



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2017 Cuyahoga County Youth Risk Behavior Survey: Dietary Behavior

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 spring of 2017, 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 2017 Cuyahoga County High School Youth Risk Behavior Survey, with a particular focus on Nutrition. In this brief report, we present:

- [Overall Prevalence](#)
- [Regional 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 nutrition behaviors among the 13,907 high school students who completed the 2017 Cuyahoga County YRBS. Prevalence estimates and 95% confidence intervals were computed for all variables.

Risk Behavior	% (95% Confidence Interval)
Ate fruits and vegetables 5 or more times per day (During the 7 days before the survey.)	19.5 (18.7-20.4)
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.)	57.7 (56.2-59.3)
Did not eat breakfast every day (During the 7 days before the survey.)	71.7 (70.5-72.8)
Ate fast food meal or snack on 1 or more days (Includes McDonalds, Taco Bell, or KFC; during the 7 days before the survey.)	71.2 (70.2-72.3)
Went hungry because not enough food at home (Sometimes, most of the time, or always; during the 30 days before the survey.)	18.4 (17.5-19.3)

Regional Prevalence

The table below represents nutrition behaviors by the six regions of Cuyahoga County. This division was conducted to provide a geographic representation of the prevalence of different risk behaviors in Cuyahoga County. In 2017, we were able to weight to 5 of 6 regions in Cuyahoga County. The column under Outer Ring—West does not include data because school participation within that region was insufficient to permit weighting.

Risk Behavior	CMSD-East % (95% CI)	CMSD- West % (95% CI)	Inner Ring-East % (95% CI)	Inner Ring-West % (95% CI)	Outer Ring-East % (95% CI)	Outer Ring-West % (95% CI)
Ate fruits and vegetables 5 or more times per day (During the 7 days before the survey.)	18.2 (16.5-20.0)	20.8 (18.7-23.0)	19.1 (17.0-21.3)	15.2 (13.7-16.8)	24.9 (23.0-26.9)	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.)	47.1 (44.7-49.5)	43.4 (40.7-46.2)	51.9 (47.6-56.1)	57.0 (53.2-60.8)	62.5 (59.3-65.5)	n/a
Did not eat breakfast every day (During the 7 days before the survey.)	81.9 (80.1-83.6)	80.9 (79.1-82.7)	78.4 (75.3-81.1)	73.9 (71.7-76.0)	63.4 (60.2-66.4)	n/a
Ate fast food meal or snack 1 or more days (Includes McDonalds, Taco Bell, or KFC; during the 7 days before the survey.)	77.2 (75.3-78.9)	74.2 (72.1-76.2)	74.9 (72.2-77.4)	76.7 (74.3-79.0)	60.6 (57.5-63.7)	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.)	20.2 (18.2-22.3)	21.1 (19.4-23.0)	21.2 (18.3-24.4)	19.1 (17.0-21.4)	14.8 (12.7-17.2)	n/a

Demographic Prevalence

The tables below allow for further comparisons of nutrition behaviors between demographic groups. Data are presented by gender, race/ethnicity, and grade level. 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	18.6	17.6	19.7
Male	20.3	19.1	21.7
Race/Ethnicity			
White	19.0	17.9	20.2
Black	19.4	17.9	21.0
Hispanic	19.9	17.7	22.2
Other/Multiple	27.7	24.0	31.7
Grade			
9th	20.3	18.8	21.8
10th	19.5	18.1	20.9
11th	19.8	17.9	21.9
12th	17.9	16.4	19.5
Total	19.5	18.7	20.4

Drank water at school on average every day			
Category	%	CI	
Gender			
Female	58.9	57.2	60.5
Male	56.8	54.8	58.8
Race/Ethnicity			
White	66.0	63.6	68.2
Black	48.1	45.4	50.8
Hispanic	46.1	42.7	49.4
Other/Multiple	58.9	53.8	63.9
Grade			
9th	56.7	53.2	60.1
10th	58.0	55.4	60.6
11th	58.6	55.7	61.3
12th	58.6	55.7	61.4
Total	57.7	56.2	59.3

Did not eat breakfast every day		
Category	%	CI
Gender		
Female	72.8	71.2 - 74.3
Male	70.6	69.0 - 72.1
Race/Ethnicity		
White	63.9	62.3 - 65.4
Black	82.0	80.2 - 83.7
Hispanic	78.6	76.1 - 80.9
Other/Multiple	62.3	57.3 - 67.1
Grade		
9th	69.7	67.6 - 71.6
10th	68.4	66.0 - 70.7
11th	74.1	71.4 - 76.7
12th	75.9	73.6 - 78.1
Total	71.7	70.5 - 72.8

Ate fast food meal or snack on 1 or more days		
Category	%	CI
Gender		
Female	69.0	67.4 - 70.7
Male	73.4	71.9 - 74.8
Race/Ethnicity		
White	66.0	64.5 - 67.5
Black	78.1	76.5 - 79.6
Hispanic	77.1	74.0 - 79.9
Other/Multiple	67.9	63.1 - 72.4
Grade		
9th	72.0	69.4 - 74.5
10th	70.3	67.9 - 72.6
11th	72.0	70.3 - 73.7
12th	70.5	68.4 - 72.4
Total	71.2	70.2 - 72.3

Went hungry because not enough food at home			
Category	%	CI	
Gender			
Female	17.7	16.3	- 19.1
Male	19.0	17.8	- 20.3
Race/Ethnicity			
White	14.8	13.7	- 15.9
Black	22.3	20.5	- 24.2
Hispanic	24.9	22.4	- 27.5
Other/Multiple	17.4	14.6	- 20.6
Grade			
9th	14.9	13.5	- 16.3
10th	16.9	15.4	- 18.4
11th	20.4	18.1	- 22.9
12th	21.7	19.6	- 23.9
Total	18.4	17.5	- 19.3

Cuyahoga County Trend Data

The following table presents the prevalence of nutrition behaviors among Cuyahoga County high school students in 2009, 2011, 2013, 2015, and 2017. The prevalence for each year is given (when available), with 95% confidence intervals below.

Cuyahoga County, 2009	Cuyahoga County, 2011	Cuyahoga County, 2013	Cuyahoga County, 2015	Cuyahoga County, 2017
Ate fruits and vegetables 5 or more times per day (During the 7 days before the survey.)				
21.6 (19.9-23.3)	22.6 (21.6-23.6)	21.6 (20.5-22.7)	20.8 (19.6-22.1)	19.5 (18.7-20.4)
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.)				
25.3 (23.6-27.0)	22.8 (21.8-23.8)	20.0 (19.0-21.0)	18.5 (17.2-19.9)	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	n/a	48.9 (47.2-50.7)	57.7 (56.2-59.3)
Did not eat breakfast every day (During the 7 days before the survey.)				
66.3 (64.0-68.6)	67.6 (66.4-68.8)	66.7 (65.4-68.1)	70.1 (68.7-71.5)	71.7 (70.5-72.8)
*Ate fast food on 1 or more days (During the 7 days before the survey.)				
74.1 (72.5-75.7)	74.2 (73.1-75.3)	74.4 (73.4-75.4)	70.5 (68.8-72.2)	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	n/a	71.2 (70.2-72.3)
Went hungry because not enough food in the home (Sometimes, most of the time, or always; during the past 30 days.)				
n/a	n/a	n/a	15.0 (13.9-16.2)	18.4 (17.5-19.3)

*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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