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Health E-Stat 106: Fast-food Intake Among Children and Adolescents in the United States, August 2021–August 2023

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Fast-food consumption is associated with higher caloric intake and poorer diet quality in children and adolescents (1). During 2015–2018, 36.3% of youth ages 2–19 years consumed fast food on a given day. On average, youth consumed 13.8% of their calories from fast food on a given day (2). This report presents updated estimates of the percentage of calories consumed from fast food on a given day among U.S. children ages 2–11 years and adolescents ages 12–19 years during August 2021–August 2023, based on data from the National Health and Nutrition Examination Survey (NHANES). Trends since 2013–2014 are also presented.

During August 2021–August 2023, 30.1% of youth ages 2–19 years consumed fast food on a given day (Figure 1, Table 1). On average, youth consumed 11.4% of their daily calories from fast food (Figure 2, Table 2). The mean percentage of calories consumed from fast food was 8.5% for children ages 2–11 years and 14.6% for adolescents ages 12–19 years. The difference between boys and girls in the percentage of calories from fast food was not significant overall or by age group. Adolescents ages 12–19 consumed a significantly higher percentage of calories from fast food than children ages 2–11 years overall and by sex.

Among youth ages 2–19 years, the mean percentage of calories consumed from fast food was higher in 2017–March 2020 than August 2021–August 2023 (Figure 3, Table 3). Among children ages 2–11 years, a significant decrease was seen from 2013–2014 to August 2021–August 2023. Among adolescents ages 12–19 years, an increase in mean calories from fast food was seen from 2013–2014 to 2017–March 2020, followed by a decrease.

Data sources and methods

Data from NHANES August 2021–August 2023 were used to estimate the percentage of calories consumed from fast food on a given day. Trends were assessed using NHANES 2013–2014, 2015–2016, 2017–March 2020, and August 2021–August 2023.

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NHANES is conducted by the National Center for Health Statistics and uses a complex, multistage probability design to collect a nationally representative sample of the U.S. civilian noninstitutionalized population (3–5). During August 2021–August 2023, Day 1 dietary recall data were collected by phone after health examinations in mobile examination centers (6). Day 1 dietary weights were used to account for selection probabilities, nonresponse, and day of the week.

Foods and beverages reported on the Day 1 dietary recall from "restaurant fast food/pizza" were classified as fast food. Calories from fast food were divided by total daily calories and multiplied by 100. Statistical testing incorporated Taylor series linearization and orthogonal contrasts. Linear and quadratic trends were assessed using regression models adjusting for varying time between survey cycles. Analyses were conducted using SAS 9.4 (SAS Institute Inc., Cary, N.C.) and SUDAAN version 11.0 (RTI International, Research Triangle Park, N.C.).

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Suggested citation

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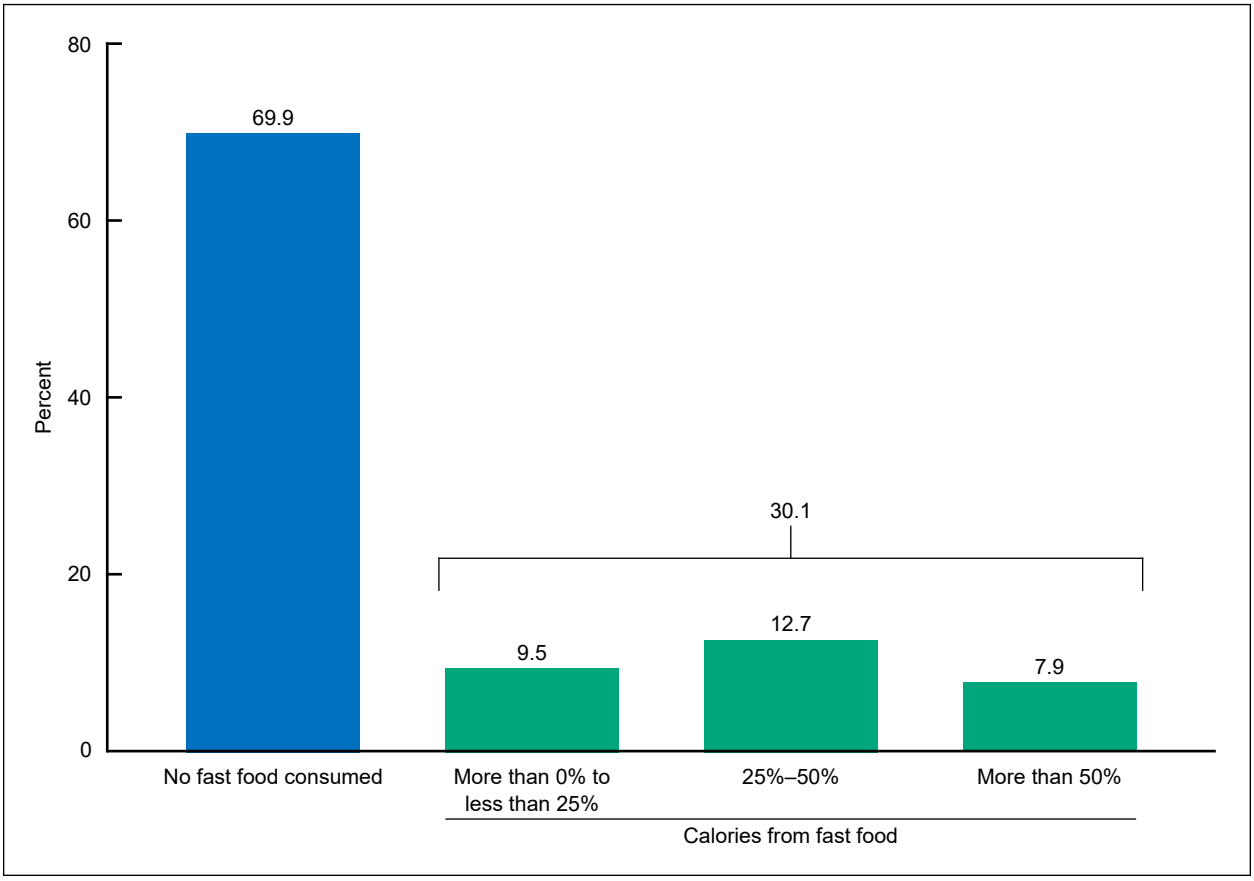
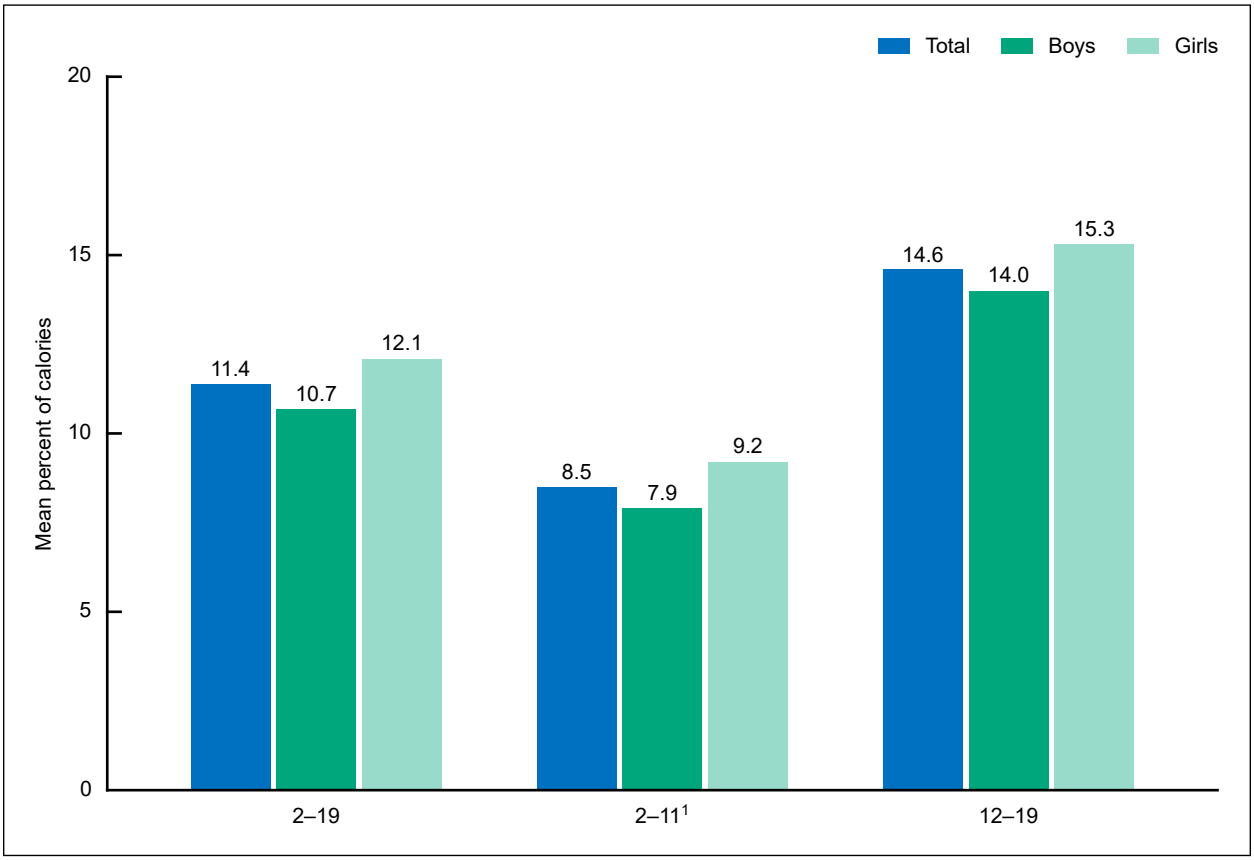
Figure 1. Percentage of children and adolescents ages 2–19 years who reported eating fast food on a given day, by calories consumed: United States, August 2021–August 2023



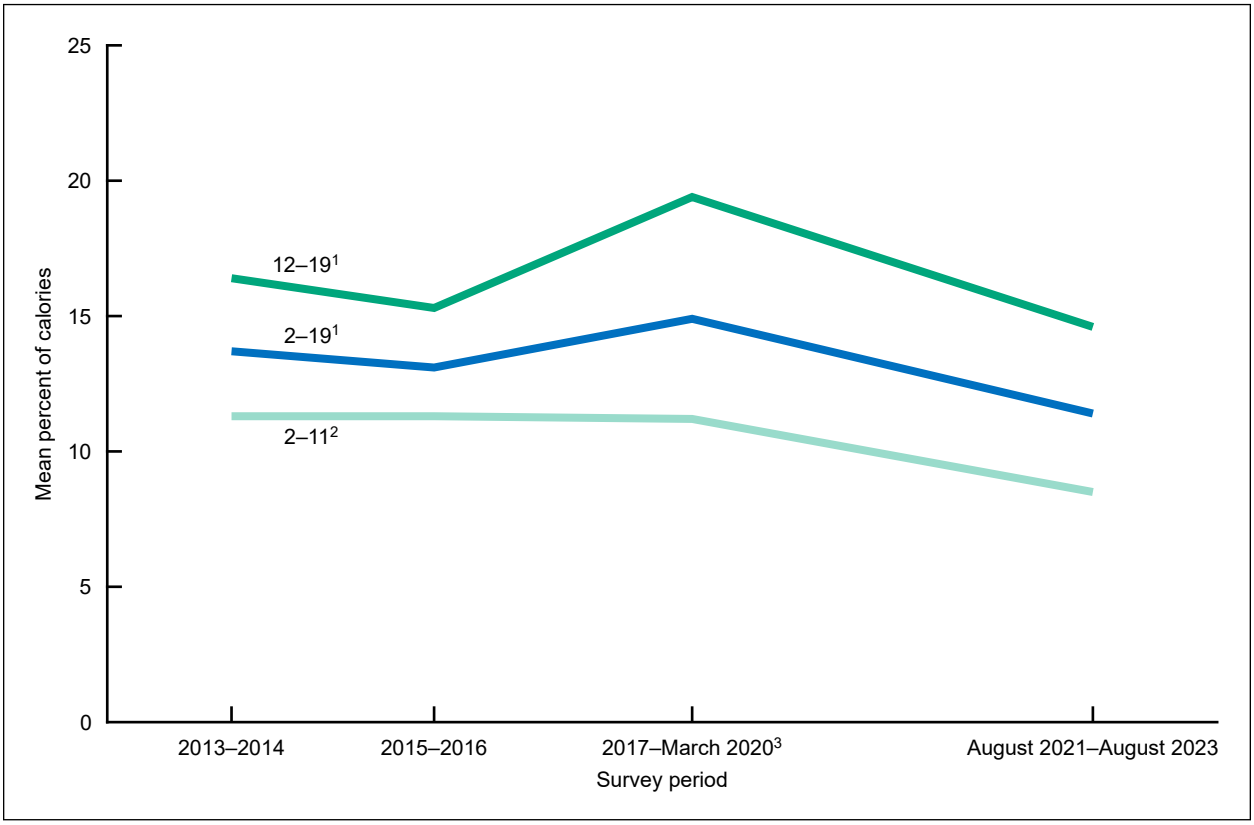
SOURCE: National Center for Health Statistics, National Health and Nutrition Examination Survey, August 2021–August 2023.

Figure 2. Mean percentage of calories from fast food among children and adolescents ages 2–19 years, by age group and sex: United States, August 2021–August 2023



[1]Significantly different from 12–19 years ($p < 0.05$).
SOURCE: National Center for Health Statistics, National Health and Nutrition Examination Survey, August 2021–August 2023.

Figure 3. Trends in mean percentage of calories from fast food among children and adolescents ages 2–19 years: United States, 2013–2014 through August 2021–August 2023



[1]Significant quadratic trend ($p < 0.05$).
[2]Significant decreasing linear trend ($p < 0.05$).
[3]Significantly different from August 2021–August 2023 ($p < 0.05$).
SOURCE: National Center for Health Statistics, National Health and Nutrition Examination Survey, 2013–2014 through August 2021–August 2023.

Table 1. Percentage of children and adolescents ages 2–19 years who reported eating fast food on a given day, by calories consumed: United States, August 2021–August 2023

Calories from fast food	Percent	Standard error
No fast food consumed	69.9	1.1
More than 0% to less than 25%	9.5	0.7
25%–50%	12.7	0.9
More than 50%	7.9	0.8

SOURCE: National Center for Health Statistics, National Health and Nutrition Examination Survey, August 2021–August 2023.

Table 2. Mean percentage of calories from fast food among children and adolescents ages 2–19 years, by age group and sex: United States, August 2021–August 2023

Age group and sex	Sample size	Mean percent (95% confidence interval)	Standard error
2–19			
Total	1,763	11.4 (9.9–13.0)	0.5
Boys	872	10.7 (8.8–13.0)	0.5
Girls	891	12.1 (10.0–14.4)	1.0
2–11[1]			
Total	1,006	8.5 (6.9–10.4)	0.7
Boys	506	7.9 (5.7–10.7)	1.0
Girls	500	9.2 (6.8–12.0)	1.0
12–19			
Total	757	14.6 (12.2–17.3)	0.8
Boys	366	14.0 (10.6–17.9)	1.4
Girls	391	15.3 (11.8–19.2)	1.6

[1]Significantly different from ages 12–19 ($p < 0.05$).

SOURCE: National Center for Health Statistics, National Health and Nutrition Examination Survey, August 2021–August 2023.

Table 3. Trends in mean percentage of calories from fast food among children and adolescents ages 2–19 years: United States, 2013–2014 through August 2021–August 2023

Survey cycle and age group	Sample size	Mean percent (95% confidence interval)	Standard error
2013–2014			
2–19[1]	3,020	13.7 (12.4–15.1)	0.6
2–11[2]	1,724	11.3 (9.7–13.1)	0.8
12–19[1]	1,296	16.4 (14.5–18.6)	0.8
2015–2016			
2–19	2,900	13.1 (11.9–14.4)	0.5
2–11	1,705	11.3 (9.7–13.1)	0.8
12–19	1,195	15.3 (13.3–17.5)	0.8
2017–March 2020[3]			
2–19	4,089	14.9 (13.1–16.8)	0.9
2–11	2,349	11.2 (9.9–12.5)	0.6
12–19	1,740	19.4 (16.4–22.6)	1.5
August 2021–August 2023			
2–19	1,763	11.4 (9.9–13.0)	0.5
2–11	1,006	8.5 (6.9–10.4)	0.7
12–19	757	14.6 (12.2–17.3)	0.8

[1]Significant quadratic trend ($p < 0.05$) from 2013–2014 through August 2021–August 2023.
[2]Significant decreasing linear trend ($p < 0.05$) from 2013–2014 through August 2021–August 2023.
[3]Significantly different from August 2021–August 2023 ($p < 0.05$).

SOURCE: National Center for Health Statistics, National Health and Nutrition Examination Survey, 2013–2014 through August 2021–August 2023.