



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2019 Cuyahoga County Youth Risk Behavior Survey: Dietary Behaviors

Introduction

The Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University has administered the Youth Risk Behavior Survey (YRBS) in school districts throughout Cuyahoga County since 2000. The YRBS is a cross-sectional tool developed by the Centers for Disease Control and Prevention (CDC) to track adolescent risk behavior over time. In fall of 2019, the PRCHN conducted the YRBS among 9th through 12th grade students in Cuyahoga County high schools. A more detailed description of the methodology is available at our website, www.prchn.org/YRBSDataCollectionAnalysis.aspx.

This brief report presents results from the 2019 Cuyahoga County High School Youth Risk Behavior Survey, with a particular focus on Dietary Behaviors. In this brief report, we present:

- [Overall Prevalence](#)
- [Demographic Prevalence](#)
- [Trend Report](#)

Data for similar behaviors can be found at our website, www.prchn.org/yrbs_home.aspx.

Dietary Behavior

Diet and nutrition have important links to adolescent health and well-being, as well as to major causes of morbidity and mortality later in life. Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. There is probable evidence to suggest that dietary patterns with higher intakes of fruits and vegetables are associated with a decreased risk for some types of cancer,^{i,ii,iii} cardiovascular disease,^{iv} and stroke.^v Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.^{vi}

Eating breakfast every day may reduce the risk for obesity and insulin resistance syndrome – an early sign of developing diabetes, by as much as 35 to 50 percent.^{vii} Breakfast eaters tend to eat fewer calories, less saturated fat and cholesterol and have better overall nutritional status than breakfast skippers.^{viii}

Overall Prevalence

The following table summarizes dietary behaviors among the 15,350 high school students who completed the 2019 Cuyahoga County YRBS. Prevalence estimates and 95% confidence intervals were computed for all dichotomous variables. The 2019 Ohio Youth Risk Behavior Survey prevalence for shared variables is also shown. A statistically significant difference exists between groups if the 95% confidence intervals do not overlap.

Risk Behavior	Cuyahoga County % (95% Confidence Interval)	Ohio % (95% Confidence Interval)
Ate fruits and vegetables 5 or more times per day (During the 7 days before the survey.)	17.2 (16.2 - 18.2)	n/a
Drank water at school on average every day (Including water from a fountain, a sink or faucet, a bottle, a reusable bottle student brought from home, or some other source; during an average school week.)	56.8 (55.6 - 58.0)	n/a
Did not eat breakfast every day (During the 7 days before the survey.)	73.6 (72.1 - 75.0)	74.4 (69.4 - 78.8)
Ate fast food meal or snack on 1 or more days (Includes McDonalds, Taco Bell, or KFC; during the 7 days before the survey.)	73.1 (72.0 - 74.2)	n/a
Went hungry because not enough food in the home (Sometimes, most of the time, or always; during the 30 days before the survey.)	16.5 (15.6 - 17.5)	n/a

Demographic Prevalence

The tables below allow for further comparisons of dietary behaviors between demographic groups. Data are presented by gender, race/ethnicity, grade level, and sexual identity. In following tables, LGB stands for lesbian, gay, or bisexual. A statistically significant difference exists between groups if the 95% confidence intervals do not overlap.

Ate fruits and vegetables 5 or more times per day			
Category	%	CI	
Gender			
Female	15.5	14.3	16.7
Male	18.8	17.3	20.4
Race/Ethnicity			
White	15.0	13.6	16.5
Black	19.1	17.6	20.7
Hispanic	21.2	19.1	23.5
Other/Multiple	23.0	20.1	26.1
Grade			
9th	19.4	17.6	21.4
10th	17.9	16.1	19.7
11th	14.2	12.4	16.2
12th	16.4	14.4	18.5
Sexual Identity			
Heterosexual	17.3	16.2	18.5
LGB	16.4	14.3	18.8
Not sure	16.6	13.1	20.8
Total	17.2	16.2	18.2

Drank water at school on average every day			
Category	%	CI	
Gender			
Female	55.8	54.3	57.3
Male	58.0	56.0	59.9
Race/Ethnicity			
White	64.5	63.1	66.0
Black	47.0	44.9	49.2
Hispanic	48.4	45.4	51.4
Other/Multiple	57.8	53.4	62.0
Grade			
9th	53.3	50.6	56.0
10th	56.5	54.2	58.8
11th	61.2	58.7	63.6
12th	57.2	54.0	60.3
Sexual Identity			
Heterosexual	58.4	57.0	59.7
LGB	50.0	47.2	52.8
Not sure	50.5	44.9	56.1
Total	56.8	55.6	58.0

Did not eat breakfast every day		
Category	%	CI
Gender		
Female	77.1	75.5 - 78.7
Male	70.0	67.9 - 72.0
Race/Ethnicity		
White	68.9	66.5 - 71.2
Black	80.6	79.0 - 82.2
Hispanic	75.9	73.6 - 78.1
Other/Multiple	66.3	62.5 - 69.8
Grade		
9th	71.4	69.3 - 73.4
10th	72.2	69.2 - 75.1
11th	72.5	69.6 - 75.2
12th	78.3	74.7 - 81.5
Sexual Identity		
Heterosexual	72.0	70.3 - 73.6
LGB	82.4	80.1 - 84.5
Not sure	75.7	70.5 - 80.2
Total	73.6	72.1 - 75.0

Ate fast food meal or snack on 1 or more days		
Category	%	CI
Gender		
Female	72.8	71.3 - 74.3
Male	73.4	71.8 - 74.9
Race/Ethnicity		
White	70.6	68.9 - 72.3
Black	76.6	75.1 - 78.1
Hispanic	77.9	75.5 - 80.2
Other/Multiple	67.3	63.5 - 70.9
Grade		
9th	72.0	69.8 - 74.2
10th	73.4	71.0 - 75.7
11th	73.7	71.3 - 75.9
12th	73.2	70.8 - 75.6
Sexual Identity		
Heterosexual	73.6	72.3 - 74.9
LGB	72.7	70.0 - 75.2
Not sure	66.0	60.3 - 71.3
Total	73.1	72.0 - 74.2

Went hungry because not enough food in the home			
Category	%	CI	
Gender			
Female	16.3	15.2	- 17.6
Male	16.6	15.3	- 17.9
Race/Ethnicity			
White	12.7	11.5	- 13.9
Black	21.0	19.6	- 22.5
Hispanic	23.6	21.0	- 26.4
Other/Multiple	17.5	15.3	- 19.9
Grade			
9th	15.3	13.7	- 17.0
10th	15.6	13.8	- 17.6
11th	18.3	16.2	- 20.5
12th	16.6	14.9	- 18.6
Sexual Identity			
Heterosexual	15.4	14.5	- 16.5
LGB	20.4	18.2	- 22.8
Not sure	24.7	19.7	- 30.5
Total	16.5	15.6	- 17.5

Cuyahoga County Trend Data

The following table presents the prevalence of dietary behaviors among Cuyahoga County high school students in 2011, 2013, 2015, 2017, and 2019. The prevalence for each year is given (when available), with 95% confidence intervals below.

Cuyahoga County, 2011	Cuyahoga County, 2013	Cuyahoga County, 2015	Cuyahoga County, 2017	Cuyahoga County, 2019
Ate fruits and vegetables 5 or more times per day (During the 7 days before the survey.)				
22.6 (21.6 - 23.6)	21.6 (20.5 - 22.7)	20.8 (19.6 - 22.1)	19.5 (18.7 - 20.4)	17.2 (16.2 - 18.2)
Had a can, bottle, or glass of soda or pop 1 or more times per day (Not including diet soda or diet pop; during the 7 days before the survey.)				
22.8 (21.8 - 23.8)	20.0 (19.0 - 21.0)	18.5 (17.2 - 19.9)	n/a	n/a
Drank water at school on average every day (Including water from a fountain, a sink or faucet, a bottle, a reusable bottle student brought from home, or some other source; during an average school week.)				
n/a	n/a	48.9 (47.2 - 50.7)	57.7 (56.2 - 59.3)	56.8 (55.6 - 58.0)
Did not eat breakfast every day (During the 7 days before the survey.)				
67.6 (66.4 - 68.8)	66.7 (65.4 - 68.1)	70.1 (68.7 - 71.5)	71.7 (70.5 - 72.8)	73.6 (72.1 - 75.0)
*Ate fast food on 1 or more days (During the 7 days before the survey.)				
74.2 (73.1 - 75.3)	74.4 (73.4 - 75.4)	70.5 (68.8 - 72.2)	n/a	n/a
*Ate a fast food meal or snack on 1 or more days (Includes McDonalds, Taco Bell, or KFC; during the 7 days before the survey.)				
n/a	n/a	n/a	71.2 (70.2 - 72.3)	73.1 (72.0 - 74.2)
Went hungry because not enough food in the home (Sometimes, most of the time, or always; during the 30 days before the survey.)				
n/a	n/a	15.0 (13.9 - 16.2)	18.4 (17.5 - 19.3)	16.5 (15.6 - 17.5)

*In 2017, “ate fast food on 1 or more days” was revised to “ate a fast food meal or snack on 1 or more days.” Both items are included in this table.

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