

Fruit and Vegetable Consumption

DESCRIPTION

Fruits and vegetables are key components in a healthy diet because they are rich sources of vitamins, minerals, flavonoids, antioxidants and fiber. Consuming a wide variety of fruits and vegetables helps to ensure an adequate intake of all the essential nutrients. Including the recommended levels of fruits and vegetables in the daily diet tends to decrease the risk of noncommunicable diseases such as stroke, heart disease and cancer. Inadequate consumption of fruits and vegetables contributes to an estimated 5.2 million deaths worldwide.¹

HOW WE ARE DOING

In 2015 nationally, 12.2 percent of adults met the fruit intake recommendations, and 9.3 percent met vegetable intake recommendations. Compared to Minnesota, 11.6 percent met the fruit intake requirement and 8.1 percent met the vegetable recommendation.² In that same year, about 22 percent of Minnesota adults ate less than one daily vegetable and 37 percent ate less than one daily fruit.³ In 2014 among Ramsey County adults, 12.8 percent reported eating less than one daily vegetable and 15.6 percent ate less than one fruit.⁴ Fruit and vegetable intake among Ramsey County youth is also a concern. In 2016, about 6 percent of 9th grade students reported that they had eaten no fruit in the past seven days, and 11.5 percent said they had eaten no vegetables during that time.⁵

BENCHMARK INDICATOR

Healthy People 2020:

- 1) Increase the contribution of fruits to the diets of the population aged 2 years and older. U.S. Target: 0.93 cup equivalent per 1,000 calories.
- 2) Increase the contribution of total vegetables to the diets of the population aged 2 years and older. U.S. Target: 1.16 cup equivalent per 1,000 calories.⁶

DISPARITIES

There are disparities related to fruit and vegetable consumption. Rates of eating less than one daily fruit or vegetable are highest among American Indian/Alaska Native individuals, followed by non-Hispanic black and individuals of two or more races.² In Ramsey County, adults with only high school education generally have lower fruit and vegetable consumption than those with college education.⁴ Adults with incomes below 200 percent of the federal poverty level also report eating less fruits and vegetables.⁴ Individuals with lower incomes are more likely to use food shelves; because of financial constraints, and food shelves often have limited numbers of fresh fruits and vegetables to offer.

RISK FACTORS

Factors affecting fruit and vegetable consumption are complex, but socio-economic status and environmental factors play a large role. The World Health Organization recommends the following actions to address low fruit and vegetable consumption: pricing incentives to lower the cost; promotion and support of gardening; behavioral interventions to boost consumption; and improvements in food systems.¹

Information to note

- Among Ramsey County adults, 12.8% reported eating less than one daily vegetable and 15.6% ate less than one fruit.
- Among Ramsey County 9th graders, 20.2% reported getting five or more daily servings of fruit, fruit juice or vegetables.
- Individuals with lower incomes or less education are at greater risk for low fruit and vegetable consumption.

Community voice

"Drinking plenty of water, eating veggies, stable diet."
- Male, age 25-34

1878 respondents identified food and nutrition as influencing their health. About half of these respondents (48.8%) attributed positive health to healthy dieting and fruit and vegetable consumption.

¹ Increasing fruit and vegetable consumption to reduce the risk of noncommunicable diseases. World Health Organization. http://www.who.int/elena/titles/fruit_vegetables_ncds/en/. Accessed June 2018.

² Lee-Kwan SH, Moore LV, Blanck HM, Harris DM, Galuska D. Disparities in State-Specific Adult Fruit and Vegetable Consumption — United States, 2015. *MMWR Morb Mortal Wkly Rep* 2017;66:1241–1247. DOI: <http://dx.doi.org/10.15585/mmwr.mm6645a1>.

³ Centers for Disease Control and Prevention. Nutrition, Physical Activity, and Obesity: Data Trends & Maps. <https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html>. Accessed June 2018.

⁴ Saint Paul – Ramsey County Public Health. Metro SHAPE Ramsey County Data Book 2014. https://www.ramseycounty.us/sites/default/files/Open%20Government/Public%20Health%20Data/ramsey_county_metro_SHAPE_2014_survey.pdf. Accessed June 2018.

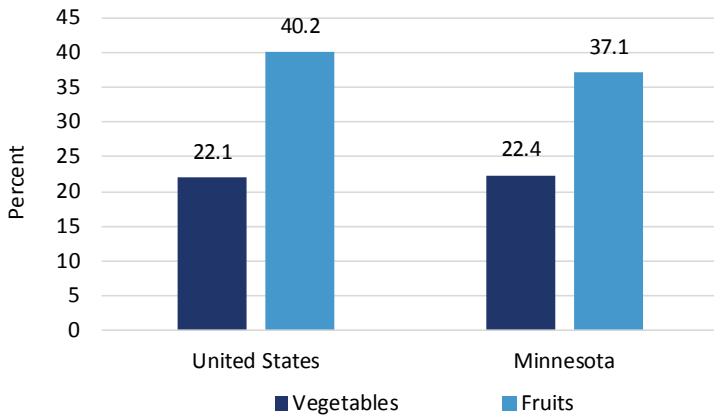
⁵ Minnesota Student Survey. Saint Paul Ramsey County Public Health data set.

⁶ Nutrition and Weight Status. [Healthypeople.gov](https://www.healthypeople.gov/2020/topics-objectives/topic/nutrition-and-weight-status/objectives). <https://www.healthypeople.gov/2020/topics-objectives/topic/nutrition-and-weight-status/objectives>. Accessed June 2018.

WHAT RAMSEY COUNTY GOVERNMENT IS DOING

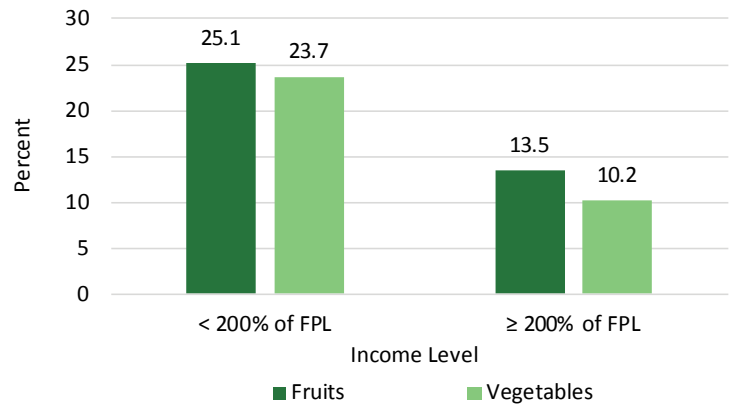
The Statewide Health Improvement Partnership (SHIP) work has become an integral part of Saint Paul- Ramsey County Public Health's efforts to help combat and prevent chronic disease among Ramsey County residents, including focusing on increasing fruit and vegetable consumption. Efforts include working within our Ramsey County district schools to implement school yard garden programs, farm to school strategies, and smarter lunchroom strategies. Also, SHIP funds are used to help improve Farmers Market access, improve food shelf offerings and improve offerings in vending machines, as well as improve childcare offerings and expand gardens in the workplace. Healthy eating and physical activity are vital to preventing and addressing chronic disease.

Adults Who Consumed Less Than One Fruit or Vegetable the Previous Day, 2015



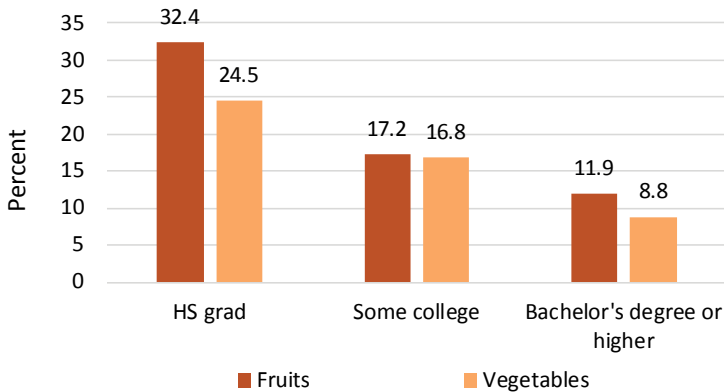
Source: Centers for Disease Control and Prevention.⁷

Adults Who Consumed Less Than One Fruit or Vegetable the Previous Day by Income, Ramsey County, 2014



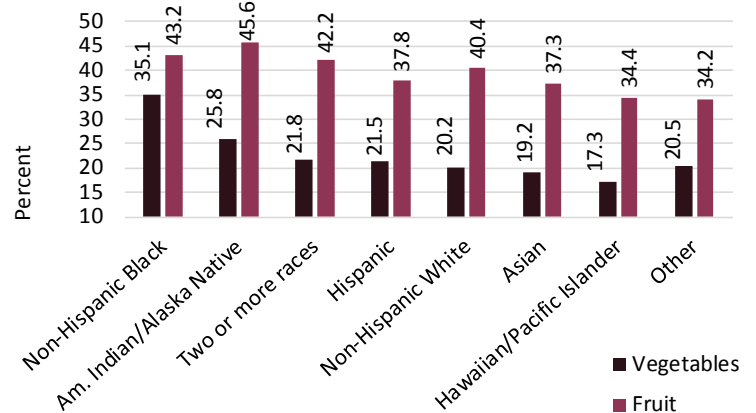
Source: Metro SHAPE Ramsey County Data Book 2014.⁸

Adults Who Consumed Less Than One Fruit or Vegetable the Previous Day by Education, Ramsey County, 2014



Source: Metro SHAPE Ramsey County Data Book 2014.⁹

Adults Who Consumed Less Than One Fruit or Vegetable the Previous Day by Race/Ethnicity, U.S., 2015



Source: Centers for Disease Control and Prevention.¹⁰

⁷ Data Trends & Maps. Centers for Disease Control and Prevention. <https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html>. Accessed June 2018.

⁸ Saint Paul – Ramsey County Public Health. Metro SHAPE Ramsey County Data Book 2014. <https://www.ramseycounty.us/your-government/open-government/research-data/public-health-data>. Accessed June 2018.

⁹ Saint Paul – Ramsey County Public Health. Metro SHAPE Ramsey County Data Book 2014. <https://www.ramseycounty.us/your-government/open-government/research-data/public-health-data>. Accessed March 2018.

¹⁰ Disparities in Race-Specific Fruit and Vegetable Consumption. Centers for Disease Control and Prevention. <https://www.cdc.gov/mmwr/volumes/66/wr/mm6645a1.htm>. Accessed June 2018.