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DISPARITIES IN OBESITY, NUTRITION, AND
PHYSICAL ACTIVITY IN ARKANSAS



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Executive Summary

- ❖ Since 2001, obesity rates have generally increased in Arkansas, with higher rates found among African Americans than among Whites. As of 2012, rates were similar among African Americans and Latinos, and lowest among Whites.
- ❖ Obesity is associated with a higher risk of heart disease, stroke, and diabetes – all three of which were among the top ten causes of death from 2006 – 2010 for Whites, African Americans, and Latinos.
- ❖ In terms of conditions associated with obesity, Whites showed the highest rates of asthma and angina/CHD, whereas African Americans showed the highest rates of diabetes and hypertension.
- ❖ Rates for proper nutrition in adults were similar among African Americans, Whites, and Latinos, while the latter showed the highest rate of physical activity in the previous month. Only about 1 in 5 of Arkansas adults met aerobic and muscle strengthening guidelines.
- ❖ Among children, obesity rates were highest among African Americans and Latinos and lowest among Whites.
- ❖ White high school students were more likely to report having fruit or fruit juice less than twice a day. Almost 9 out of 10 white, African American, and Latino students reported eating vegetables less than three times a day.
- ❖ Two-thirds of African American and Latino students reported being physically active less than 5 days in the past week, and Latinos reported the highest rate of no physical activity. On an average school day, about half of all African American high school students watched 3 or more hours of television and about 1 in 3 African American students played video games or used their computer for 3 or more hours.

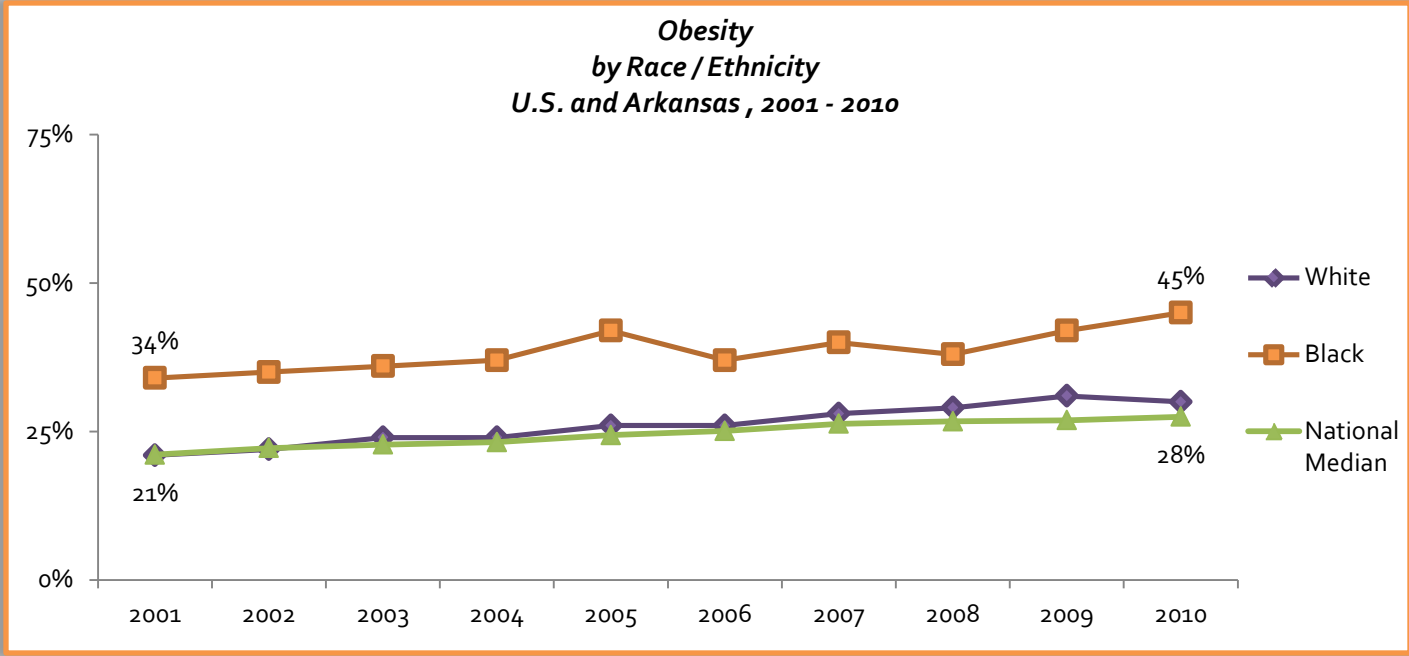
Introduction

In 2012, 68.7% of Arkansans were either overweight or obese, making obesity a critical public health concern for the state. In 2010, Arkansas' obesity rate was the 12th highest in the nation.¹ This report examines the burden of obesity in Arkansas, with special attention to racial/ethnic disparities and age group differences. Data are presented on prevalence, mortality, associated conditions, and obesity prevention strategies in adults, as well as prevalence and prevention in children. The data contained in this report reflect the most recent available.

Adult Obesity

Obesity Prevalence

Source: Behavioral Risk Factor Surveillance Survey¹



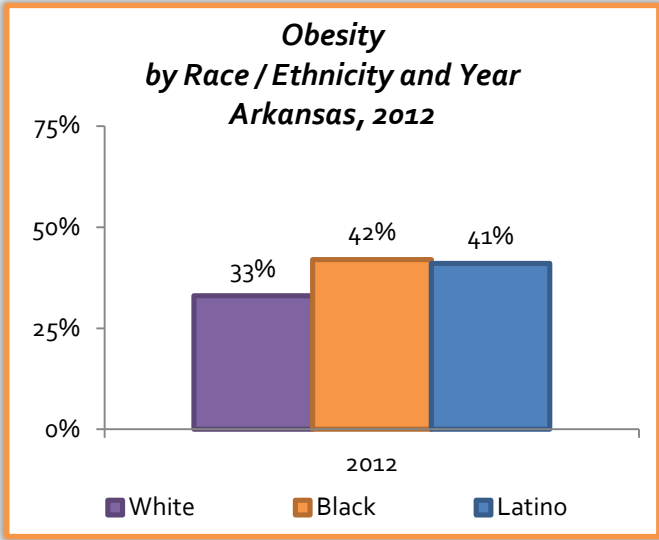
Overweight and obesity are public health concerns across the country, but are especially prevalent problems in Arkansas. In 2010, Arkansas' obesity rate of 31% was the 12th highest in the country.¹

From 2001 to 2010, obesity rates increased over time among both African Americans and Whites, with the former maintaining higher proportions of obesity across this time period.

During this same time period, national median obesity rates increased at a degree similar to that of white Arkansans while remaining much lower than rates among African American Arkansans.

In 2012*, rates were highest among African Americans and Latinos.

*Note: Due to sampling changes in the 2011 BRFSS, data from that year onward are not comparable to data from before 2011.



Mortality

Source: CDC WONDER Compressed Mortality File – Underlying Cause²

One way to understand the burden of obesity is to examine the impact of associated diseases and conditions (i.e., those that are thought to be caused by or associated with obesity) on mortality rates in the state.

Obesity is associated with a higher risk of heart disease, stroke, and diabetes.

From 2006 to 2010, these three conditions were in the top 10 leading cause of death for all Arkansans, as well as for each race/ethnicity individually.

Leading Causes of Death All races Arkansas, 2006 – 2010

Rank	Cause of Death	#	% of All Deaths
[1]	Heart Disease	36,730	26%
[2]	Cancer	32,079	22%
[3]	Stroke	8,914	6%
[4]	Chronic Lower Respiratory Disease	8,645	6%
[5]	Unintentional Injury	7,217	5%
[6]	Alzheimer's Disease	4,340	3%
[7]	Diabetes	4,318	3%
[8]	Influenza & Pneumonia	3,704	3%
[9]	Nephritis	3,337	2%
[10]	Septicemia	2,485	2%

Leading Causes of Death By race / ethnicity Arkansas, 2006 - 2010

Rank	<i>White</i>		<i>Black</i>		<i>Latino</i>	
	Cause	Deaths	Cause	Deaths	Cause	Deaths
[1]	Heart Disease	31,552	Heart Disease	4,810	Cancer	191
[2]	Cancer	27,582	Cancer	4,125	Unintentional Injury	187
[3]	Chronic Lower Respiratory Disease	8,135	Stroke	1,339	Heart Disease	179
[4]	Stroke	7,478	Diabetes	1,046	Perinatal Period	53
[5]	Unintentional Injury	6,070	Unintentional Injury	878	Homicide	45
[6]	Alzheimer's Disease	3,953	Nephritis	667	Congenital Anomalies	40
[7]	Influenza & Pneumonia	3,318	Homicide	545	Suicide	39
[8]	Diabetes	3,202	Septicemia	499	Diabetes	38
[9]	Nephritis	2,629	Chronic Lower Respiratory Disease	462	Stroke	36
[10]	Septicemia	1,960	Alzheimer's Disease	361	Influenza & Pneumonia	29

Associated Conditions

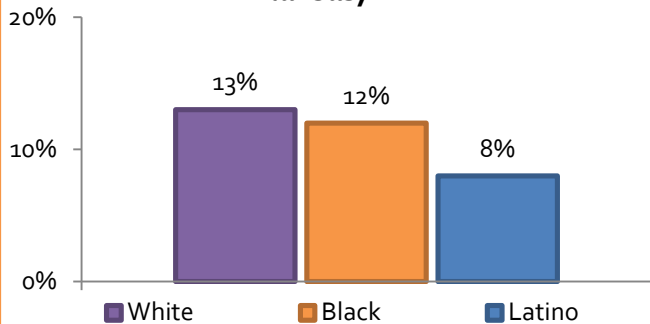
Source: Behavioral Risk Factor Surveillance System¹

Obesity is associated with a number of other chronic conditions.³ Examining these other conditions can provide some clue as to how obesity may be impacting Arkansas' population.

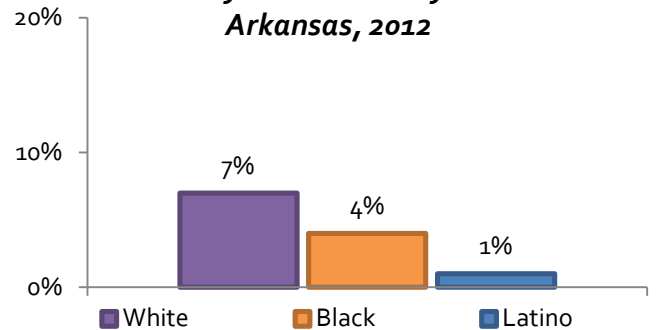
In 2012, similar proportions of White and African Americans reported that they had ever been told they had asthma. Conversely, Whites showed the highest proportions of angina or coronary heart disease diagnosis, especially compared to Latinos.

Also in 2012, African Americans showed the highest proportion of non-pregnancy diabetes diagnoses when compared to Whites. Similarly, African Americans showed the highest proportion of hypertension in 2011, with significantly higher rates than Latinos.

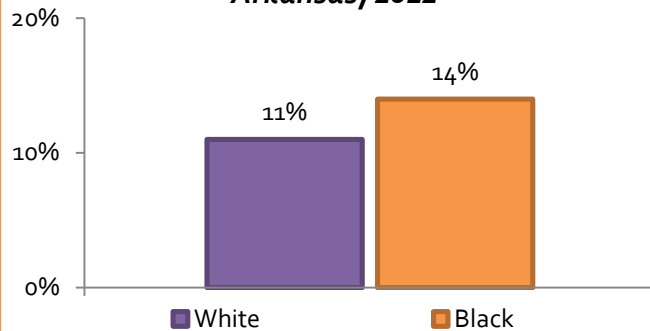
**Ever told by a doctor you had asthma?
by race / ethnicity
Arkansas, 2012**



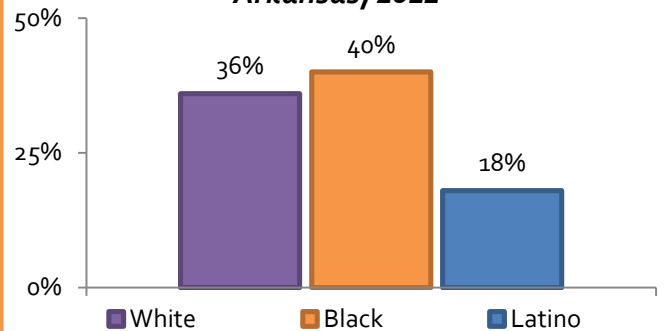
**Ever told by a doctor you had angina or coronary heart disease?
by race / ethnicity
Arkansas, 2012**



**Ever told by a doctor you had diabetes?
by race / ethnicity
Arkansas, 2012**



**Ever told by a doctor you had hypertension?
by race / ethnicity
Arkansas, 2011**



Prevention – Nutrition

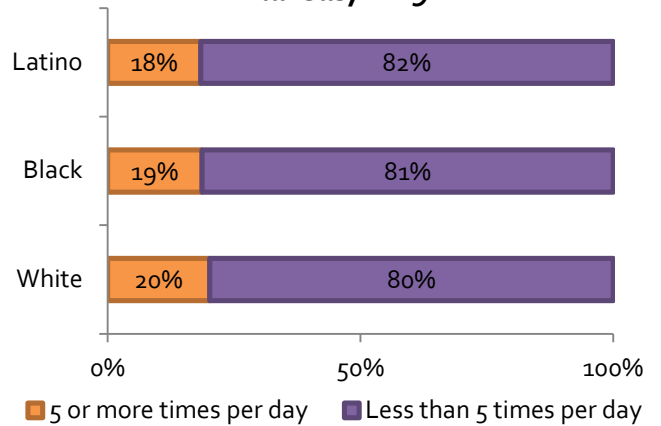
Source: Behavioral Risk Factor Surveillance System¹

Good nutrition is vital to both preventing and reducing obesity.³

In 2009, proportions of adults who consumed fruits and vegetables at least five times per day were relatively equal among Whites, African Americans, and Latinos.

Of particular concern, around 80% of adults from each race/ethnicity consumed fruits and vegetables *less* than five times per day.

**Adults who have consumed fruits and vegetables five or more times per day
Arkansas, 2009**



Prevention – Physical Activity

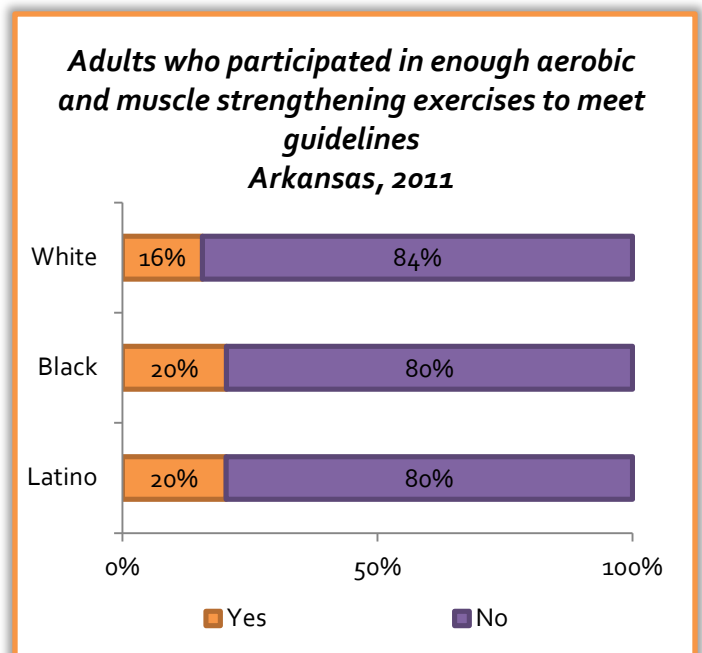
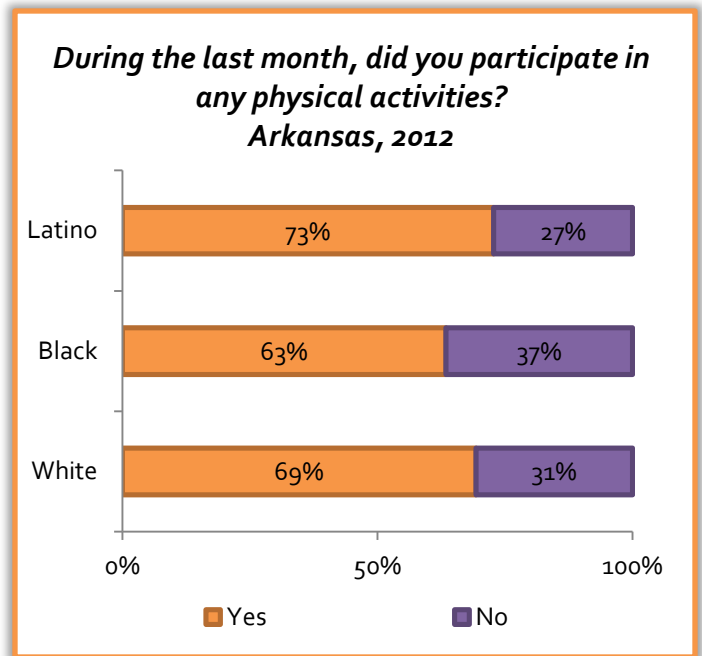
Source: Behavioral Risk Factor Surveillance System¹

Physical activity is an essential behavior that helps prevent and treat obesity.³

In 2012, a slightly higher proportion of Latinos reported participating in at least some physical activity during the previous month compared to Whites and African Americans.

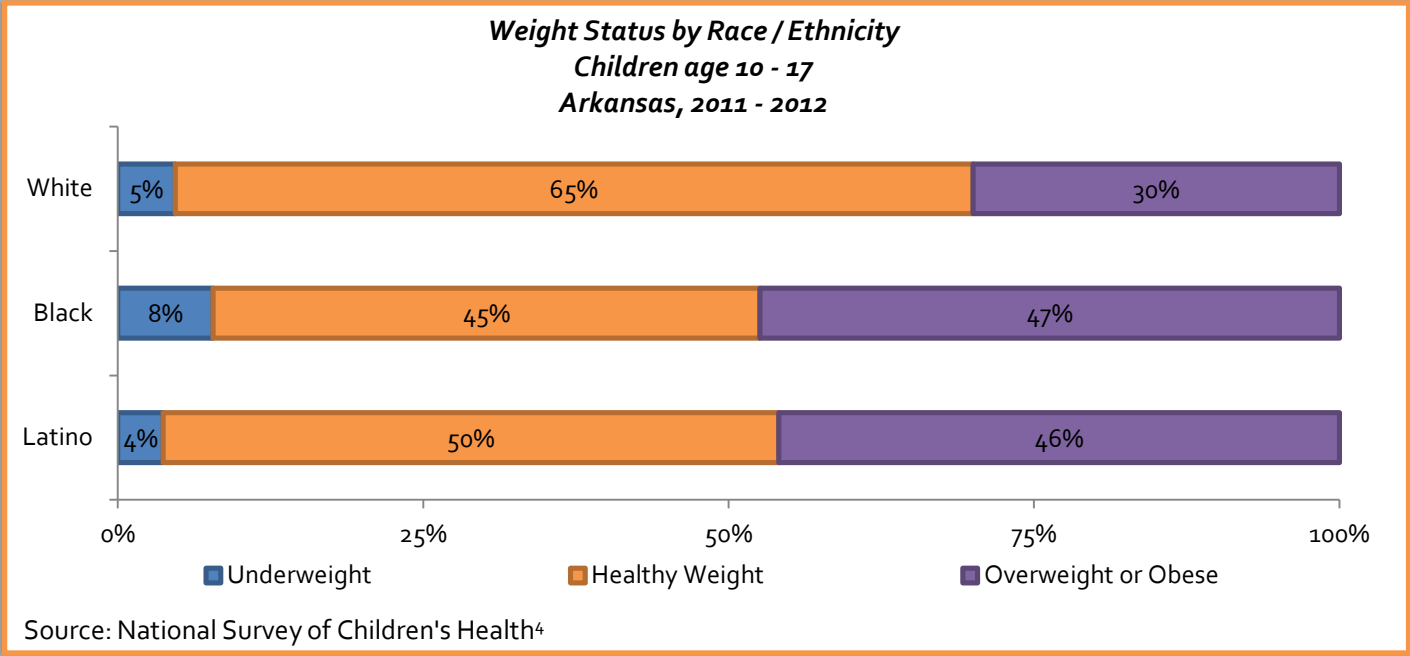
About a third of each group reported participating in no physical activities.

In 2011, Whites reported the lowest rates of exercise meeting both aerobic and muscle strengthening guidelines. About 4 out of 5 adults of each race/ethnicity failed to participate in enough exercise to meet guidelines.



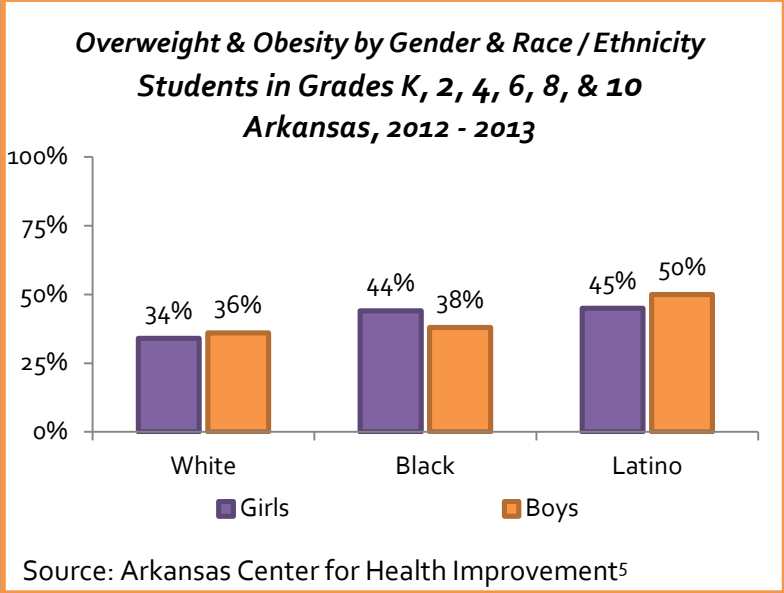
Childhood Obesity

Prevalence



From 2011-2012, differences in weight status were evident among children age 10 – 17 in Arkansas. White children showed the highest rates of healthy weight compared to African American and Latino children, and the lowest rates of overweight or obesity. Nearly half of African American and Latino children were overweight or obese.

Slight differences were also apparent when considering gender as well as race/ethnicity. While white boys and girls showed similar levels of overweight or obesity, African American girls showed a higher rate compared to African American boys, and Latino boys showed higher rates than Latino girls. Both genders of Latino students showed greater proportions of overweight and obesity compared to every other gender/race combination.

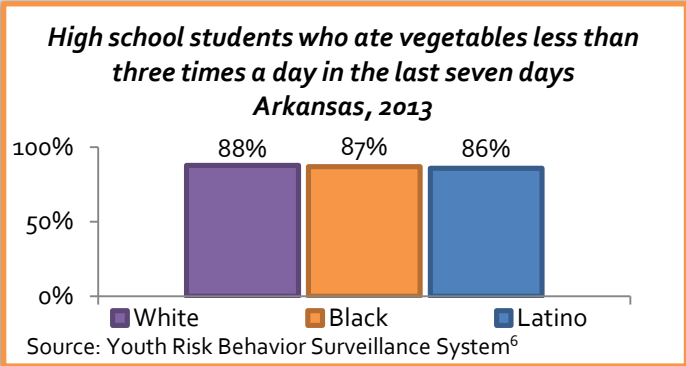
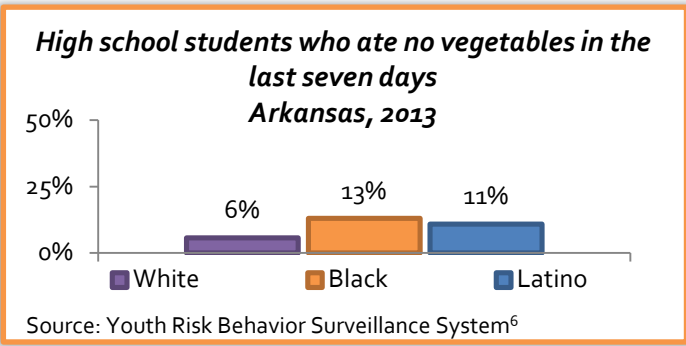
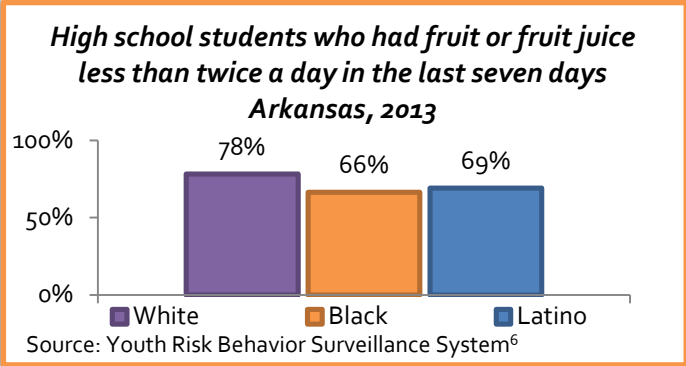
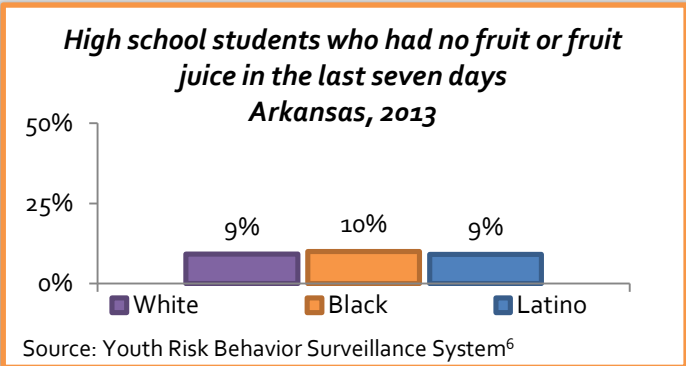


Prevention – Nutrition

For children and adolescents, proper nutrition can greatly reduce the risk of obesity in childhood and adulthood.⁷

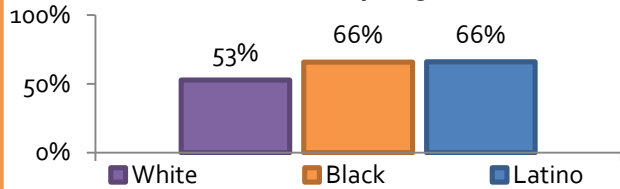
In 2013, about 1 in 10 high school students reported having no fruit or fruit juice in the seven days before the survey. Similar rates were reported among white, African American, and Latino students. In addition, white students were more likely to report having fruit or fruit juice less than twice a day.

Also in 2013, greater proportions of African American and Latino high school students reported eating no vegetables during the previous week compared to white students, and a similar proportion of white, African American, and Latino students reported eating vegetables less than three times a day.



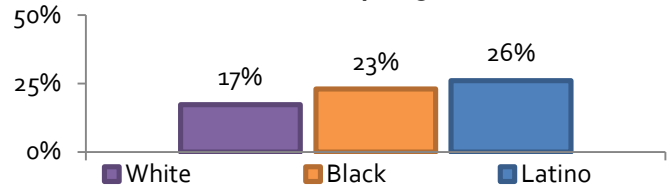
Prevention – Physical Activity

**High school students who were physically active at least 60 minutes on less than 5 days in the past week
Arkansas, 2013**



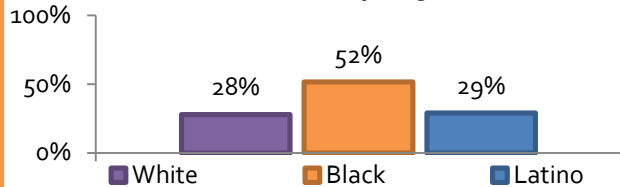
Source: Youth Risk Behavior Surveillance System⁶

**High school students who did not participate in at least 60 minutes of physical activity on any day in the past week
Arkansas, 2013**



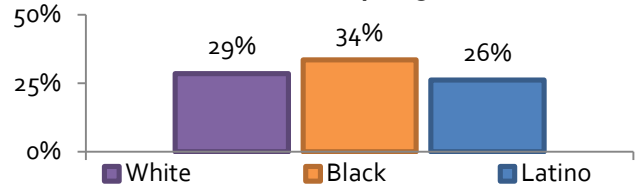
Source: Youth Risk Behavior Surveillance System⁶

**High school students who watched 3 or more hours of television on an average school day
Arkansas, 2013**



Source: Youth Risk Behavior Surveillance System⁶

**High school students who played video games or used their computer for 3 or more hours on an average school day
Arkansas, 2013**



Source: Youth Risk Behavior Surveillance System⁶

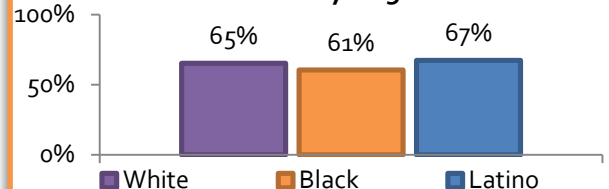
Appropriate levels of physical activity in children and adolescents can also be instrumental in the prevention and control of adult obesity.⁷

In 2013, Arkansas high school students of all races reported high rates of physical inactivity. Two-thirds of African American and Latino students reported being physically active less than 5 days in the past week, and 1 in 5 Latino students reported being active 0 days in the past week.

On an average school day, more than half of African American students reported watching more than 3 hours of television, and one third reported playing video games or using their computer 3 or more hours.

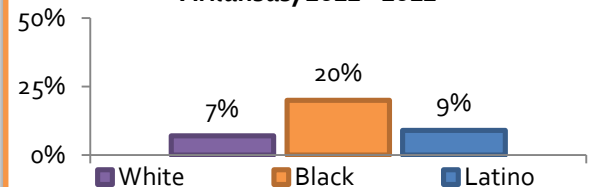
Continuing this trend, nearly 3 in 4 white, African American, and Latino students reported attending no physical education classes in an average week. In addition, higher rates of physical inactivity were reported by parents of African American children aged 6 to 17

**High school students who did not attend physical education classes in an average week
Arkansas, 2013**



Source: Youth Risk Behavior Surveillance System⁶

**Children age 6 - 17 who participated in no physical activity during the past week
Arkansas, 2011 - 2012**



Source: National Survey of Children's Health⁴

References

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