

# WEIGHT AND NUTRITION

## Fact Sheet



The Michigan Youth Risk Behavior Survey (YRBS) is part of a nationwide surveying effort led by the Centers for Disease Control and Prevention (CDC) to monitor students' health risks and behaviors in six categories identified as most likely to result in adverse outcomes. These categories include unintentional injury and violence, tobacco use, alcohol and other drug use, sexual behaviors that contribute to unintended pregnancy or disease, dietary behaviors, and physical inactivity. High response rates allow results of the 2009 YRBS to be generalized to all Michigan students in grades 9-12.

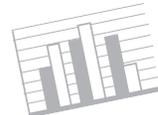


### Of Vital Concern: The National Perspective

Nationwide in 2007, 13% of high school students were obese and 16% were overweight. During 1999-2007, significant increases occurred in the percentage of students who were obese (11%-13%) and who were overweight (14%-16%). Obesity during adolescence is associated with negative psychological and social consequences and health problems such as type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome. Further, obese adolescents are more likely to become obese adults. Engaging in unhealthy weight control behaviors may result in health and psychological problems such as obesity, eating disorders such as anorexia and bulimia, and stunted growth. Disordered eating behaviors are correlated with inadequate nutrient intake, low self-esteem, high levels of depression, suicidal ideation, high levels of stress, and alcohol and drug use.

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, cardiovascular disease, and stroke. Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.

Calcium is essential for forming and maintaining healthy bones and low calcium intake during the first two to three decades of life is an important risk factor in developing osteoporosis. Although the recommended intake of calcium is 1,300 mg/day, most adolescents consume far less. In recent years, soft drink consumption has significantly increased among children and adolescents. Among persons aged 2 to 18 years, soft drinks comprised 3% of the total daily calories consumed in 1977-1978 compared to 7% in 1999-2001. Consumption of sugar-sweetened drinks, including soft drinks, appears to be associated with being at increased risk for overweight in children.

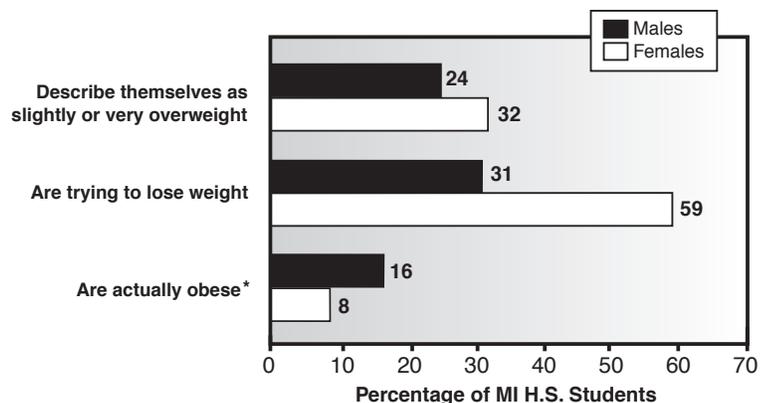


### 2009 Survey Results

- ◆ One-quarter of Michigan high school students are **obese**<sup>1</sup> or **overweight**.<sup>2</sup> Over one-third of failing students and black students fall into these categories.
- ◆ Males were more likely than females to be **obese**. Females were more likely than males to describe themselves as being **overweight** and were nearly twice as likely to be **trying to lose weight** (Figure 1).

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#### Body Image and Weight



\* Includes students who are overweight as defined by a body mass index at or above the 95th percentile

<sup>1</sup> *Obese* is defined by the CDC as a Body Mass Index (BMI) greater than 95 percent. BMI is calculated using the height and weight questions answered by each respondent.

<sup>2</sup> *Overweight* is defined by the CDC as a Body Mass Index (BMI) greater than 85 percent and less than 95 percent.

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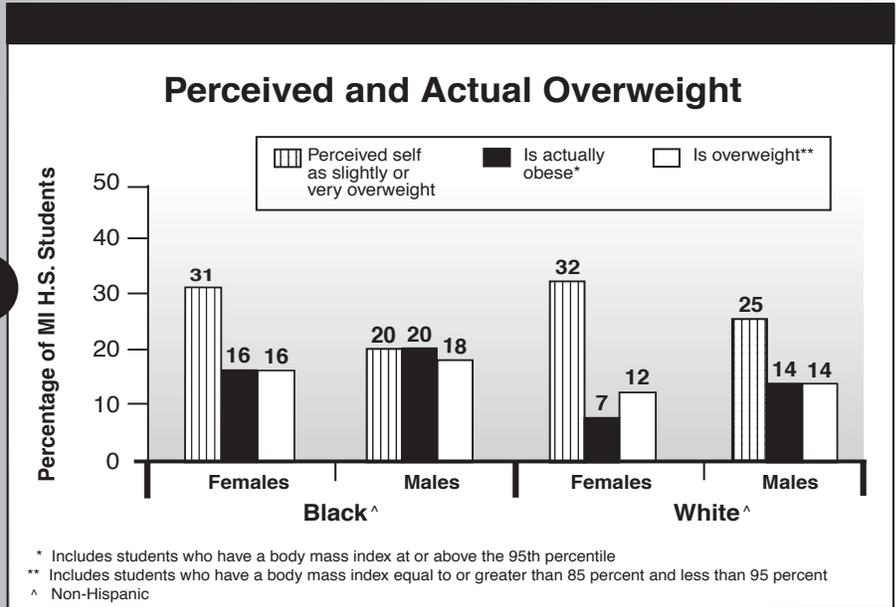
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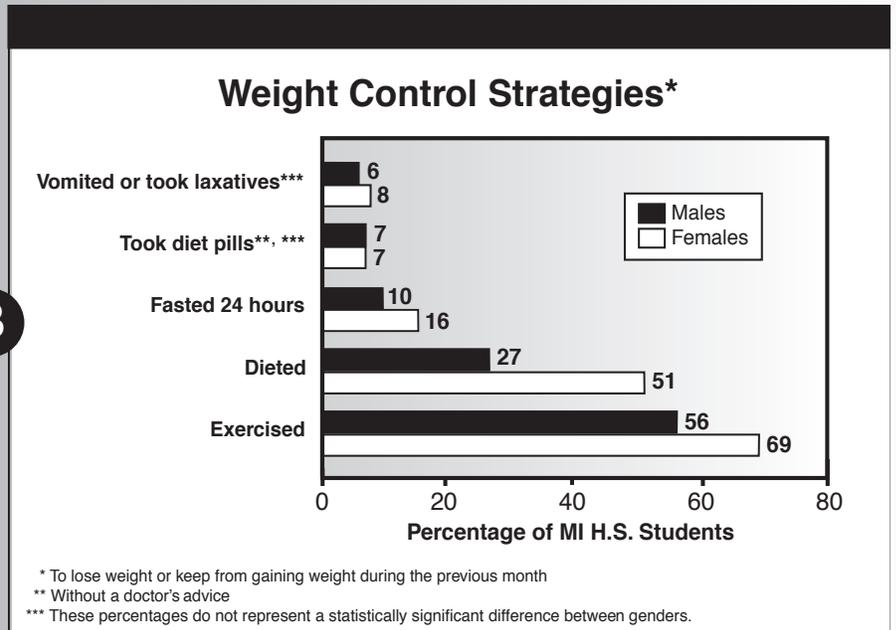
### 2009 Survey Results (continued)

- ◆ Black students were more likely than white students to be **obese**. They were also less likely to **exercise** or **diet** to lose or keep from gaining weight (Figure 2).
- ◆ Females were more likely than males to engage in weight loss behaviors, such as **exercise** and **dieting**. They were also more likely to **fast** to maintain or lose weight (Figure 3).
- ◆ Students with high grades were less likely to be **obese** than those with average and low grades in school.<sup>3</sup> They were also less likely to **fast** and use **diet pills** to control weight.
- ◆ One third of Michigan students had **breakfast daily**. More ninth graders than twelfth graders, more white than black and Hispanic students, and more students with high grades than average and low grades reported eating **breakfast** for the past week.

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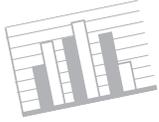


<sup>3</sup> Self report grades earned in school are used to assess academic achievement with high grades representing students with mostly As and Bs, average grades with Cs, and low grades with mostly Ds and Fs.

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### 2009 Survey Results (continued)



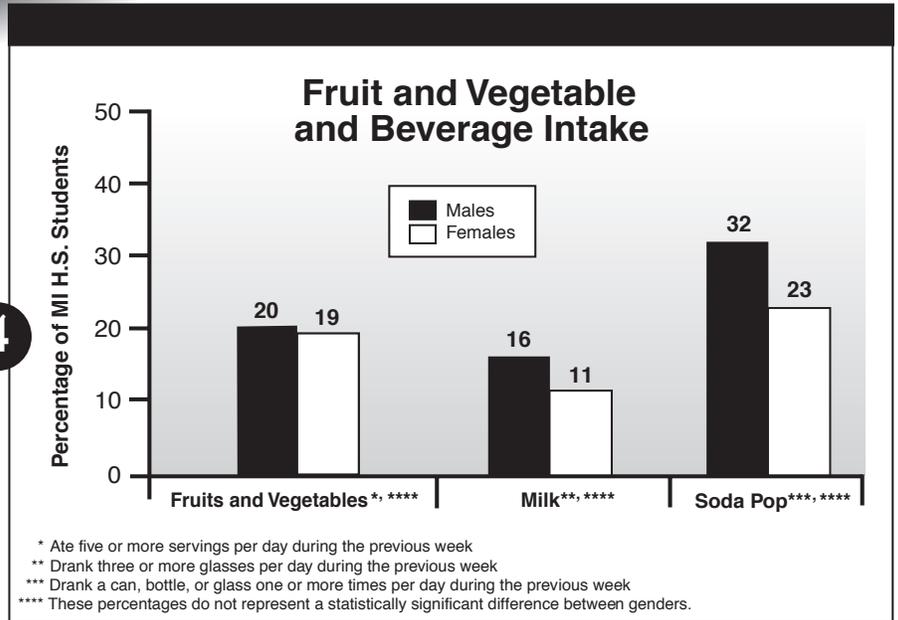
◆ One-fifth of Michigan students ate the recommended daily allowance of **five servings of fruit and vegetables<sup>4</sup> a day**. Females were more likely than males to consume **green salads** and **vegetables** other than potatoes and carrots in the past week (Figure 4).

◆ One-eighth of all students drank three or more glasses of **milk** daily. Black students were less likely than white students to drink **milk**. Ninth graders were more likely to drink **milk** than 12<sup>th</sup> graders.

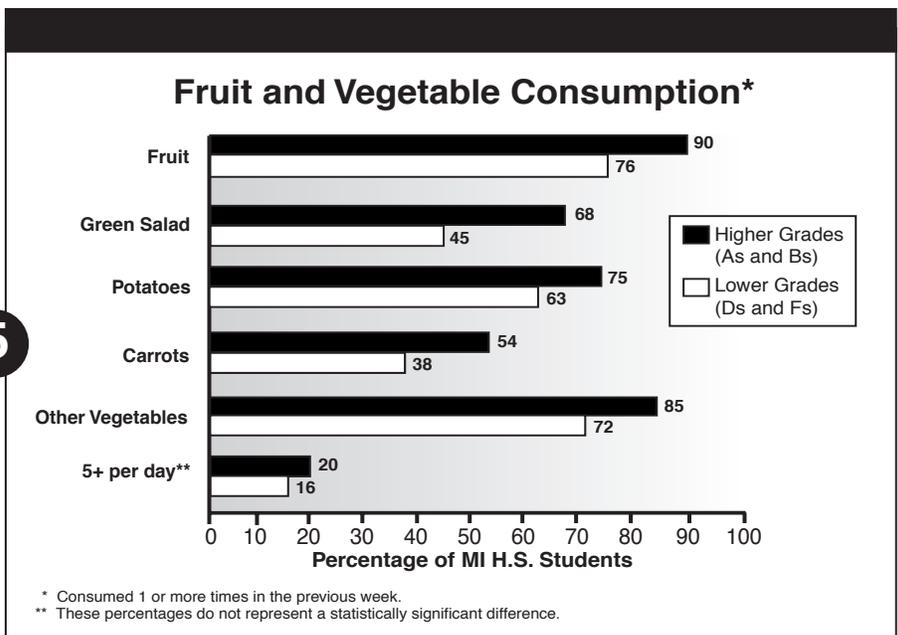
◆ Over one quarter of all students drank at least one can, bottle, or glass of **soda** daily. Females and students with high grades were less likely than males and students with average and low grades to do so (Figure 4).

◆ Students with higher grades were more likely than students with lower grades to consume at least one serving in the past week of **fruit, green salad, potatoes, carrots, or other vegetables**; however, they were about the same in eating at least **five or more servings of fruit and vegetables** a day (Figure 5).

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5



<sup>4</sup> Fruits and vegetables include 100% fruit juice, fruit, green salad, potatoes (excluding French fries, fried potatoes, or potato chips), carrots, or other vegetables.



### Trends

In the past decade, Michigan high school students are significantly more likely to exercise to control weight and less likely to diet or take diet pills to control weight. Nutritionally, they are less likely to eat green salads and potatoes and drink fruit juices and enough milk.

**Contact Information**  
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SURVEY QUESTIONS	MI	GENDER		GRADES				RACE/ETHNICITY		
	2009	M	F	9	10	11	12	Black <sup>^</sup>	Hispanic / Latino	White <sup>^</sup>
% of students who are <b>overweight</b> , whose Body Mass Index is >85% and < 95%	14	15	13	17	14	15	11	17	16	13
% of students who are <b>obese</b> , whose Body Mass Index is > or = 95%	12	16	8	11	13	13	11	18	11	10
% of students who <b>described themselves</b> as slightly or very <b>overweight</b>	28	24	32	26	28	30	27	25	28	28
% of students were <b>trying to lose weight</b>	45	31	59	48	44	42	45	38	48	46
% of students who <b>exercised to lose weight</b> or keep from gaining weight during the past 30 days	63	56	69	68	63	58	60	49	64	66
% of students who <b>ate less</b> food, fewer calories, or foods low in fat <b>to lose weight</b> or to keep from gaining weight during the past 30 days	39	27	51	39	38	40	38	31	45	41
% of students who <b>went without eating</b> for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days	13	10	16	13	13	13	12	16	17	12
% of students who <b>took diet pills</b> , powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight during the past 30 days	7	7	7	6	7	8	8	10	14	6
% of students who <b>vomited or took laxatives</b> to lose weight or to keep from gaining weight during the past 30 days	7	6	8	7	7	7	7	9	11	7
% of students who drank 100% <b>fruit juices</b> one or more times during the past 7 days	79	78	79	78	79	80	78	80	75	78
% of students <b>ate fruit</b> one or more times during the past 7 days	87	85	89	87	87	87	86	78	86	89
% of students who <b>ate green salad</b> one or times during the past 7 days	64	59	68	61	62	68	65	56	58	66
% of students who <b>ate potatoes</b> one or more times during the past 7 days	72	72	72	74	72	71	73	67	62	74
% of students who <b>ate carrots</b> one or more times during the past 7 days	51	49	52	51	51	52	48	36	53	53
% of students who <b>ate other vegetables</b> one or more times during the past 7 days	82	78	86	82	81	83	81	71	79	84
% of students who ate <b>5 or more servings of fruits and vegetables per day</b> during the past 7 days	20	20	19	20	18	21	19	24	25	18
% of students who <b>drank 3 or more glasses of milk per day</b> during the past 7 days	13	16	11	17	13	13	10	6	9	15
Percentage of students who <b>drank a can, bottle, or glass of soda or pop</b> one or more times per day during the past seven days	28	32	23	28	27	28	28	32	33	26
Percentage of students who <b>ate breakfast on seven</b> of the past seven days	35	37	34	42	33	35	31	20	27	39
Percentage of students who <b>ate breakfast on none</b> of the past seven days	13	14	13	12	13	13	16	21	19	12

<sup>^</sup>Non-Hispanic

For additional information on the YRBS results, please log on to [www.michigan.gov/yrbs](http://www.michigan.gov/yrbs)