



FRUITS AND VEGETABLE CONSUMPTION AMONG MICHIGAN ADULTS (2011 and 2013)

- In 2011, the CDC updated the Behavioral Risk Factor Survey (BRFS) fruit and vegetable dietary intake module to be more reflective of the 2010 Dietary Guidelines for Americans.¹ In addition, four new indicators were introduced replacing the adequate fruits and vegetable consumption indicator.
- Fruits and vegetables are no longer combined in one measure. Median daily fruit and vegetable intakes will serve as proxies for food access. The median is a statistic in which 50% of the measurements are above and 50% are below the value. Consumption of less than one time per day will be used to track poor fruit and vegetable intake over time.
- The CDC set results from 2013 as the new baselines for the states. Below are comparisons of 2011 and 2013 results for Michigan.

- **Median daily intake of fruits among adults:** In Michigan, the median intake was 1.1 times per day in 2011 and 1.0 time per day in 2013.
- **Percentage of adults who reported consuming fruit less than one time per day:** Nearly 40% of Michigan adults consumed fruits less than one time per day both in 2011 and 2013 (37.3% and 37.7%, respectively). A higher percentage of females than males consumed fruits more than one time per day. Only half of Michigan adults with less than a high school education consumed fruit more than one time per day.

Table 1. Daily Fruit Intake, Michigan, Adults (2011 and 2013)

	Median Fruit Intake Per Day		Fruits (< 1 time / day)			
	2011	2013	2011		2013	
			%	95% CI	%	95% CI
Total	1.1	1.0	37.3	(35.9-38.7)	37.7	(36.5-38.9)
Gender						
Male	1.0	1.0	42.3	(40.2-44.5)	42.4	(40.6-44.3)
Female	1.1	1.1	32.5	(30.7-34.3)	33.4	(31.8-34.9)
Race/Ethnicity						
Whiten Non-Hispanic	1.1	1.0	36.9	(35.3-38.5)	37.4	(36.1-38.7)
Black, Non-Hispanic	1.1	1.1	37.1	(33.0-41.5)	37.7	(33.7-41.9)
Other, Non-Hispanic	1.1	1.0	38.7	(31.8-46.1)	41.5	(35.3-48.0)
Hispanic	1.0	1.0	46.8	(38.2-55.7)	39.9	(32.7-47.6)
Education						
Less than high school	0.9	1.0	48.7	(43.1-54.3)	48.2	(42.9-53.5)
High school graduate	1.0	1.0	43.1	(40.6-45.7)	40.1	(38.1-42.2)
Some college	1.1	1.1	34.0	(31.6-38.4)	38.1	(36.0-40.2)
College graduate	1.3	1.2	28.6	(26.6-30.7)	29.2	(27.4-31.0)
Household Income						
< \$20,000	1.0	1.0	45.2	(41.6-48.8)	41.8	(38.6-45.0)
\$20,000 - \$34,999	1.0	1.0	42.8	(39.6-46.0)	41.8	(39.1-44.6)
\$35,000 - \$49,999	1.1	1.1	32.6	(29.2-36.2)	36.4	(33.1-39.7)
\$50,000 - \$74,999	1.1	1.0	33.8	(30.4-37.4)	36.2	(33.3-39.3)
\$75,000 +	1.3	1.1	29.6	(26.9-32.4)	32.4	(30.1-34.7)

- **Median daily intake of vegetables among adults:** The median vegetable intake was 1.6 in 2011 and 2013.
- **Percentage of adults who reported consuming vegetables less than one time per day:** Nearly one quarter of Michigan adults consumed vegetables less than one time per day. The prevalence estimates among adult males and non-Hispanic Black adults were higher than the estimates among adult females and non-Hispanic White adults. The percentage of those who had vegetable intake less than once per day was lowest among those with at least a college degree compared to lower education.

Table 2. Daily Vegetable Intake, Michigan, Adults (2011 and 2013)

	Median Vegetable Intake Per Day		Vegetable (< 1 time / day)			
	2011	2013	2011		2013	
			%	95% CI	%	95% CI
Total	1.6	1.6	23.2	(21.8-24.3)	24.8	(23.6-25.9)
Gender						
Male	1.4	1.4	27.4	(25.4-29.5)	28.6	(26.9-30.4)
Female	1.7	1.7	18.9	(17.5-20.5)	21.1	(19.8-22.6)
Race/Ethnicity						
Whiten Non-Hispanic	1.6	1.6	21.3	(20.0-22.7)	22.6	(21.4-23.7)
Black, Non-Hispanic	1.3	1.4	32.4	(28.4-36.7)	36.5	(32.4-40.8)
Other, Non-Hispanic	1.7	1.6	24.4	(18.4-31.7)	26.2	(20.9-32.4)
Hispanic	1.5	1.4	28.3	(20.7-37.3)	29.5	(22.7-37.5)
Education						
Less than high school	1.3	1.2	32.9	(27.8-38.6)	38.7	(33.6-44.0)
High school graduate	1.4	1.4	28.2	(25.9-30.6)	28.4	(26.4-30.4)
Some college	1.6	1.6	20.2	(18.2-22.4)	23.6	(21.8-25.6)
College graduate	1.9	1.9	15.5	(13.9-17.1)	15.5	(14.1-17.0)
Household Income						
< \$20,000	1.4	1.3	31.8	(28.4-35.3)	34.3	(31.2-37.6)
\$20,000 - \$34,999	1.4	1.5	26.2	(23.4-29.2)	27.1	(24.6-29.7)
\$35,000 - \$49,999	1.6	1.5	18.9	(16.1-22.1)	23.7	(20.8-26.8)
\$50,000 - \$74,999	1.7	1.7	19.6	(16.6-22.9)	19.2	(16.8-21.8)
\$75,000 +	1.8	1.8	15.5	(13.5-17.9)	17.0	(15.2-19.0)

Source: MiBRFSS [www.michigan.gov/brfs]

References:

1. U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2010. 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010.

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