Healthy Wisconsin (2017-2021) Nutrition and Physical Activity Data Brief

"Eat Healthier and Move More" Goal

Healthy Wisconsin Background

Healthy Wisconsin, Wisconsin's state health improvement plan (SHIP), is a five-year strategic plan designed to improve health outcomes for Wisconsinites and their communities. Healthy Wisconsin officially launched in May 2017 and receives annual reassessments and updates to ensure the effectiveness of its implementation. These updates help keep the plan relevant and responsive in a rapidly changing environment.

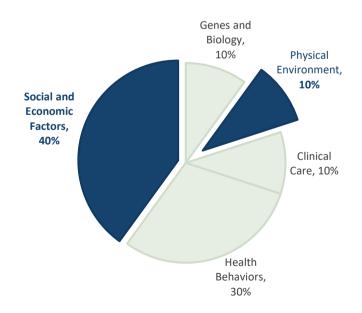
May 2021 marked the end of Healthy Wisconsin as the operational plan, and planning staff are shifting focus to the next iteration of our SHIP. This data brief was prepared by the Chronic Disease Prevention Program to support the final Healthy Wisconsin annual reassessment and focuses on one of the five priority areas: Nutrition and Physical Activity. This data brief specifically details indicators of adult health used to measure the goal of "Eating Healthier and Moving More."

Indicators in This Data Brief

In January 2021, the <u>Wisconsin State Improvement Plan 2019 Annual Report, (P-01791)</u> reported that numerous targets within the Nutrition and Physical Activity priority area met their 2020 goal, or were trending upward from the 2013 baseline, using the most recently available data. While this update is an encouraging marker of overall state progress, disparities across indicators of adult health in the Nutrition and Physical Activity priority area persist. This data brief describes disparities across three indicators of adult health within the Nutrition and Physical Activity priority area by gender, race and ethnicity, age, educational attainment, and household income. Populations are then compared to the Healthy Wisconsin 2020 goals.

Looking at population disparities allows us to better understand who has opportunities and supports to be healthy, and who does not. These opportunities and supports are shaped by policies, systems and environments that are out of an individual's control. These systems, policies, and environments and how they intersect have immense implications for disparities observed in eating healthier and moving more. For example, racial disparities in fruit and vegetable consumption are closely tied to structural and institutional racism's impacts on food environments, and systemic barriers to healthy food access. 1-5 Built environment factors are further compounded by social and economic factors that influence nutrition and physical activity outcomes. Addressing systems, policies, and environments that create equitable opportunities for health is essential to improving nutrition and activity levels. 6 The disparities highlighted in this data brief can be used to guide system, policy, and environmental change to provide all Wisconsinites the opportunity to be healthy.

What creates health?7



The indicators for this data brief are from the Behavioral Risk Factor Surveillance System (BRFSS). BRFSS is an annual, representative survey of non-institutionalized Wisconsin adults 18 and older. BRFSS is used to provide state-wide estimates of health behaviors and status. These estimates of population statistics contain some level of sampling error.

In this document, we highlight the 95% confidence intervals around estimates in line graphs using shadowed coloring. Confidence intervals for bar graphs are not displayed, but can be found in Tables 1 through 3.

Although BRFSS is conducted annually, some questions are asked every other year, including the fruit and vegetable consumption questions used to calculate the indicators in this data brief. For this reason, we present data points for every other year over time.

All stratifications by population demographics are 2013, 2015, 2017, and 2019 survey data combined. Survey data were combined primarily to generate reliable estimates for more detailed racial and ethnic stratifications.

The **three indicators** presented in this data brief are the percent of Wisconsin adults who:

- Consume fruits more than one time per day.
- Consume vegetables more than one time per day.
- Are physically active for more than 150 minutes per week.

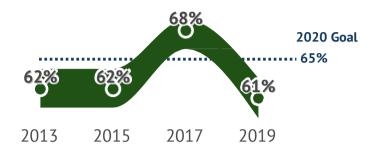
These indicators are measures of progress under Objectives 1 and 3 of the Healthy Wisconsin Nutrition and Physical Activity priority area:

- Objective 1: Increase consumption of healthy foods and beverages.
- Objective 3: Increase physical activity.

Objective 1: Increase consumption of healthy foods and beverages

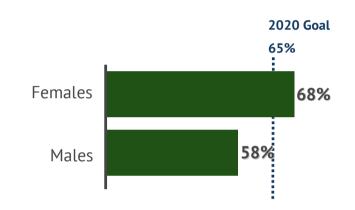
2020 Goal: Increase consumption of **at least one fruit per day** by adults from 62% in 2013 to 65% in 2020.

The percentage of Wisconsin adults who report eating more than one fruit per day has experienced an overall decline from 2013 to 2019. 2013, 2015, and 2017 saw consecutive increases, but declined in 2019 to below the 2020 goal.



Sex

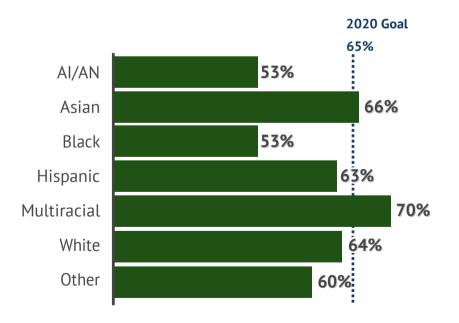
Females report consuming at least one fruit per day at higher rates than males. Females meet the 2020 goal, but males do not.



Race and Ethnicity Black

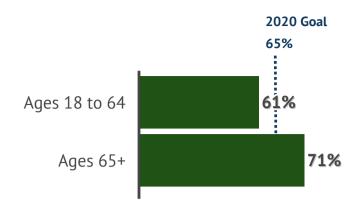
and American Indian or Alaskan Native (AI/AN) adults report significantly less fruit consumption. Rates among Black and AI/AN adults are significantly lower than the Healthy Wisconsin 2020 goal.

Racial and ethnic disparities in fruit and vegetable consumption are closely tied to structural and institutional racism's impacts on food environments, and systemic barriers to healthy food access.¹⁻⁵



Age

Adults 65 years of age or older have had consistently higher rates of fruit consumption than younger adults. While older adults are meeting the Healthy Wisconsin 2020 goal, those under 65 are not.

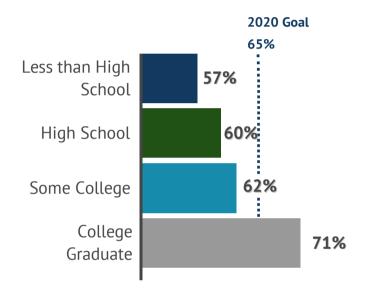


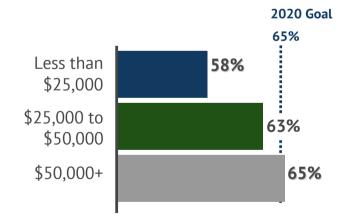
Education and Household Income

Rates of consuming at least one fruit per day increase with rising household income levels and educational attainment

Education is closely connected to income. Higher educational attainment improves access to higher paying jobs, which can afford people the ability to purchase more nutritious foods and access spaces or equipment that promote physical activity. Higher paying jobs also improve access to quality health care, and the ability to cover out-of-pocket expenses.⁸⁻¹¹

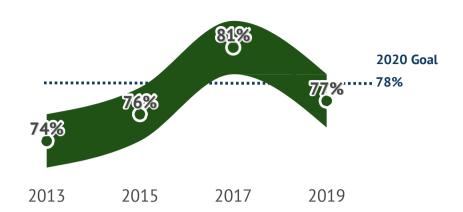
Additionally, education increases awareness of nutritious foods and physical activity, and their importance to health and wellbeing. When combined with other systemic factors, like access nutritious foods and to safe places, this knowledge can inform healthier personal choices when options are available.





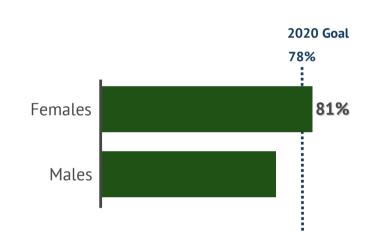
2020 Goal: Increase consumption of **at least one vegetable per day** by adults from 74% in 2013 to 78% in 2020.

The percentage of adults eating more than one vegetable per day steadily increased from 74% in 2013 to 81% in 2017. In 2019, there was a drop back down to 77%, just shy of the Healthy Wisconsin 2020 goal of 78%.



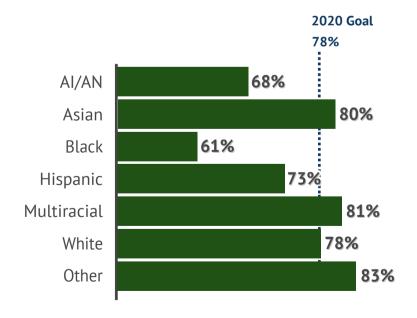
Sex

Females report consuming at least one vegetable per day at higher rates than males. Females meet the 2020 goal, while males do not.



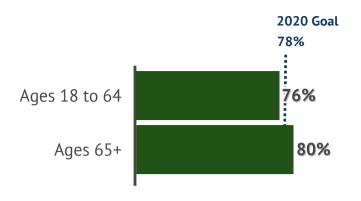
Race and Ethnicity

Stark racial and ethnic disparities in vegetable consumption exist. The percentage of Black adults that reported eating at least one vegetable per day was much lower than other racial and ethnic groups. American Indian or Alaska/Native (AI/AN) and Hispanic adults were also below the Healthy Wisconsin 2020 goal.



Age

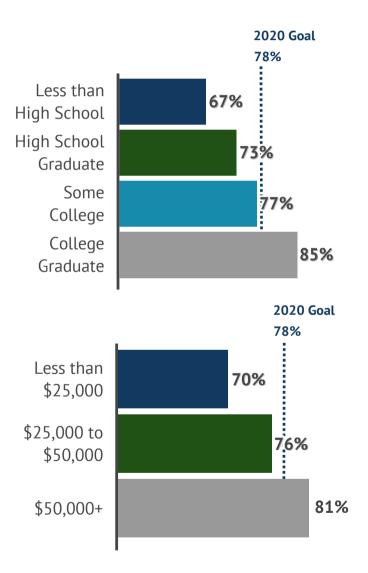
Like fruit consumption, adults 65 years of age or older have had consistently higher rates of vegetable consumption than younger adults. While older adults are meeting the Healthy Wisconsin 2020 goal, those under 65 are not.



Education and Household Income

Like fruit consumption, as income and education increase, so does vegetable consumption.

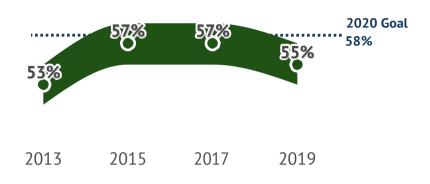
Those with a household income of \$50,000+ per year consistently had higher rates than all other income categories, and college graduates had the highest rates among educational attainment categories.



Objective 3: Increase physical activity

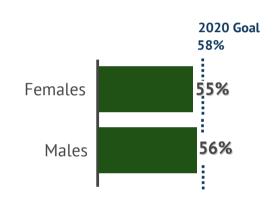
2020 Goal: Increase the rate of adults physically active at least 150 minutes per week from 53% in 2013 to 58% in 2020.

The percentage of Wisconsin adults who get at least 150 minutes of physical activity per week has remained largely unchanged since 2013 and hasn't reached the Healthy Wisconsin 2020 goal.



Sex

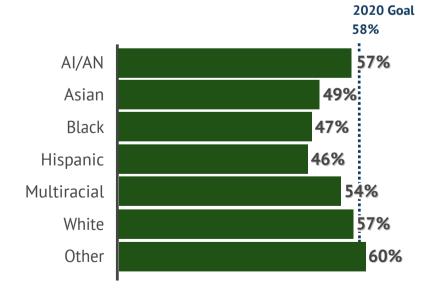
Males and females report similar rates at 55% and 56% respectively, and do not meet the Healthy Wisconsin 2020 goal.



Race and Ethnicity

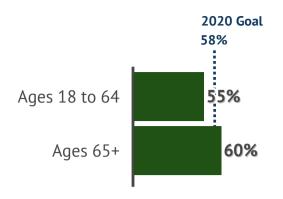
We observed racial and ethnic disparities in reported rates of 150 or more minutes of physical activity per week.

Black, Hispanic, and Asian adults reported lower rates than other races and ethnicities in Wisconsin.



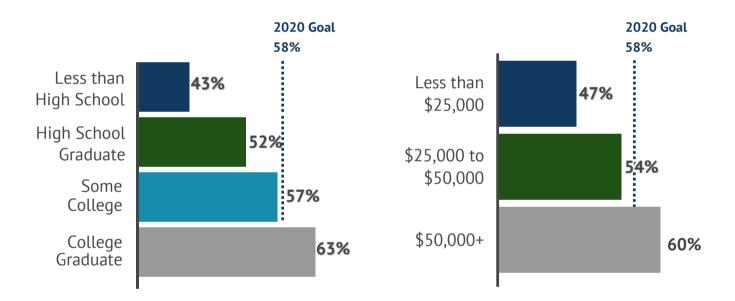
Age

While older adults are meeting the Healthy Wisconsin 2020 goal of attaining 150 minutes per week of physical activity, those under 65 are not.



Education and Household Income

Like fruit and vegetable consumption indicators, as household income and educational attainment increase, the rates of physical activity increase.



Conclusion

This data brief highlights select disparities observed across three Healthy Wisconsin indicators. Even when statewide measures suggest goals are being met, when we break the data down by different populations, we uncover disparities. Furthermore, across all three indicators, we appear to reach Healthy Wisconsin 2020 goals in 2017. However, our latest available data in 2019 showed concerning decreases in recent progress.

The trends and disparities outlined in this data brief were compiled as part of the Healthy Wisconsin's annual reassessment and update. We know these disparities reflect inequitable access, opportunity, and supports for health. The disparities described here can be used to foster discussion around policy, system, and environmental change, and provide baseline measures for improvement goals moving forward into the next state health improvement plan.

Citations

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Table 1. Percent of adults consuming at least one fruit per day by gender, age, race/ethnicity, education, and household income stratifications, and 95% confidence intervals (CI).

| Year | Percent | Lower 95% CI | Upper 95% CI |
|---|---|---|---|
| 2013 | 62% | 60% | 64% |
| 2015 | 62% | 60% | 64% |
| 2017 | 68% | 66% | 69% |
| 2019 | 61% | 59% | 63% |
| Sex | | Lower 95% CI | |
| Males | 58% | 57% | 59% |
| Females | 68% | 67% | 70% |
| | 0070 | 0770 | 7 070 |
| Race and Ethnicity | Percent | Lower 95% CI | Upper 95% CI |
| AI/AN | 53% | 44% | 63% |
| Asian | 66% | 57% | 75% |
| Black | 53% | 48% | 59% |
| Hispanic | 63% | 58% | 69% |
| Multiracial | 70% | 61% | 79% |
| | 6.407 | 63% | 65% |
| White | 64% | 03/0 | 0370 |
| White Other | 60% | 49% | 72% |
| | 60% | | 72% |
| Other | 60% | 49% | 72% |
| Other Age | 60% Percent | 49% Lower 95% CI | 72% Upper 95% CI |
| Other Age 18 to 64 | 60% Percent 61% 71% | 49% Lower 95% CI 60% | 72% Upper 95% CI 62% 73% |
| Other Age 18 to 64 65+ | 60% Percent 61% 71% | 49% Lower 95% CI 60% 70% | 72% Upper 95% CI 62% 73% |
| Other Age 18 to 64 65+ Education | 60% Percent 61% 71% Percent | 49% Lower 95% CI 60% 70% Lower 95% CI | 72% Upper 95% CI 62% 73% Upper 95% CI |
| Other Age 18 to 64 65+ Education Less than High School | 60% Percent 61% 71% Percent 57% | 49% Lower 95% CI 60% 70% Lower 95% CI 53% | 72% Upper 95% CI 62% 73% Upper 95% CI 61% |
| Other Age 18 to 64 65+ Education Less than High School High School Graduate | 60% Percent 61% 71% Percent 57% 60% | 49% Lower 95% CI 60% 70% Lower 95% CI 53% 58% | 72% Upper 95% CI 62% 73% Upper 95% CI 61% 61% |
| Other Age 18 to 64 65+ Education Less than High School High School Graduate Some College | 60% Percent 61% 71% Percent 57% 60% 62% 71% | 49% Lower 95% CI 60% 70% Lower 95% CI 53% 58% 61% | 72% Upper 95% CI 62% 73% Upper 95% CI 61% 61% 64% 73% |
| Other Age 18 to 64 65+ Education Less than High School High School Graduate Some College College Graduate | 60% Percent 61% 71% Percent 57% 60% 62% 71% | 49% Lower 95% CI 60% 70% Lower 95% CI 53% 58% 61% 70% | 72% Upper 95% CI 62% 73% Upper 95% CI 61% 61% 64% 73% |
| Other Age 18 to 64 65+ Education Less than High School High School Graduate Some College College Graduate Income | 60% Percent 61% 71% Percent 57% 60% 62% 71% Percent | 49% Lower 95% CI 60% 70% Lower 95% CI 53% 58% 61% 70% Lower 95% CI | 72% Upper 95% CI 62% 73% Upper 95% CI 61% 61% 64% 73% Upper 95% CI |
| Other Age 18 to 64 65+ Education Less than High School High School Graduate Some College College Graduate Income Less than \$25,000 | 60% Percent 61% 71% Percent 57% 60% 62% 71% Percent 58% | 49% Lower 95% CI 60% 70% Lower 95% CI 53% 58% 61% 70% Lower 95% CI | 72% Upper 95% CI 62% 73% Upper 95% CI 61% 61% 64% 73% Upper 95% CI 60% |

Table 2. Percent of adults consuming at least one vegetable per day by gender, age, race/ethnicity, education, and household income stratifications, and 95% confidence intervals (CI).

| Year | Percent | Lower 95% CI | Upper 95% CI |
|-----------------------|---------|--------------|--------------|
| 2013 | 74% | 72% | 76% |
| 2015 | 76% | 74% | 78% |
| 2017 | 81% | 79% | 83% |
| 2019 | 77% | 75% | 79% |
| Sex | Percent | Lower 95% CI | Upper 95% CI |
| Males | 73% | 72% | 75% |
| Females | 81% | 80% | 82% |
| | | | |
| Race and Ethnicity | Percent | Lower 95% CI | Upper 95% CI |
| AI/AN | 68% | 59% | 77% |
| Asian | 80% | 72% | 87% |
| Black | 61% | 56% | 67% |
| Hispanic | 73% | 68% | 78% |
| Multiracial | 81% | 74% | 88% |
| White | 78% | 77% | 79% |
| Other | 83% | 74% | 92% |
| Age | Percent | Lower 95% CI | Upper 95% CI |
| 18 to 64 | 76% | 75% | 77% |
| 65+ | 80% | 78% | 81% |
| Education | Percent | Lower 95% CI | Upper 95% CI |
| Less than High School | 67% | 62% | 71% |
| High School Graduate | 73% | 71% | 74% |
| Some College | 77% | 76% | 79% |
| College Graduate | 85% | 84% | 86% |
| Income | Percent | Lower 95% CI | Upper 95% CI |
| Less than \$25,000 | 70% | 68% | 72% |
| \$25,000 to \$50,000 | 76% | 74% | 78% |
| \$50,000+ | 81% | 80% | 82% |
| | | | |

Table 3. Percent of adults physically active at least 150 minutes per week by gender, age, race/ethnicity, education, and household income stratifications, and 95% confidence intervals (CI).

| 95% confidence intervals (CI). | | | |
|--------------------------------|---------|--------------|--------------|
| Year | Percent | Lower 95% CI | Upper 95% CI |
| 2013 | 53% | 51% | 55% |
| 2015 | 57% | 55% | 59% |
| 2017 | 57% | 55% | 59% |
| 2019 | 55% | 53% | 57% |
| Sex | Percent | Lower 95% CI | Upper 95% CI |
| Males | 56% | 54% | 57% |
| Females | 55% | 54% | 57% |
| | | | |
| Race and Ethnicity | Percent | Lower 95% CI | Upper 95% CI |
| AI/AN | 57% | 47% | 66% |
| Asian | 49% | 40% | 59% |
| Black | 47% | 41% | 53% |
| Hispanic | 46% | 41% | 52% |
| Multiracial | 54% | 44% | 64% |
| White | 57% | 56% | 58% |
| Other | 60% | 48% | 71% |
| Age | Percent | Lower 95% CI | Upper 95% CI |
| 18 to 64 | 55% | 53% | 56% |
| 65+ | 60% | 58% | 62% |
| Education | Percent | Lower 95% CI | Upper 95% CI |
| Less than High School | 43% | 39% | 47% |
| High School Graduate | 52% | 50% | 54% |
| Some College | 57% | 55% | 59% |
| College Graduate | 63% | 61% | 64% |
| Income | Percent | Lower 95% CI | Upper 95% CI |
| Less than \$25,000 | 47% | 45% | 50% |
| \$25,000 to \$50,000 | 54% | 52% | 56% |
| \$50,000+ | 60% | 58% | 61% |

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