietary pattern interaction terms. All models were adjusted for age (age, age^2), gender, race/ethnicity (Non-Hispanic white, Non-Hispanic black, Mexican American, and other race/ethnicities), income (household income ≤130%, 131-185%, 186-350%, >350% of Federal Poverty Level), parental education (<high school, high school, some college, college degree), 2-day mean total energy intake (age-group specific quintiles), and weight status (non-overweight/obese, overweight, and obese) where appropriate. FF, fast food; SSB, sugar sweetened beverage.

[2] Dietary patterns for the remainder of intake outside the fast food restaurant were determined by cluster analysis using standardized *z*-scores for the percentage of non-fast food energy intake from each food group.

[3] Fast food consumption is defined by the weekly frequency of fast food meals reported on the Diet, Behavior, and Nutrition Questionnaire: non-consumers, 0 meals/week; low-consumers, 1-3 meals/week; high-consumers, 4+ meals/week.

[4] Wald test of joint significance of interaction product terms for low- and high-fast food consumption by Western dietary pattern.

[5] Adjusted mean value ± standard error of outcome by combination of fast food consumption and dietary pattern (all such values).

[6] Includes fresh, frozen, or canned non-starchy vegetables.

[7] Includes colas, fruit drinks, sports drinks, and energy drinks.

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Supplemental Table 9. Independent associations of frequency of fast food consumption and dietary pattern for the remainder of diet with weight status and total dietary intake among US children[1]

	Low fast food consumption[2]	High fast food consumption	Western dietary pattern[3]
Overweight/obese (%)			
Model 1 (including fast food only)[4]	2.4 (-2.9, 7.7)[5]	5.6 (-1.4, 12.7)	-
Model 2 (including fast food and dietary pattern)[6]	2.1 (-3.2, 7.3)	4.6 (-2.8, 11.9)	**6.0 (1.2, 10.8)**
Food Groups (kcal/d)			
Milk			
Model 1 (including fast food only)	-11 (-25, 3)	**-22 (-43, -1)**	-
Model 2 (including fast food and dietary pattern)	-6 (-17, 6)	-5 (-22, 12)	**-98 (-109, -88)** [*,**]
Fruit			
Model 1 (including fast food only)	-5 (-10, 1)	**-20 (-29, -11)**	-
Model 2 (including fast food and dietary pattern)	-2 (-8, 3)	**-14 (-22, -5)**	**-38 (-45, -32)** [*,**]
Vegetables[7]			
Model 1 (including fast food only)	0 (-2, 2)	0 (-4, 4)	-
Model 2 (including fast food and dietary pattern)	1 (-1, 3)	1 (-2, 5)	**-7 (-9, -5)** [*,**]
SSB[8]			
Model 1 (including fast food only)	**14 (3, 25)**	**56 (31, 81)**	-
Model 2 (including fast food and dietary pattern)	9 (-1, 19)	**40 (18, 61)**	**98 (86, 110)** [*,**]
French fries			
Model 1 (including fast food only)	5 (-6, 15)	**28 (11, 45)**	-
Model 2 (including fast food and dietary pattern)	4 (-6, 14)	**25 (8, 42)**	**17 (8, 27)** [*]
Nutrients			
Total energy (kcal/d)			
Model 1 (including fast food only)	10 (-58, 78)	**223 (88, 358)**	-
Model 2 (including fast food and dietary pattern)	4 (-67, 74)	**202 (66, 338)**	**112 (56, 169)** [*]
Fat (% kcal)			
Model 1 (including fast food only)	**0.6 (0.1, 1.2)**	0.7 (-0.5, 2.0)	-
Model 2 (including fast food and dietary pattern)	0.5 (0.0, 1.0)	0.4 (-0.8, 1.6)	**1.9 (1.2, 2.7)** [*]
Fiber (g/1000 kcal)			
Model 1 (including fast food only)	**-0.4 (-0.7, -0.1)**	**-1.0 (-1.3, -0.6)**	-
Model 2 (including fast food and dietary pattern)	-0.3 (-0.6, 0.0)	**-0.7 (-1.0, -0.4)**	**-1.7 (-1.9, -1.4)** [*,**]
Calcium (mg/1000 kcal)			
Model 1 (including fast food only)	-14 (-38, 11)	-44 (-91, 2)	-
Model 2 (including fast food and dietary pattern)	-5 (-26, 15)	-19 (-56, 17)	**-148 (-166, -130)** [*,**]

* Association with Western dietary pattern significantly different from association with low fast food consumption, ** Association with Western dietary pattern significantly different from association with high fast food consumption ($P<0.05$, Wald test).

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[1] Data for 4,413 children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010. All results account for complex survey design and are weighted to be nationally representative. Each outcome was included as the dependent variable in a separate logistic (overweight/obesity) or linear (dietary outcomes) regression model with frequency of fast food consumption (dummy variables for low- and high-consumption) as the independent variable. All models were adjusted for age (age, age^2), gender, race/ethnicity (Non-Hispanic white, Non-Hispanic black, Mexican American, and other race/ethnicities), income (household income ≤130%, 131-185%, 186-350%, >350% of Federal Poverty Level), parental education (<high school, high school, some college, college degree), 2-day mean total energy intake (age-group specific quintiles), and weight status (non-overweight/obese, overweight, and obese) where appropriate.

[2] Fast food consumption is defined by the weekly frequency of fast food meals reported on the Diet, Behavior, and Nutrition Questionnaire: non-consumers, 0 meals/week; low-consumers, 1-3 meals/week; high-consumers, 4+ meals/week.

[3] Dietary patterns for the remainder of intake outside the fast food restaurant were determined by cluster analysis using standardized z-scores for the percentage of non-fast food energy intake from each food group.

[4] Model includes fast food consumption as independent variable; associations of outcomes with fast food are unadjusted for dietary pattern.

[5] β (95% CI) (all such values). Coefficients from logistic models were transformed into differences in prevalence of outcome (overweight/obesity) by exposure.

[6] Model includes frequency of fast food consumption and dietary pattern as independent variables; associations of outcomes with fast food are adjusted for dietary pattern for the remainder of diet, and associations of outcomes with dietary pattern for the remainder of diet are adjusted for fast food intake.

[7] Includes fresh, frozen, or canned non-starchy vegetables.

[8] SSBs, sugar sweetened beverages. Includes sodas, fruit drinks, sports drinks, and energy drinks.

Supplemental Table 10. Assessment of potential confounding by physical activity of the multivariable-adjusted odds ratio (95% CI) for consuming a Western dietary pattern for the remainder of diet by fast food consumption among US children [1]

	Fast Food Consumption[2]		
	Non-consumer	**Low-consumer**	**High-consumer**
No. of participants[3]	2,299 (49.9%)	1,683 (39.5%)	484 (10.5%)
Fast food intake, % kcal[4]	0.0	15.4 (0.0, 30.0)	39.6 (30.0, 92.7)
Multivariable-adjusted OR			
Model 1[5]	1.0 (ref)	1.60 (1.31, 1.96)	2.27 (1.68, 3.06)
Model 2[6]	1.0	1.51 (1.23, 1.84)	2.24 (1.63, 3.08)
Model 3[7]	1.0	1.51 (1.24, 1.85)	2.21 (1.60, 3.05)
Model 4[8]	1.0	1.51 (1.24, 1.84)	2.23 (1.60, 3.10)
Multivariable-adjusted probability of Western dietary pattern			
Unadjusted for physical activity[9]	43.9 ± 1.9	54.2 ± 2.3	63.4 ± 3.8
Adjusted for physical activity[10]	43.9 ± 1.9	54.2 ± 2.3	63.6 ± 3.8

[1] Data for 4,466 children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010. All models account for complex survey design and are weighted to be nationally representative. Dietary patterns for the remainder of intake outside the fast food restaurant were determined by cluster analysis using standardized *z*-scores for the percentage of non-fast food energy intake from each food group.

[2] Fast food consumption is defined by the 2-day mean percentage of total calorie intake from fast food restaurants: non-consumers, 0% kcal from fast food; low-consumers, 0.1 to 30% kcal from fast food; high-consumers, >30% kcal from fast food.

[3] Values are number in sample; percentages adjusted to be nationally representative in parentheses.

[4] Values are medians; ranges in parentheses.

[5] Odds ratios (95% CI) for Western diet comparing fast food consumers to non-consumers (reference) derived from logistic regression models of Western dietary pattern for the remainder of diet on fast food consumption, adjusted for age (age, age^2), gender, race/ethnicity (Non-Hispanic white, Non-Hispanic black, Mexican American, and other race/ethnicities), income (household income ≤130%, 131-185%, 186-350%, >350% of Federal Poverty Level), and parental education (<high school, high school, some college, college degree).

[6] Model 1 additionally adjusted for 2-day mean total energy intake (age-group specific quintiles of kcal/d).

[7] Model 2 additionally adjusted for weight status (non-overweight/obese, overweight, and obese).

[8] Model 3 additionally adjusted for physical activity (age-specific quintiles of total MET-minutes per week of work, recreational, and transportation activity among adolescents aged 12-18 years; times per week of "playing or exercising hard" among children aged 2-11 years in 2007-2008; and days per week of at least 60 minutes of activity among children aged 2-11 years in 2009-2010). Children with missing physical activity data (n=181) were included in the analysis using an additional category for missing data.

[9] Adjusted predicted probability ± standard error of having a Western dietary pattern for the remainder of diet by level of fast food consumption from logistic regression model 3, without adjustment for physical activity.

[10] Adjusted predicted probability ± standard error of having a Western dietary pattern for the remainder of diet by level of fast food consumption from logistic regression model 4, with adjustment for physical activity.

Supplemental Table 11. Assessment of potential confounding by physical activity of estimates of weight status and total dietary intake by degree of fast food consumption and dietary pattern for the remainder of diet among US children[1]

	Prudent dietary pattern[2]			Western dietary pattern			
	FF non-consumer[3]	FF low-consumer	FF high-consumer	FF non-consumer	FF low-consumer	FF high-consumer	*P* for interaction[4]
No. of participants	1321	792	153	978	891	331	-
Overweight/obese (%)							
Unadjusted for PA	28.0 ± 1.4[5]	25.1 ± 2.3	31.1 ± 5.9	33.4 ± 2.0	30.8 ± 2.9	**40.4 ± 3.4***	0.9
Adjusted for PA[6]	28.0 ± 1.5	25.1 ± 2.3	31.2 ± 5.8	33.4 ± 2.0	30.5 ± 2.8	**40.2 ± 3.4***	0.9
Food Groups (kcal/d)							
Milk							
Unadjusted for PA	220 ± 6	214 ± 7	**149 ± 14***	**128 ± 7***	**109 ± 5***	**87 ± 7***	0.07
Adjusted for PA	220 ± 6	214 ± 7	**149 ± 15***	**128 ± 7***	**109 ± 5***	**86 ± 7***	0.08
Fruit							
Unadjusted for PA	70 ± 3	74 ± 6	60 ± 5	**35 ± 3***	**30 ± 2***	**21 ± 2***	0.5
Adjusted for PA	71 ± 3	73 ± 6	60 ± 5	**35 ± 3***	**30 ± 2***	**21 ± 2***	0.5
Vegetables[7]							
Unadjusted for PA	15 ± 2	15 ± 2	8 ± 3	**8 ± 1***	**6 ± 1***	**7 ± 2***	0.09
Adjusted for PA	15 ± 2	15 ± 2	8 ± 3	**8 ± 1***	**6 ± 1***	**7 ± 2***	0.1
SSBs[8]							
Unadjusted for PA	69 ± 4	80 ± 6	79 ± 12	**161 ± 6***	**176 ± 9***	**212 ± 14***	0.1
Adjusted for PA	69 ± 4	79 ± 6	81 ± 11	**161 ± 6***	**175 ± 9***	**211 ± 14***	0.1
French fries							
Unadjusted for PA	13 ± 2	**47 ± 6***	**116 ± 14***	**27 ± 3***	**67 ± 4***	**94 ± 9***	0.05
Adjusted for PA	13 ± 2	**47 ± 6***	**116 ± 14***	**27 ± 3***	**67 ± 4***	**94 ± 9***	0.05
Nutrients							
Total energy (kcal/d)							
Unadjusted for PA	1746 ± 19	**1932 ± 36***	1760 ± 55	**1847 ± 25***	**2039 ± 40***	**1934 ± 53***	0.7
Adjusted for PA	1746 ± 19	**1932 ± 36***	1758 ± 56	**1849 ± 26***	**2040 ± 39***	**1930 ± 52***	0.7
Fat (% kcal)							
Unadjusted for PA	31.4 ± 0.3	31.8 ± 0.5	**34.9 ± 0.8***	**33.6 ± 0.4***	**33.9 ± 0.3***	**34.6 ± 0.4***	0.05
Adjusted for PA	31.4 ± 0.3	31.8 ± 0.4	**35.0 ± 0.8***	**33.6 ± 0.4***	**33.9 ± 0.3***	**34.7 ± 0.4***	0.06
Fiber (g/1000 kcal)							
Unadjusted for PA	8.2 ± 0.2	8.1 ± 0.2	**7.1 ± 0.3***	**6.5 ± 0.1***	**6.2 ± 0.1***	**5.7 ± 0.1***	0.4
Adjusted for PA	8.2 ± 0.2	8.1 ± 0.2	**7.1 ± 0.3***	**6.5 ± 0.1***	**6.2 ± 0.1***	**5.7 ± 0.1***	0.4
Calcium (mg/1000 kcal)							
Unadjusted for PA	651 ± 9	639 ± 11	**546 ± 30***	**505 ± 8***	**480 ± 9***	**479 ± 13***	0.02

| Adjusted for PA | 651 ± 9 | 639 ± 11 | **544 ± 30**[*] | **506 ± 8**[*] | **480 ± 8**[*] | **478 ± 13**[*] | 0.02 |

* Significantly different from Prudent fast food non-consumers (*P*<0.05 with Bonferroni correction for multiple comparisons, *t* test).

[1] Data for 4,466 children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010. All results account for complex survey design and are weighted to be nationally representative. Each outcome was included as the dependent variable in a separate logistic (overweight/obesity) or linear (dietary outcomes) regression model with fast food consumption, dietary pattern for the remainder of diet, and fast food by dietary pattern interaction terms. All models were adjusted for age (age, age^2), gender, race/ethnicity (Non-Hispanic white, Non-Hispanic black, Mexican American, and other race/ethnicities), income (household income ≤130%, 131-185%, 186-350%, >350% of Federal Poverty Level), parental education (<high school, high school, some college, college degree), 2-day mean total energy intake (age-group specific quintiles), and weight status (non-overweight/obese, overweight, and obese) where appropriate. FF, fast food; PA, physical activity; SSB, sugar sweetened beverage.

[2] Dietary patterns for the remainder of intake outside the fast food restaurant were determined by cluster analysis using standardized *z*-scores for the percentage of non-fast food energy intake from each food group.

[3] Fast food consumption is defined by the 2-day mean percentage of total calorie intake from fast food restaurants: non-consumers, 0% kcal from fast food; low-consumers, 0.1 to 30% kcal from fast food; high-consumers, >30% kcal from fast food.

[4] Wald test of joint significance of interaction product terms for low- and high-fast food consumption by Western dietary pattern.

[5] Adjusted mean value ± standard error of outcome by combination of fast food consumption and dietary pattern (all such values).

[6] Additionally adjusted for physical activity (age-specific quintiles of total MET-minutes per week of work, recreational, and transportation activity among adolescents aged 12-18 years; times per week of "playing or exercising hard" among children aged 2-11 years in 2007-2008; and days per week of at least 60 minutes of activity among children aged 2-11 years in 2009-2010). Children with missing physical activity data (n=181) were included in the analysis using an additional category for missing data.

[7] Includes fresh, frozen, or canned non-starchy vegetables.

[8] Includes colas, fruit drinks, sports drinks, and energy drinks.

Supplemental Table 12. Assessment of potential confounding by physical activity of the independent associations of fast food consumption and dietary pattern for the remainder of diet with weight status and total dietary intake among US children[1]

	Low fast food consumption[2]	High fast food consumption	Western dietary pattern[3]
Overweight/obese (%)			
Model 1 (including fast food only)[4]	-2.3 (-6.4, 1.9)[5]	**6.7 (0.2, 13.2)**	-
Model 2 (including fast food only, adjusted for PA)[6]	-2.4 (-6.7, 1.9)	**6.6 (0.1, 13.1)**	-
Model 3 (including fast food and dietary pattern)[7]	-2.8 (-6.8, 1.1)	5.6 (-0.9, 12.1)	**5.9 (1.3, 10.5)** [*]
Model 4 (including fast food & dietary pattern, adjusted for PA)[8]	-2.9 (-7.0, 1.1)	5.5 (-1.0, 12)	**5.8 (1.2, 10.4)** [*]
Food Groups (kcal/d)			
Milk			
Model 1 (including fast food only)	**-21 (-34, -8)**	**-65 (-85, -45)**	-
Model 2 (including fast food only, adjusted for PA)	**-21 (-35, -8)**	**-66 (-86, -46)**	-
Model 3 (including fast food and dietary pattern)	**-13 (-25, 0)**	**-49 (-68, -30)**	**-95 (-105, -84)** [*,**]
Model 4 (including fast food & dietary pattern, adjusted for PA)	**-13 (-25, -1)**	**-50 (-69, -30)**	**-95 (-105, -84)** [*,**]
Fruit			
Model 1 (including fast food only)	-5 (-11, 2)	**-19 (-26, -12)**	-
Model 2 (including fast food only, adjusted for PA)	-5 (-12, 2)	**-19 (-27, -12)**	-
Model 3 (including fast food and dietary pattern)	-1 (-8, 6)	**-12 (-20, -5)**	**-39 (-46, -32)** [*,**]
Model 4 (including fast food & dietary pattern, adjusted for PA)	-1 (-8, 6)	**-12 (-20, -5)**	**-39 (-45, -33)** [*,**]
Vegetables[9]			
Model 1 (including fast food only)	-2 (-5, 1)	-4 (-9, 0)	-
Model 2 (including fast food only, adjusted for PA)	-2 (-5, 1)	**-5 (-9, 0)**	-
Model 3 (including fast food and dietary pattern)	-1 (-4, 1)	-3 (-8, 1)	**-7 (-10, -5)** [*]
Model 4 (including fast food & dietary pattern, adjusted for PA)	-2 (-4, 1)	-3 (-8, 1)	**-7 (-9, -5)** [*]
SSB[10]			
Model 1 (including fast food only)	**21 (10, 33)**	**54 (32, 76)**	-
Model 2 (including fast food only, adjusted for PA)	**20 (9, 32)**	**53 (31, 76)**	-
Model 3 (including fast food and dietary pattern)	**13 (1, 24)**	**37 (17, 58)**	**98 (86, 110)** [*,**]
Model 4 (including fast food & dietary pattern, adjusted for PA)	**12 (1, 23)**	**37 (16, 57)**	**97 (85, 109)** [*,**]
French fries			
Model 1 (including fast food only)	**38 (31, 46)**	**80 (66, 94)**	-
Model 2 (including fast food only, adjusted for PA)	**39 (31, 46)**	**80 (66, 94)**	-
Model 3 (including fast food and dietary pattern)	**37 (30, 45)**	**78 (64, 91)**	**13 (4, 22)** [*,**]
Model 4 (including fast food & dietary pattern, adjusted for PA)	**37 (30, 45)**	**78 (64, 92)**	**13 (4, 22)** [*,**]
Nutrients			
Total energy (kcal/d)			

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Model 1 (including fast food only)	**199 (135, 264)**	**82 (4, 160)**	-
Model 2 (including fast food only, adjusted for PA)	**199 (135, 262)**	78 (0, 156)	
Model 3 (including fast food and dietary pattern)	**188 (123, 252)**	63 (-15, 140)	**110 (55, 166)**
Model 4 (including fast food & dietary pattern, adjusted for PA)	**187 (124, 251)**	58 (-20, 136)	**111 (57, 165)**
Fat (% kcal)			
Model 1 (including fast food only)	0.5 (-0.2, 1.2)	**2.1 (1.2, 3.0)**	-
Model 2 (including fast food only, adjusted for PA)	0.5 (-0.2, 1.2)	**2.2 (1.3, 3.1)**	
Model 3 (including fast food and dietary pattern)	0.3 (-0.4, 1.1)	**1.8 (0.8, 2.7)**	**1.9 (1.2, 2.6)** [*]
Model 4 (including fast food & dietary pattern, adjusted for PA)	0.3 (-0.4, 1.1)	**1.9 (0.9, 2.8)**	**1.9 (1.3, 2.6)** [*]
Fiber (g/1000 kcal)			
Model 1 (including fast food only)	**-0.4 (-0.7, 0.0)**	**-1.2 (-1.5, -0.8)**	-
Model 2 (including fast food only, adjusted for PA)	**-0.4 (-0.7, 0.0)**	**-1.2 (-1.5, -0.8)**	
Model 3 (including fast food and dietary pattern)	-0.2 (-0.6, 0.1)	**-0.9 (-1.2, -0.5)**	**-1.7 (-2.0, -1.5)** [*,**]
Model 4 (including fast food & dietary pattern, adjusted for PA)	-0.2 (-0.5, 0.1)	**-0.9 (-1.2, -0.6)**	**-1.7 (-2.0, -1.5)** [*,**]
Calcium (mg/1000 kcal)			
Model 1 (including fast food only)	**-33 (-55, -11)**	**-74 (-109, -40)**	-
Model 2 (including fast food only, adjusted for PA)	**-33 (-55, -10)**	**-76 (-111, -41)**	
Model 3 (including fast food and dietary pattern)	-20 (-41, 1)	**-50 (-83, -17)**	**-144 (-162, -126)** [*,**]
Model 4 (including fast food & dietary pattern, adjusted for PA)	-20 (-41, 1)	**-51 (-84, -19)**	**-143 (-161, -125)** [*,**]

* Association with Western dietary pattern significantly different from association with low fast food consumption, ** Association with Western dietary pattern significantly different from association with high fast food consumption ($P<0.05$, Wald test).

[1] Data for 4,466 children aged 2-18 years from the National Health and Nutrition Examination Survey (NHANES) 2007-2010. All results account for complex survey design and are weighted to be nationally representative. Each outcome was included as the dependent variable in a separate logistic (overweight/obesity) or linear (dietary outcomes) regression model with fast food consumption (dummy variables for low- and high-consumption) as the independent variable. All models were adjusted for age (age, age^2), gender, race/ethnicity (Non-Hispanic white, Non-Hispanic black, Mexican American, and other race/ethnicities), income (household income ≤130%, 131-185%, 186-350%, >350% of Federal Poverty Level), parental education (<high school, high school, some college, college degree), 2-day mean total energy intake (age-group specific quintiles), and weight status (non-overweight/obese, overweight, and obese) where appropriate.

[2] Fast food consumption is defined by the 2-day mean percentage of total calorie intake from fast food restaurants: non-consumers, 0% kcal from fast food; low-consumers, 0.1 to 30% kcal from fast food; high-consumers, >30% kcal from fast food.

[3] Dietary patterns for the remainder of intake outside the fast food restaurant were determined by cluster analysis using standardized z-scores for the percentage of non-fast food energy intake from each food group.

[4] Model includes fast food consumption as independent variable; associations of outcomes with fast food are unadjusted for dietary pattern.

[5] β (95% CI) (all such values). Coefficients from logistic models were transformed into differences in prevalence of outcome (overweight/obesity) by exposure.

[6] Model 1 additionally adjusted for physical activity, PA (age-specific quintiles of total MET-minutes per week of work, recreational, and transportation activity among adolescents aged 12-18 years; times per week of "playing or exercising hard" among children aged 2-11 years in 2007-2008; and days per week of at least 60 minutes of activity among children aged 2-11 years in 2009-2010). Children with missing physical activity data (n=181) were included in the analysis using an additional category for missing data.

[7] Model includes fast food consumption and dietary pattern as independent variables; associations of outcomes with fast food are adjusted for dietary pattern for the remainder of diet, and associations of outcomes with dietary pattern for the remainder of diet are adjusted for fast food intake.

[8] Model 3 additionally adjusted for physical activity.

[9] Includes fresh, frozen, or canned non-starchy vegetables.

[10] SSBs, sugar sweetened beverages. Includes sodas, fruit drinks, sports drinks, and energy drinks.