



Prevention Research Center for Healthy Neighborhoods
at Case Western Reserve University

2014 Cuyahoga County Youth Risk Behavior Survey: Nutrition

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 2014, the PRCHN conducted the YRBS among 7th and 8th grade students in Cuyahoga County middle schools. A more detailed description of the methodology is available at our website, <http://prchn.org/yrbs.aspx>.

This brief report presents results from the 2014 Cuyahoga County Middle School Youth Risk Behavior Survey, with a particular focus on Nutrition. In this brief report, we present:

- [Healthy People 2020](#)
- [Overall Prevalence](#)
- [Regional Prevalence](#)
- [Demographic Prevalence](#)
- [Trend Report](#)

Data for similar behaviors can be found at our website, <http://prchn.org/yrbs.aspx>.

Nutrition

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}

Healthy People 2020

Where possible, the Cuyahoga County Youth Risk Behavior Survey (YRBS) data are compared to the Healthy People 2020 benchmarks.^{ix} This allows us to consider Cuyahoga County's progress towards the 10-year national objectives aimed at improving the health of all Americans.

Healthy People 2020 Objectives	Cuyahoga County 2014
There are no HP2020 objectives that relate directly to questions asked in the 2014 Cuyahoga County YRBS	

Overall Prevalence

The following table summarizes nutrition behaviors among the 12,607 middle school students who completed the 2014 Cuyahoga County YRBS. Prevalence estimates and 95% confidence intervals were computed for all variables.

Risk Behavior	% (95% Confidence Interval)
Ate fruits and vegetables five or more times per day (During the day before the survey.)	25.1% (24.3-25.9)
Ate fast food one or more times (During the 7 days before the survey.)	70.7% (69.9-71.5)
Did not eat breakfast every day (During the 7 days before the survey.)	59.5% (58.6-60.5)
Drank soda or pop at least once (During the day before the survey.)	51.6% (50.6-52.5)
Drank beverages high in caffeine one or more times (During the day before the survey.)	11.4% (10.7-12.1)
Took a multivitamin every day (During the week before the survey.)	10.3% (9.8-10.8)

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 2014, 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 this 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 five or more times per day (During the day before the survey.)	17.7% (15.6-20.0)	18.4% (16.3-20.7)	19.5% (18.1-20.9)	21.0% (18.9-23.3)	33.3% (30.6-36.1)	N/A
Ate fast food one or more times (During the 7 days before the survey.)	77.4% (75.5-79.1)	76.4% (73.9-78.8)	71.9% (70.1-73.6)	70.1% (67.4-72.7)	57.7% (55.7-59.7)	N/A
Did not eat breakfast every day (During the 7 days before the survey.)	66.4% (64.0-68.6)	65.9% (63.4-68.2)	68.5% (66.6-70.3)	63.6% (60.6-66.4)	51.8% (48.2-55.4)	N/A
Drank soda or pop at least once (During the day before the survey.)	62.7% (60.4-65.0)	66.7% (64.2-69.1)	58.1% (55.7-60.5)	52.0% (49.2-54.7)	39.0% (36.1-42.1)	N/A
Drank beverages high in caffeine one or more times (During the day before the survey.)	17.2% (15.0-19.5)	19.5% (17.3-22.0)	13.8% (12.2-15.5)	12.5% (10.1-15.3)	6.7% (5.5-8.1)	N/A
Took a multivitamin every day (During the week before the survey.)	6.4% (5.3-7.8)	6.9% (5.7-8.2)	7.2% (6.3-8.1)	10.4% (8.8-12.3)	11.5% (10.1-12.9)	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 five or more times per day			
Category	%	CI	
Gender			
Female	25.6	24.5-	26.8
Male	24.7	23.6-	25.8
Race/Ethnicity			
White	30.2	29.1-	31.4
Black	17.7	16.6-	18.9
Hispanic	17.6	15.3-	20.2
Other/Multiple	34.1	30.3-	38.2
Grade			
7th	27.0	25.6-	28.3
8th	23.2	22.1-	24.4
Total	25.1	24.3-	25.9

Ate fast food one or more times			
Category	%	CI	
Gender			
Female	70.3	69.0-	71.5
Male	71.2	70.1-	72.3
Race/Ethnicity			
White	66.7	65.6-	67.9
Black	76.3	75.1-	77.5
Hispanic	78.3	75.3-	81.1
Other/Multiple	66.4	62.7-	69.9
Grade			
7th	70.3	68.8-	71.7
8th	71.3	69.9-	72.7
Total	70.7	69.6-	71.5

Did not eat breakfast every day			
Category	%	CI	
Gender			
Female	65.6	64.3-	66.8
Male	54.0	52.7-	55.3
Race/Ethnicity			
White	52.2	50.9-	53.6
Black	69.5	68.1-	70.9
Hispanic	63.7	60.6-	66.7
Other/Multiple	54.0	50.4-	57.7
Grade			
7th	57.4	55.8-	58.9
8th	61.5	59.9-	63.0
Total	59.5	58.6-	60.5

Drank soda or pop at least once			
Category	%	CI	
Gender			
Female	47.6	46.3-	48.9
Male	55.0	53.7-	56.3
Race/Ethnicity			
White	44.0	42.8-	45.1
Black	61.1	59.6-	62.7
Hispanic	67.7	64.5-	70.8
Other/Multiple	44.2	40.6-	47.9
Grade			
7th	51.2	49.6-	52.8
8th	51.7	50.0-	53.4
Total	51.6	50.6-	52.5

Drank beverages high in caffeine one or more times			
Category	%	CI	
Gender			
Female	9.6	8.8-	10.4
Male	12.8	11.8-	13.7
Race/Ethnicity			
White	7.9	7.1-	8.8
Black	14.8	13.6-	16.1
Hispanic	21.8	19.3-	24.5
Other/Multiple	16.2	13.7-	19.0
Grade			
7th	11.4	10.4-	12.4
8th	11.0	10.0-	12.1
Total	11.4	10.7-	12.1

Took a multivitamin every day			
Category	%	CI	
Gender			
Female	11.1	10.4-	11.8
Male	9.6	8.9-	10.3
Race/Ethnicity			
White	12.8	12.0-	13.5
Black	6.6	5.9-	7.3
Hispanic	9.0	7.3-	11.0
Other/Multiple	16.0	13.0-	19.5
Grade			
7th	10.4	9.7-	11.2
8th	10.1	9.4-	10.9
Total	10.3	9.8-	10.8

Cuyahoga County Trend Data

The following table presents the prevalence of nutrition behaviors among Cuyahoga County middle school students in 2008, 2010, 2012 and 2014. The prevalence for each year is given (when available), with 95% confidence intervals below.¹

Cuyahoga County, 2008	Cuyahoga County, 2010	Cuyahoga County, 2012	Cuyahoga County, 2014
Ate fruits and vegetables 5 or more times per day (During the day before the survey.)			
24.2% (23.0-25.3)	26.9% (25.6-28.3)	28.1% (27.0-29.1)	25.1% (24.3-25.9)
Drank 3 or more glasses of milk per day (During the day before the survey.)			
24.4% (23.2-25.6)	28.0% (26.6-29.4)	24.3% (23.4-25.3)	N/A
Ate fast food one or more times (During the 7 days before the survey.)			
70.9% (69.6-72.1)	68.9% (67.8-70.0)	70.6% (69.6-71.7)	70.7% (69.6-71.5)
Did not eat breakfast every day (During the 7 days before the survey.)			
62.2% (61.1-63.4)	59.8% (58.0-61.5)	58.7% (57.6-59.9)	59.5% (58.6-60.5)

¹ The YRBS questions with two or more data points over 2008-2014 are included. The new 2014 questions are not included for the purpose of demonstrating trends. For those questions not asked in 2014, refer to the PRCHN archives at www.prchn.org/aspx for more detailed information.

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