
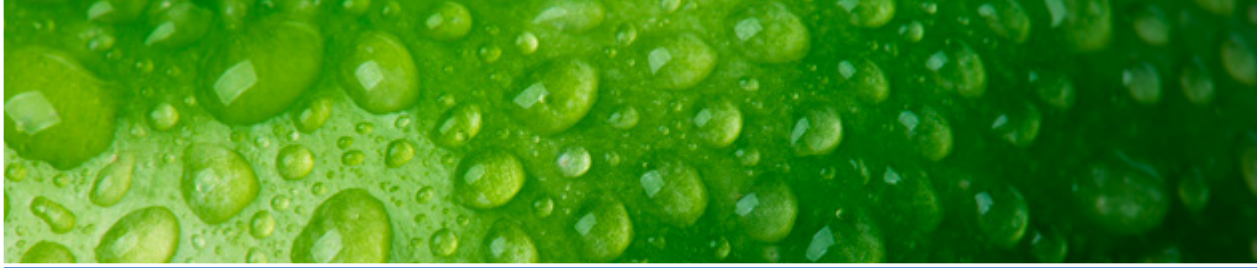


YOUTH RISK BEHAVIOR SURVEY DATA SUMMARY & TRENDS REPORT

FOR DIETARY, PHYSICAL ACTIVITY, AND SLEEP BEHAVIORS: 2013–2023




CDC
U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

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EXECUTIVE SUMMARY

The *Youth Risk Behavior Survey Data Summary & Trends Report for Dietary, Physical Activity, and Sleep Behaviors: 2013–2023* provides the most recent surveillance data, the 10-year trends, and 2-year changes in health behaviors and experiences among high school students in the United States (U.S.). This report is a companion to the Youth Risk Behavior Survey Data Summary & Trends Report: 2013–2023 and focuses on high school students' dietary, physical activity, and sleep behaviors.

The Centers for Disease Control and Prevention's (CDC) Division of Adolescent and School Health (DASH) developed this report to highlight the national Youth Risk Behavior Survey (YRBS) data. YRBS data are collected every 2 years among a nationally representative sample of U.S. high school students.

Overall, U.S. high school students did not engage in adequate levels of healthy dietary, physical activity, and sleep behaviors. The 10-year trends from 2013 to 2023 also show a decline in healthy dietary, physical activity, and sleep behaviors.

Data show a decline in the percentage of students eating fruit, vegetables, and breakfast daily. Data also highlight a decline across healthy physical activity and sleep behaviors, including daily physical activity, muscle-strengthening, attending daily physical education classes, sports team participation, and getting at least 8 hours of sleep. Both female students and LGBTQ+ students are less likely than their peers to engage in most of these health behaviors that help prevent chronic diseases.

This summary highlights continuing concerns and signs of progress from the most recent YRBS data collected during 2023 for dietary, physical activity, and sleep behaviors. The body of the report provides more detail and findings.

KEY FINDINGS ON TRENDS AND 2-YEAR CHANGES

Ten-year trends show improvements in sugary drink consumption, with more students reporting they did not drink sports drinks and soda during the past 7 days. The percentage of students reporting they drank water at least 3 times per day has increased since this question was added to the national YRBS during 2015.

Unfortunately, the data show that from 2013 to 2023, all other indicators of the healthy dietary, physical activity, and sleep behaviors either did not increase or they decreased. The data show declines in the percentage of students eating fruits and vegetables, engaging in physical activity behaviors, and in getting at least 8 hours of sleep on an average school night.

For some of these behaviors, the 2-year changes show signs of improvement (2021–2023). For example, the percentage of students eating fruit daily increased between 2021 and 2023. Similarly, the percentage of students engaging in muscle-strengthening activities at least 3 times per week and attending physical education daily increased between 2021 and 2023, despite decreases over the past decade.[1] Students likely had more opportunities to participate in physical activity and attend physical education when returning to school and school facilities (e.g., gyms) in person after extended periods of remote learning during the COVID-19 pandemic.

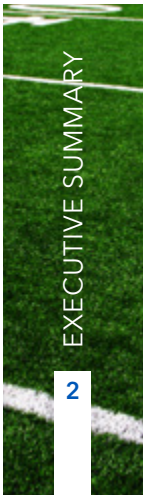
KEY FINDINGS ON DISPARITIES

During 2023, female students were less likely than male students to engage in almost all the healthy dietary, physical activity, and sleep behaviors.

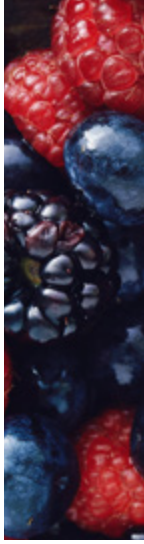
This pattern has been consistent with little signs of progress for female students from 2021 to 2023, except for doing muscle-strengthening activities at least 3 times per week and attending physical education daily.

During 2023, about 1 in 5 female students ate breakfast daily and just over half ate fruit and vegetables daily. Female students did better than male students for 2 of the dietary behaviors—not drinking sports drinks and not drinking soda. However, the percentage of female students getting the recommended amount of physical activity is concerning. Only about 1 in 5 female students were physically active for at least 60 minutes daily and about 1 in 4 attended physical education daily.

While male students consistently reported engaging in physical activity more than female students, the percentage of male students getting at least 60 minutes of physical activity daily, meeting both physical activity guidelines, attending physical education daily, and participating on a sports team decreased from 2013 to 2023.







As seen with other health behaviors, students who identify as lesbian, gay, bisexual, transgender, questioning, or another non-heterosexual identity (LGBTQ+) experienced disparities in healthy dietary, physical activity, and sleep behaviors compared to their cisgender and heterosexual peers.

LGBTQ+ students were less likely than their peers to engage in most of the healthy dietary behaviors. LGBTQ+ students were less likely than their peers to drink water at least 3 times per day and eat fruit and breakfast daily. They were also less likely to engage in all five of the physical activity behaviors. Only about 1 in 8 LGBTQ+ students were physically active for at least 60 minutes daily and about 1 in 5 attended physical education daily. Most LGBTQ+ students were also not getting the recommended amount of sleep—with about 1 in 5 getting at least 8 hours of sleep on an average school night.

The data showed important similarities and differences by race and ethnicity. For dietary behaviors, the 10-year trends were similar across racial and ethnic groups except for a few instances for Asian, Hispanic, and Multiracial students. During 2023, Black, Hispanic, and American Indian or Alaska Native students were less likely than their White and Hispanic peers to eat breakfast daily. This gap might be beginning to narrow for some populations, as seen in an increase between 2021 and 2023 among Black students.

Most of the physical activity behaviors decreased from 2013 to 2023 among Black students, and all physical activity behaviors decreased among Hispanic students. However, doing muscle-strengthening activities at least 3 times per week, participating on a sports team, and attending physical education daily increased for Hispanic students between 2021 and 2023.

Since 2021, the percentage of high school students getting at least 8 hours of sleep on an average school night held steady by race and ethnicity.

Looking at differences across racial and ethnic groups for each behavior and within each focus area is an important step in understanding these disparities. Future research that considers differences in social and structural factors that affect disparities by racial and ethnic group will improve strategies developed to address them.

ACTIONS TO IMPROVE ADOLESCENT HEALTH AND WELL-BEING

Many high school students during 2023 were not meeting recommendations for healthy eating, physical activity, and sleep behaviors that encourage overall health and well-being. Lack of these healthy behaviors has been linked to poorer mental and physical health outcomes in adolescents.[2-5]

This includes depression as well as high blood pressure, unhealthy weight gain and type 2 diabetes, which are also risk factors for diseases such as heart disease and some cancers.[4,5] Insufficient physical activity and unhealthy dietary behaviors are also linked to negative academic outcomes, such as classroom behavioral problems, lower grades and test scores, and decreased graduation rates.[6,7] This connection between health and education highlights the critical role schools play in fostering healthy behaviors among students.

Actions that can improve students' health and academic outcomes are important as schools work to support students' health, learning, and emotional well-being. These actions can be coordinated using the Whole School, Whole Community, Whole Child framework, which reflects the importance of students feeling safe, supported, challenged, engaged, and healthy. It also highlights collaboration among diverse partners, including school leaders, physical and health educators, school nurses, mental health professionals, and families to support strengthening school-based education, health services, healthy school environments, and community connections to improve the health and well-being of all students.

CDC supports schools to improve the health of students. The school-based actions below have been demonstrated to improve the dietary, physical activity, and sleep behaviors of students, and are supported by CDC programs such as the Healthy Schools Program, which funds 20 organizations to work at the state or tribal nation level to put these strategies into action within schools.[8]

Improve the School Nutrition Environment

Students consume up to half of their daily calories at school.[9] Schools can implement policies and practices to create a healthy school nutrition environment and ensure that students have access to nutritious and appealing foods and beverages.[10] For example, schools can consider Healthy School Meals for All (i.e., free school meals for all students) and "alternative" breakfast models to make meals more accessible to high school students. The Community Preventive Services Task Force recommends Healthy School Meals for All to increase participation in school meals and reduce school absenteeism as a strategy to advance health equity.[11]

Healthy School Meals for All can benefit all students but is especially important for students with unstable housing or who might not have access to enough food at home.

Schools' use of breakfast delivery options like breakfast in the classroom, grab and go, and breakfast after the bell (Second Chance breakfast) also remove students' logistical challenge of arriving early to school to eat, and are known to increase students' participation in the program.[12]

Schools can also provide professional development for school nutrition staff (e.g., chef trainings, recipe development) and offer taste-tests of new menu items to help ensure that meals are appealing and meet students' food preferences.

Sugary drinks are still the leading source of added sugars for adolescents.[13] Schools can use strategies like making free drinking water easily available during the school day and following Smart Snacks in School nutrition standards for foods and beverages sold in schools, but outside the school meals programs (e.g., vending machines, à la carte lines). These changes could help maintain improvements in students choosing healthier drinks.

Offer Opportunities for Physical Activity Throughout the School Day

Schools can use a Comprehensive School Physical Activity Program (CSPAP) to increase students' physical activity before, during, and after school. Schools can use school-level physical activity policies, physical education, active commuting options to and from school, and physically active lessons in the classroom to offer opportunities for increasing physical activity during the school day.[14,15]

Schools can consider including student input when designing programs and understanding implementation barriers to help create safe, supportive, and inclusive environments for physical activity during the CSPAP planning process. Although most secondary schools offer sports programs for physical activity, YRBS data show there are clear differences in participation across student demographics (e.g., by sex, race and ethnicity, and sexual and gender identity).[16] Therefore, as schools work to adopt a CSPAP and create more opportunities for physical activity, it is important to take actions that maximize health benefits and minimize disparities.

Build Students' Health Knowledge, Attitudes, and Skills Through School Health Education

Health education helps students build the skills and knowledge needed to make healthy decisions about eating, physical activity, and sleep. Schools can use CDC's Health Education Curriculum Analysis Tool (HECAT) to assess the strengths and weaknesses of health education curricula (broadly and specifically related to nutrition and physical activity). The HECAT is useful for creating a health education scope and sequence that includes healthy behavior outcomes in nutrition and physical activity for students from kindergarten to grade 12 (K-12). Qualified and well-supported teachers delivering health education curricula can help improve students' health knowledge, attitudes, and skills.[17-19] Also, peer mentors can complement instructor-led health education lessons or activities and positively affect students' dietary and physical activity behaviors.[20]

Engage Families and Community Members in School-Based Nutrition and Physical Activity Programs

School, home, and community partnerships can give students clear health messages, support healthy behaviors, and provide access to health resources and support networks.[21] Schools that engage families and community members in school-based nutrition and physical activity programs can positively impact the dietary and physical activity behaviors of students in grades K-12.[21] CDC's Parents for Healthy Schools webpage includes a set of resources and tools to help schools, school groups (e.g., parent teacher associations), and school wellness committees engage parents in school health. It also gives families information and suggestions on how to be champions for healthy eating and physical activity opportunities at school. Family engagement in shaping school health practices increases the likelihood that the practices are tailored to meet their needs.

Promote Mental Health and School Connectedness Through School-Based Nutrition and Physical Activity Practices

Students' poor mental health has been associated with not eating breakfast, not getting daily physical activity, and not playing on a sports team.[2,3] There are many ways schools can help students access healthy foods and beverages and get adequate physical activity. This includes allowing breakfast in the classroom or during morning breaks, daily recess, daily physical education, classroom physical activity energizers, and low- or no-cost sports. These practices also help students feel more connected to school,[22,23] and students who feel connected to school are less likely to experience poor mental health and other adverse health behaviors and experiences.[24]

The actions listed above are rooted in evidence-based strategies published in a 2023 special issue of the *Journal of School Health* titled, Collection of Evidence-Based Strategies for School Nutrition and Physical Activity. These strategies improve student and school staff physical activity and nutrition knowledge, attitudes, perceptions, and behaviors. Each of the actions refers to CDC resources that can help with implementation to improve school nutrition and physical activity environments and advance health equity.

INTRODUCTION

During August 2024, the Centers for Disease Control and Prevention (CDC) published the *Youth Risk Behavior Survey Data Summary & Trends Report: 2013–2023*, which focuses on adolescents' sexual behavior, substance use, experiences of violence, mental health, suicidal thoughts and behaviors, and new and emerging national data on issues facing today's adolescents.

This companion report presents the 10-year trends and 2-year changes of national Youth Risk Behavior Survey (YRBS) data focused on adolescents' dietary, physical activity, and sleep behaviors. A healthy diet, daily physical activity, and sufficient sleep contribute to a healthy lifestyle. These modifiable behaviors are important for adolescent health and well-being and the prevention of chronic disease.[25]

This report also presents data by students' sex, race and ethnicity, and sexual and gender identity. By describing the prevalence of health behaviors and experiences among diverse populations of adolescents, CDC and partners can better understand health disparities and implement strategies to help narrow these gaps.

Both CDC reports use data from multiple years of national YRBS data to provide a comprehensive look at health-related behaviors and experiences that contribute to the leading causes of death and disability among adolescents and adults. YRBS data are collected every 2 years among a nationally representative sample of U.S. public and private high school students.

FOCUS AREAS

The 12 variables presented in this report reflect questions from the 2023 national YRBS questionnaire. Some variables represent data from more than one question on the YRBS. Appendix A lists the full set of questions.

Dietary Behaviors

Adolescence is a period of rapid growth and development. Eating foods rich in nutrients is critical in the short-term for physical growth, immunity, brain health, and cognition, and can prevent chronic disease later in life.[4,26]

Five of the dietary variables explore dietary behaviors that are associated with better quality diets, including eating fruits and vegetables daily, eating breakfast daily, and avoiding soda and sports drinks.[4,27]

Additionally, drinking plain water is addressed because it is important for overall health and low water intake is associated with several poor dietary behaviors.[28,29]

Physical Activity and Sleep Behaviors

Regular physical activity benefits adolescents' physical health (e.g., bone density, cardiometabolic health, cardiorespiratory fitness, and muscular fitness), and cognitive functioning, and may reduce the risk of depression.[5,30] Being more active, participating in team sports, and attending physical education classes daily have also been linked with school connectedness.[22]

The five physical activity variables explore whether students had been physically active for at least 60 minutes daily (i.e., met the federal guideline for aerobic activity), had strengthened or toned muscles on at least 3 days per week (i.e., met the federal guideline for muscle-strengthening activity), had met both the aerobic and muscle-strengthening guidelines,[5] had attended physical education classes daily in an average school week, and had played on a sports team during the 12 months before the survey.

Lastly, the one question included for sleep assesses if adolescents are getting the recommended 8 or more hours of sleep. Adequate sleep duration is linked with better emotional regulation, physical and mental health, attention, learning, and behavior; conversely, not sleeping enough increases the risk of chronic disease.[31]

REPORT LAYOUT

Organization of the Report

The report is organized into two chapters:

1. **Dietary Behaviors** and
2. **Physical Activity and Sleep Behaviors**.

It is a priority to highlight the behaviors and experiences of as many groups of students as possible, while maintaining data quality. Each chapter provides 2023 data for students overall and broken down by sex, race and ethnicity, and sexual and gender identity. The two chapters provide 10-year trend data and data showing recent changes (2021 vs. 2023) broken down by sex and race and ethnicity.

- **Trends** consider all years of data available since 2013. Most variables have 10 years of data available. Some variables were added more recently to the YRBS and have fewer than 10 years of data available.
- **Two-year changes** compare data from 2021 to 2023 to show the most recent signs of progress, stability, or concern.

The trends and 2-year changes are categorized as:

Green
(Moving in the right direction),

Yellow
(No significant change), or

Red
(Moving in the wrong direction).

Race and Ethnicity Data

Data from 2023 are shown for American Indian or Alaska Native, Asian, Black, Hispanic, Native Hawaiian or other Pacific Islander, White, and Multiracial (students of multiple races) students. Trend data are not shown for American Indian or Alaska Native and Native Hawaiian or other Pacific Islander students because of concerns with statistical power due to small sample sizes for some years.

Sex Data

Data from 2023, 2-year changes, and trends are shown for male and female students. Students were asked "What is your sex?" The answer options were male or female.

Sexual and Gender Identity Data

During 2023, the national YRBS included a question asking students if they identify as transgender. The national YRBS also included a question asking students how they describe their sexual identity. In this report, sexual and gender identity are represented in two categories:

1. **Cisgender and heterosexual.** This group includes students who answered that they (1) are not transgender and (2) describe themselves as heterosexual (straight).

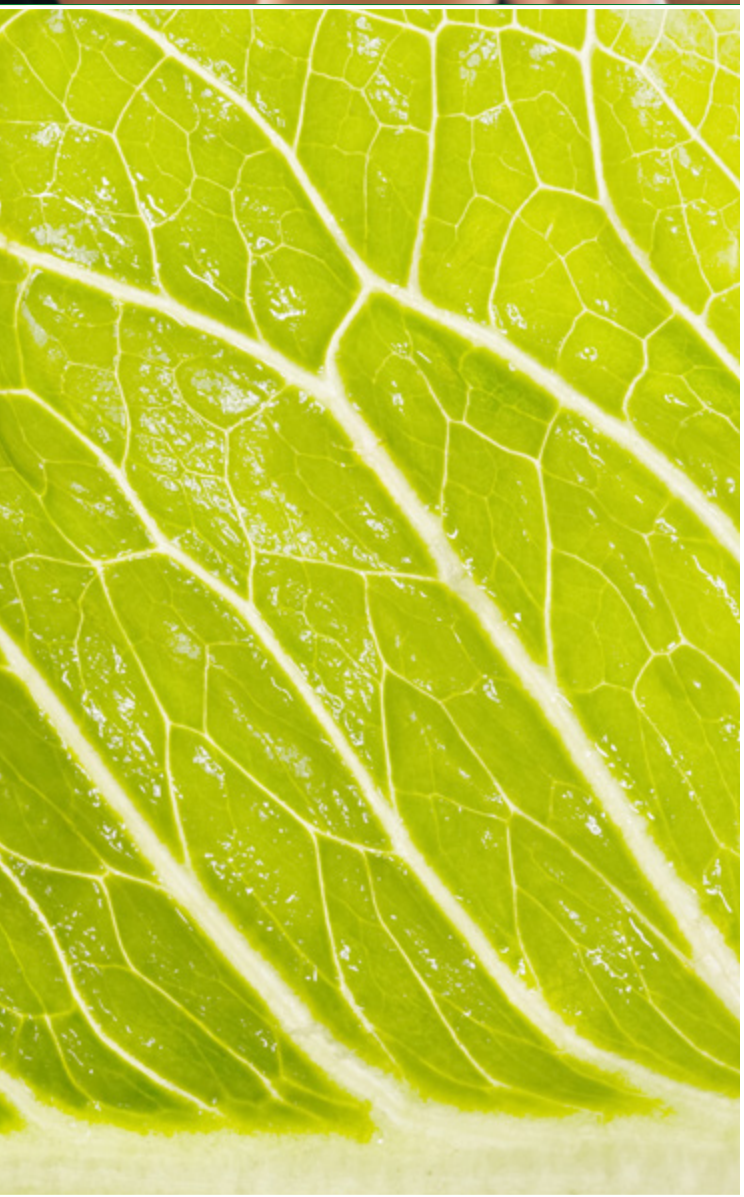
2. **LGBTQ+.** This group includes students who answered that they (1) are transgender or are not sure if they are transgender or (2) describe themselves as lesbian, gay, bisexual, questioning, or some other way.

Comparisons Between Groups

For 2023 data, CDC used pairwise t-tests to examine if there were significant differences in the prevalence of students' behaviors and experiences by sex, race and ethnicity, and sexual and gender identity. In these tests, we compared females to males, each racial and ethnic group to each other, and students who identify as cisgender and heterosexual to students who identify as LGBTQ+. Data summaries highlight key points from the data and comparisons. The summaries list significant demographic differences but are not exhaustive. **Appendix B has tables showing all significant demographic differences.**

FOCUS AREA

DIETARY BEHAVIORS

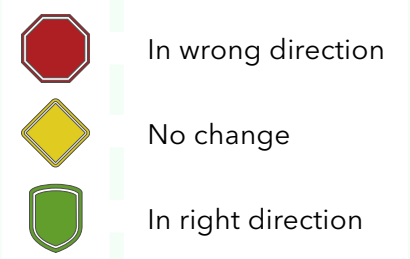


PROGRESS AT A GLANCE FOR

DIETARY BEHAVIORS

Healthy eating is important throughout the lifespan and especially during adolescence which is a period of rapid growth and development.[26] Yet, many adolescents do not meet dietary recommendations, putting them at risk for inadequate intake of important nutrients.[4] Additionally, adolescents tend to consume more than the recommended amount of sodium, added sugars, and unhealthy fats (e.g., trans-fat and saturated fat).[4] This report examines six important dietary behaviors including consuming fruits, vegetables, breakfast, plain water, soda, and sports drinks.

The Percentage of High School Students Who:*†	2013 Total	2015 Total	2017 Total	2019 Total	2021 Total	2023 Total	Trend (All Years Available)	2-Year Change (2021-2023)
Ate fruit daily‡	63	63	61	58	53	55		
Ate vegetables daily	61	61	59	59	55	58		
Ate breakfast daily	38	36	35	33	25	27		
Drank plain water at least 3 times per day§¶	–	49	51	55	56	54		
Did not drink soda	22	26	28	32	31	31		
Did not drink sports drinks¶	–	42	48	50	48	48		



*For the complete wording of YRBS questions, refer to Appendix A.

†The time period for all dietary items is "during the past 7 days".

‡Or drank 100% fruit juices.

§Drank a bottle or glass of plain water 3 or more times per day.

¶Question introduced during 2015.

KEY FINDINGS FOR

DIETARY BEHAVIORS

DURING 2023:

Just over half
of high school students **ate fruit daily**, **ate vegetables daily**, and **drank plain water at least 3 times per day**.

Less than 1/3
of high school students did **not drink soda** and **less than half of students did not drink sports drinks**.

About
1 in 4
high school students ate breakfast daily.

Male high school students were more likely than female high school students
to **eat fruit daily**, **eat breakfast daily**, and **drink plain water at least 3 times per day**.

FROM 2013 TO 2023:

There was a **decrease** in the percentage of high school students eating fruit, vegetables, and breakfast daily.

FROM 2021 TO 2023:

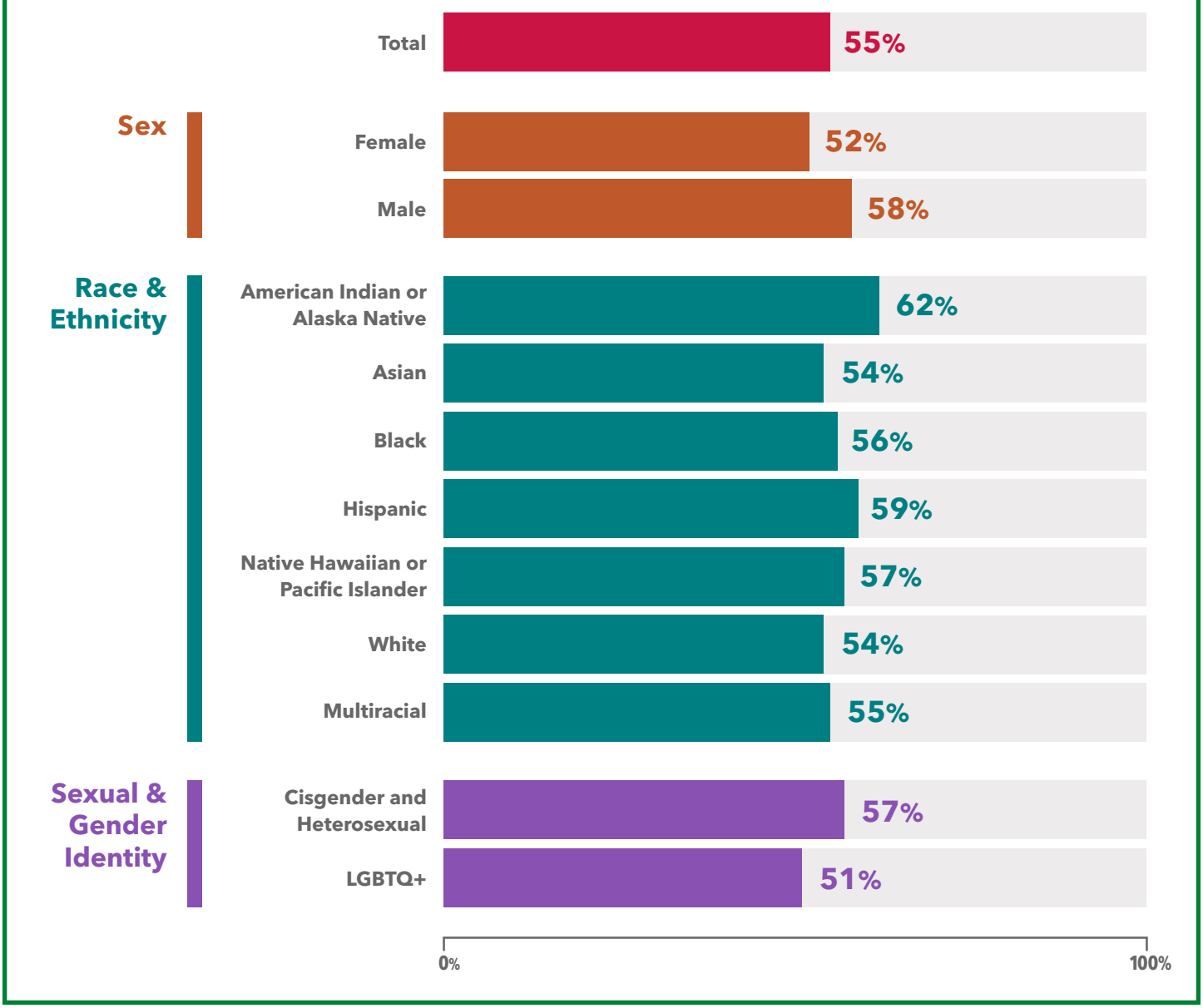
The percentage of high school students who ate fruit daily **increased** but there were no changes in the other dietary behaviors.

ATE FRUIT DAILY

During 2023, 55% of high school students ate fruit or drank 100% fruit juices 1 or more times per day during the past 7 days. Male students were more likely than female students to eat fruit daily. Cisgender and heterosexual students were more likely than LGBTQ+ students to eat fruit daily.

Percentage of High School Students Who

Ate Fruit Daily During the Past 7 Days, by Demographic Characteristics, United States, YRBS, 2023



Trends in the Percentage of High School Students Who

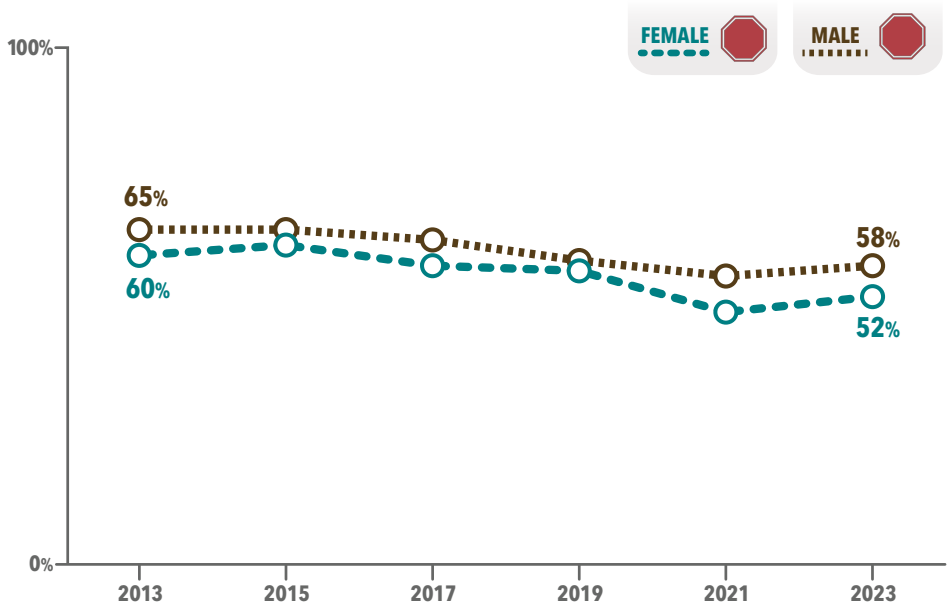
Ate Fruit Daily During the Past 7 Days, United States, YRBS, 2013–2023

In right direction

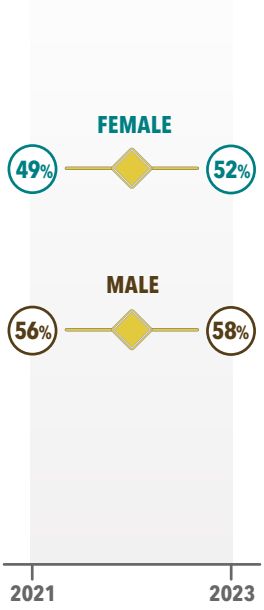
No change

In wrong direction

10-Year Trend by Sex

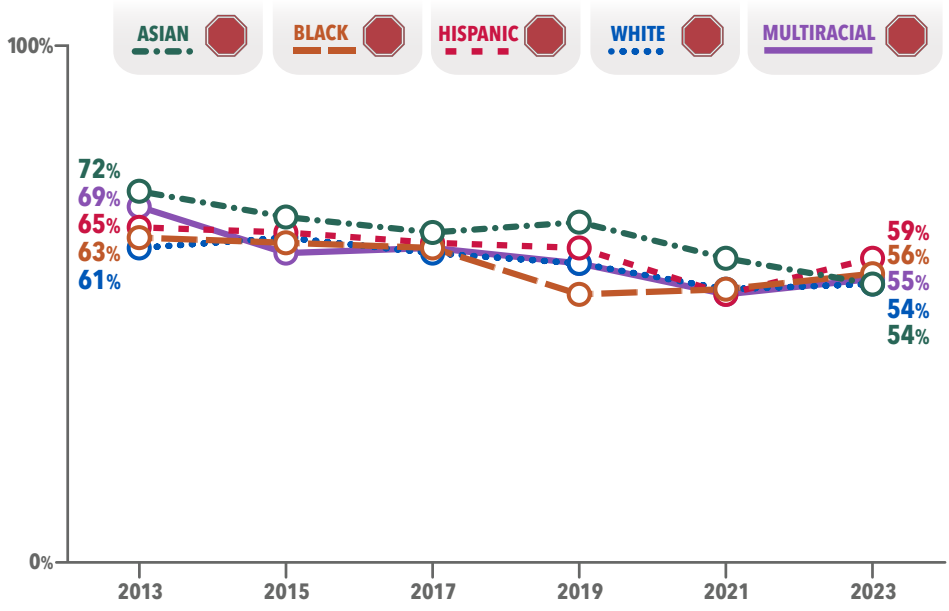


2-Year Change by Sex

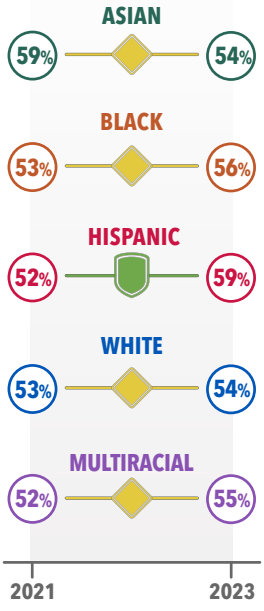


The percentage of female and male students who ate fruit daily decreased from 2013 to 2023 but did not change from 2021 to 2023.

10-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



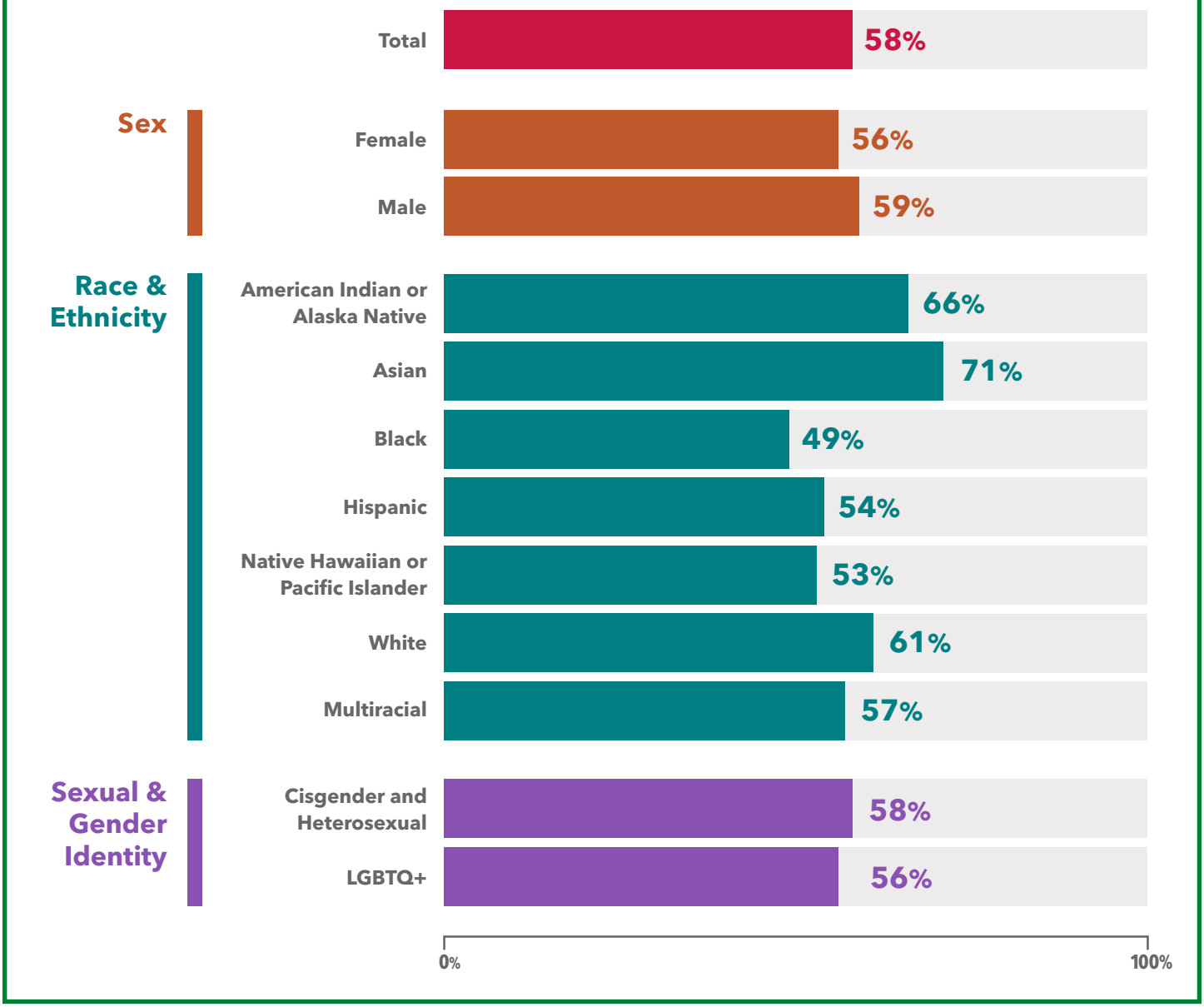
The percentage of students from all racial and ethnic groups who ate fruit daily decreased from 2013 to 2023. For most groups, the percentage of students who ate fruit daily did not change from 2021 to 2023. However, the percentage of Hispanic students who ate fruit daily increased during this time.

ATE VEGETABLES DAILY

During 2023, 58% of high school students ate vegetables 1 or more times per day during the past 7 days. Asian students were more likely than students from most other racial and ethnic groups to eat vegetables daily, whereas Black students were less likely than White, Hispanic, and Multiracial students to eat vegetables daily.

Percentage of High School Students Who

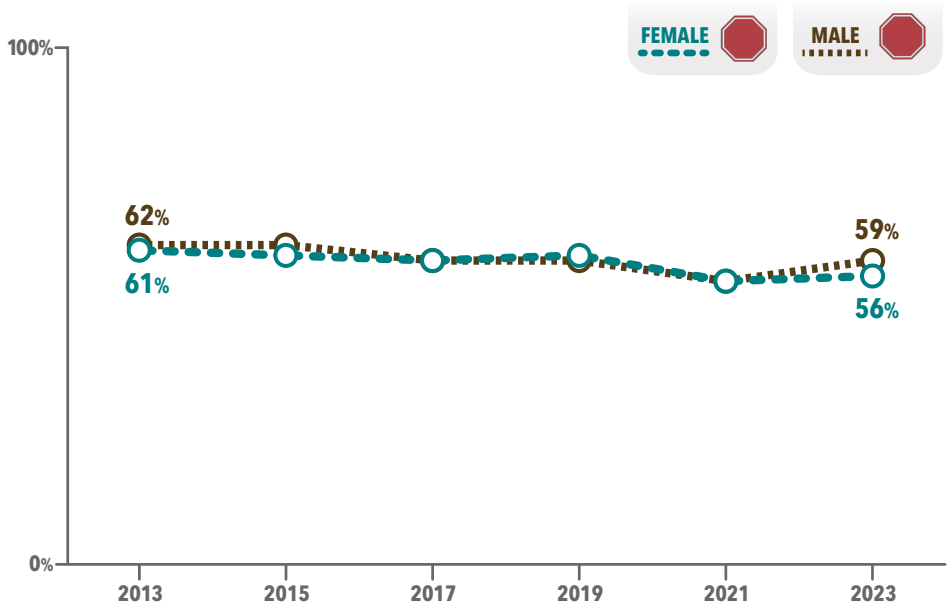
Ate Vegetables Daily During the Past 7 Days, by **Demographic Characteristics**, United States, YRBS, 2023



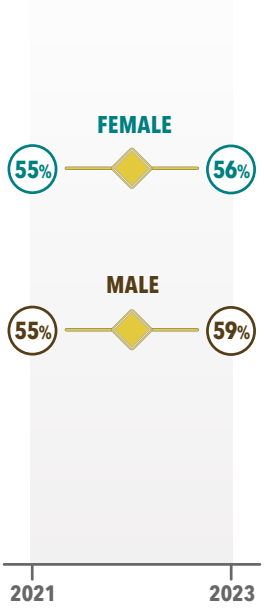
Trends in the Percentage of High School Students Who

Ate Vegetables Daily During the Past 7 Days, United States, YRBS, 2013–2023

10-Year Trend by Sex

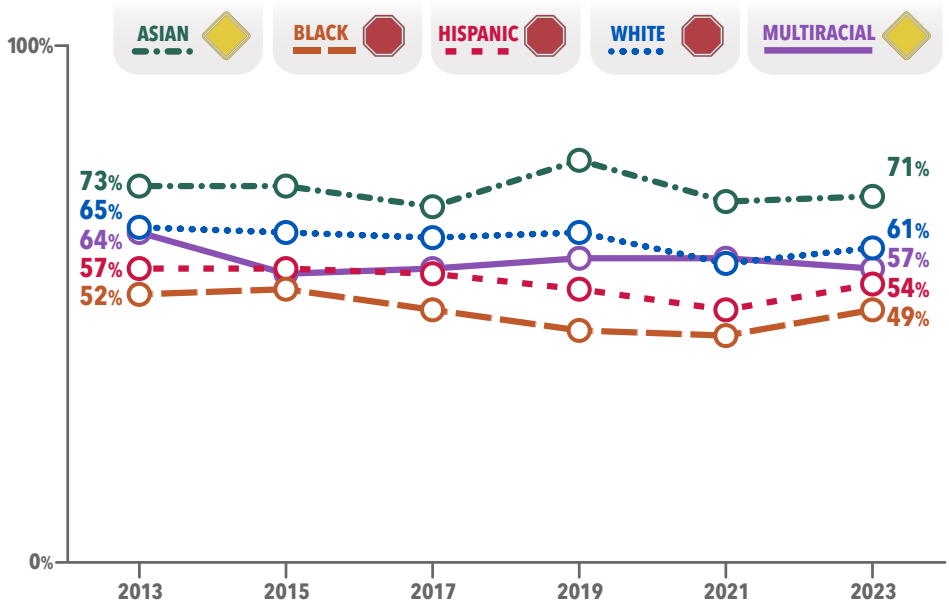


2-Year Change by Sex

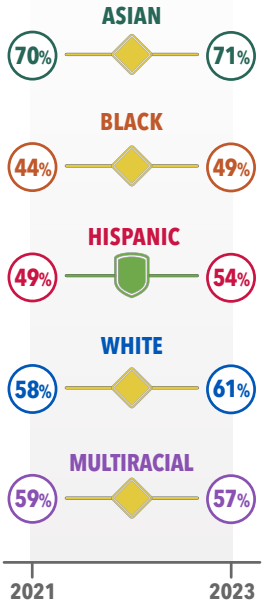


The percentage of female and male students who ate vegetables daily decreased from 2013 to 2023 but did not change from 2021 to 2023.

10-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of students from most racial and ethnic groups who ate vegetables daily decreased from 2013 to 2023 but did not change from 2021 to 2023. The percentage of Asian and Multiracial students who ate vegetables daily did not change from 2013 to 2023. The percentage of Hispanic students who ate vegetables daily increased from 2021 to 2023.

In right direction

No change

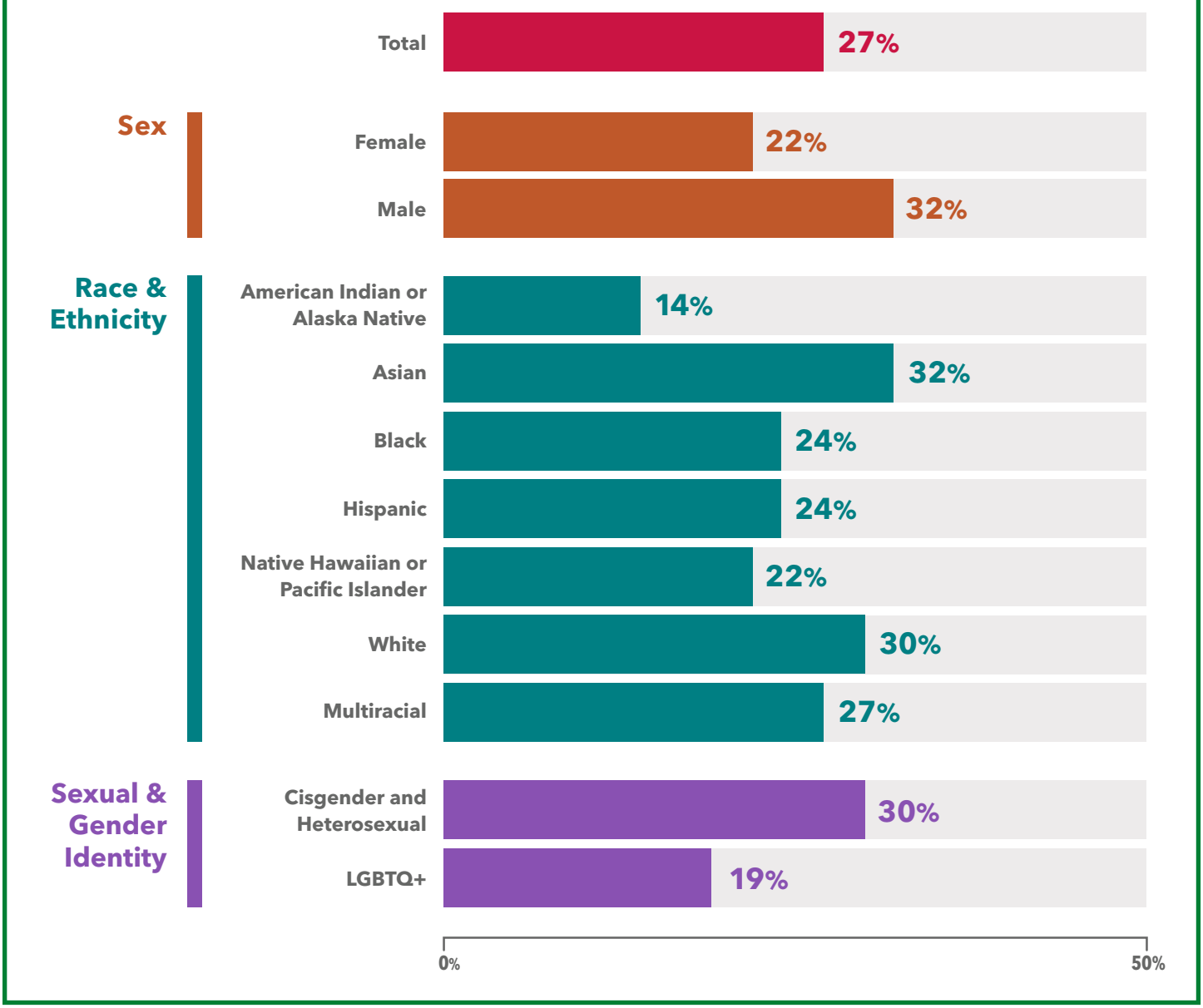
In wrong direction

ATE BREAKFAST DAILY

During 2023, 27% of high school students ate breakfast daily during the past 7 days. Male students were more likely than female students to eat breakfast daily. American Indian or Alaska Native students were less likely than students from most other racial and ethnic groups to eat breakfast daily. White and Asian students were more likely than Black and Hispanic students to eat breakfast daily. Cisgender and heterosexual students were more likely than LGBTQ+ students to eat breakfast daily.

Percentage of High School Students Who

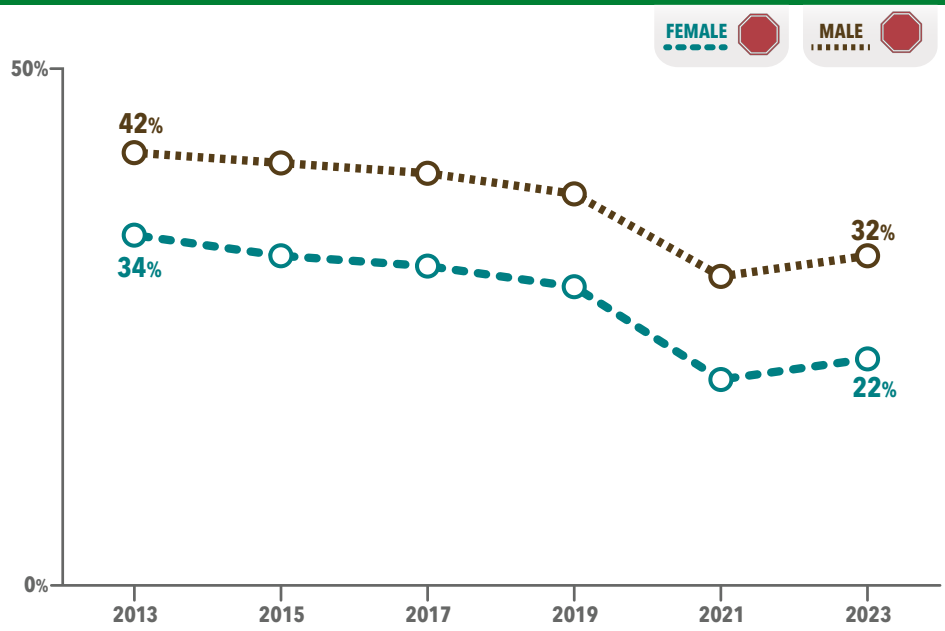
Ate Breakfast Daily During the Past 7 Days, by Demographic Characteristics, United States, YRBS, 2023



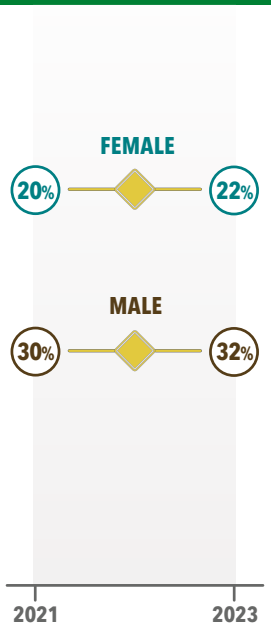
Trends in the Percentage of High School Students Who

Ate Breakfast Daily During the Past 7 Days, United States, YRBS, 2013–2023

10-Year Trend by Sex

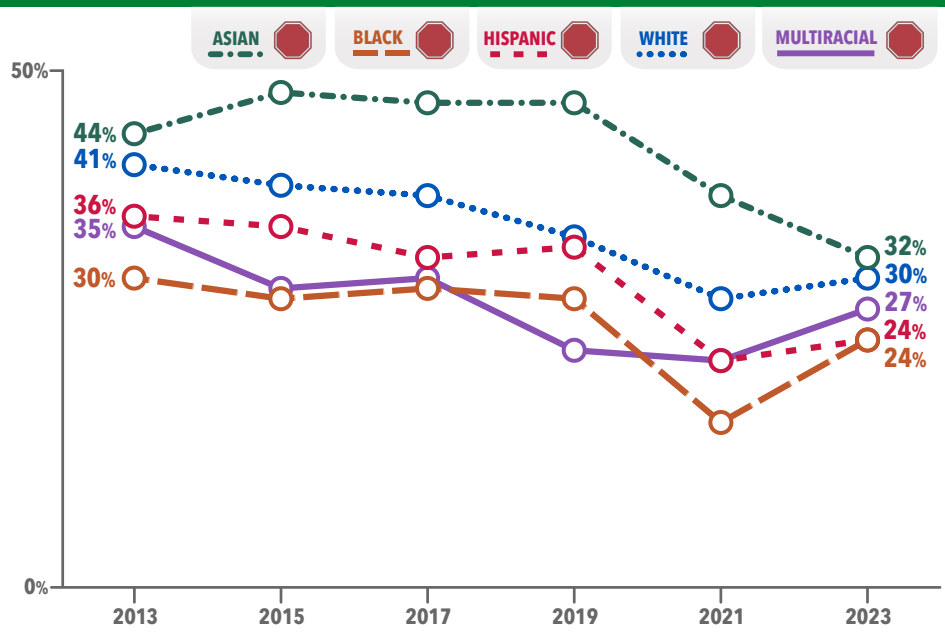


2-Year Change by Sex

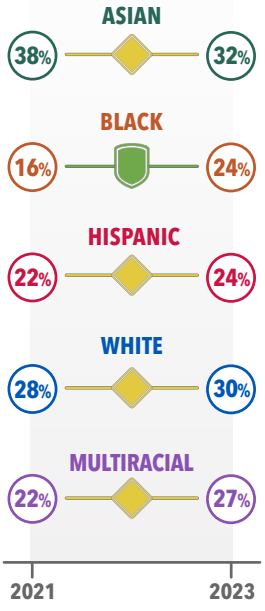


The percentage of female and male students who ate breakfast daily decreased from 2013 to 2023 but did not change from 2021 to 2023.

10-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of students from almost all racial and ethnic groups who ate breakfast daily decreased from 2013 to 2023 but did not change from 2021 to 2023. However, the percentage of Black students who ate breakfast daily increased from 2021 to 2023.

In right direction

No change

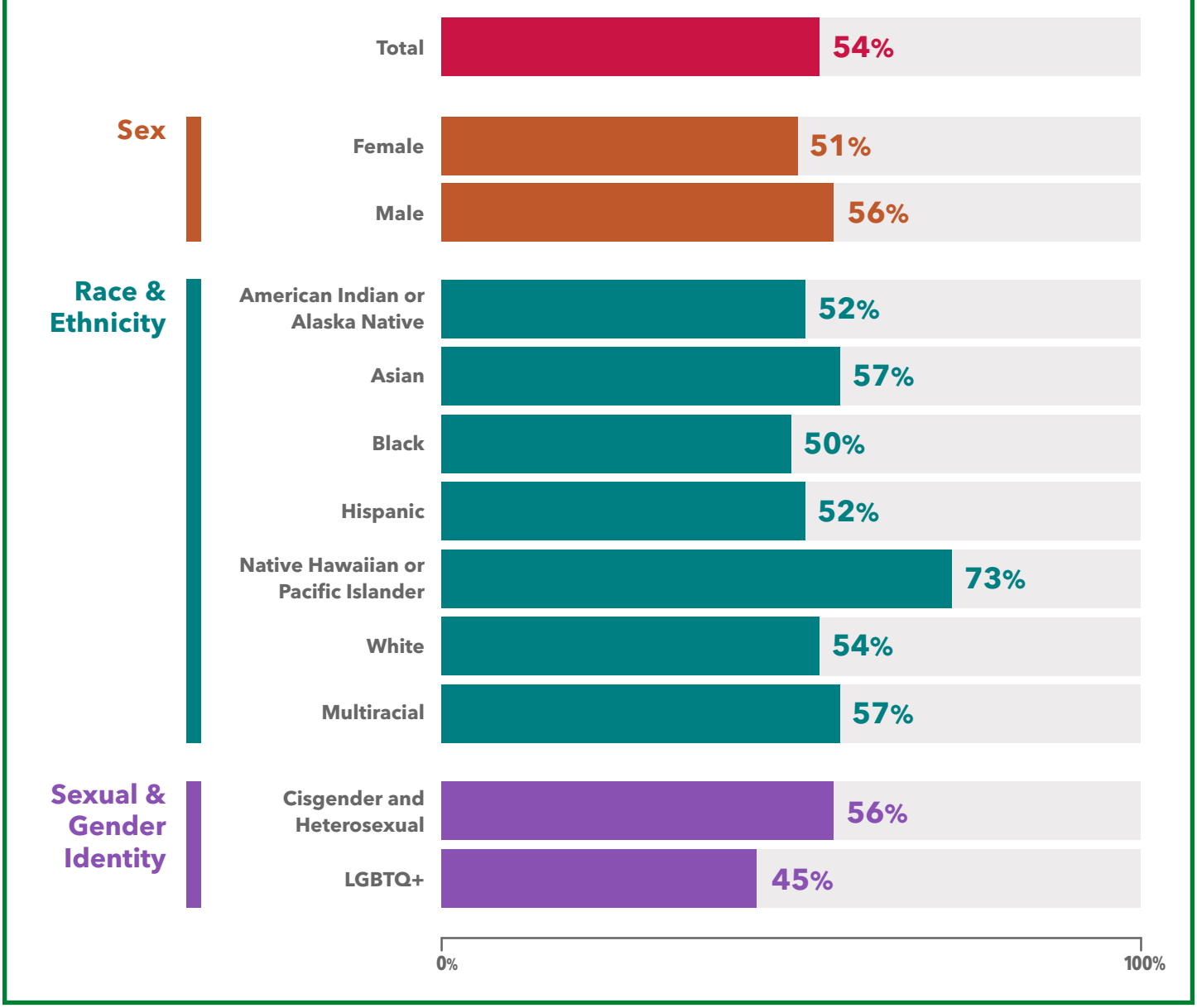
In wrong direction

DRANK PLAIN WATER

During 2023, 54% of high school students drank plain water at least 3 times per day. Male students were more likely than female students to drink plain water at least 3 times per day. Black students were less likely than Native Hawaiian or other Pacific Islander and Multiracial students to drink plain water at least 3 times per day. Native Hawaiian or other Pacific Islander students were more likely than Hispanic and White students to drink plain water at least 3 times per day. Cisgender and heterosexual students were more likely than LGBTQ+ students to drink plain water at least 3 times per day.

Percentage of High School Students Who

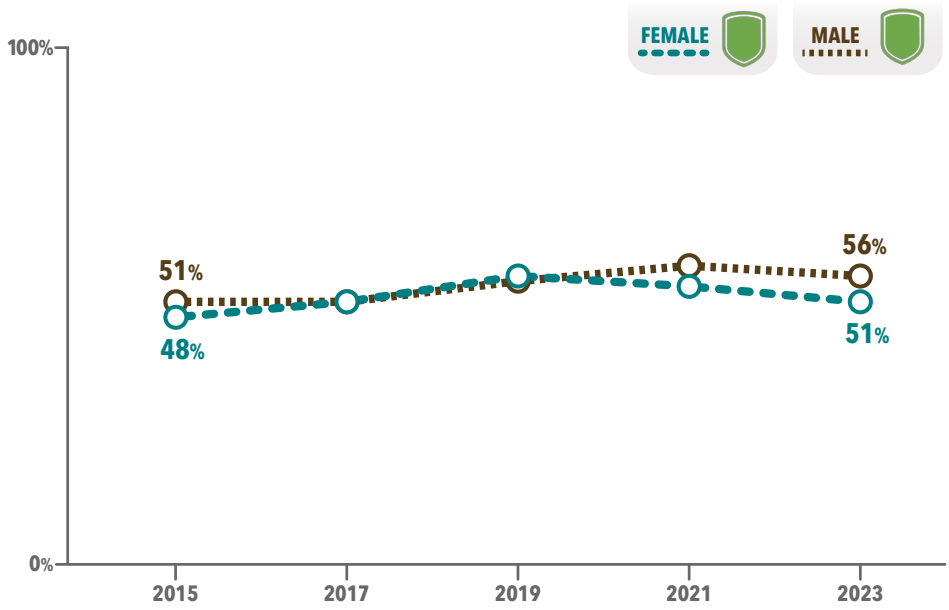
Drank Plain Water at Least 3 Times Per Day During the Past 7 Days, by Demographic Characteristics, United States, YRBS, 2023



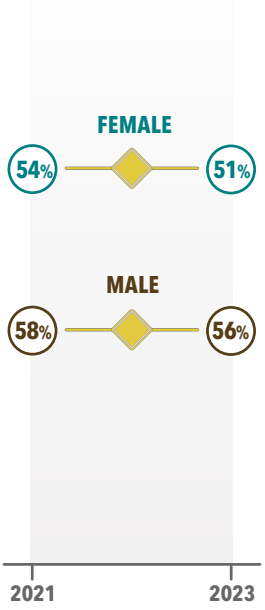
Trends in the Percentage of High School Students Who

Drank Plain Water at Least 3 Times Per Day, United States, YRBS, 2015–2023

8-Year Trend by Sex

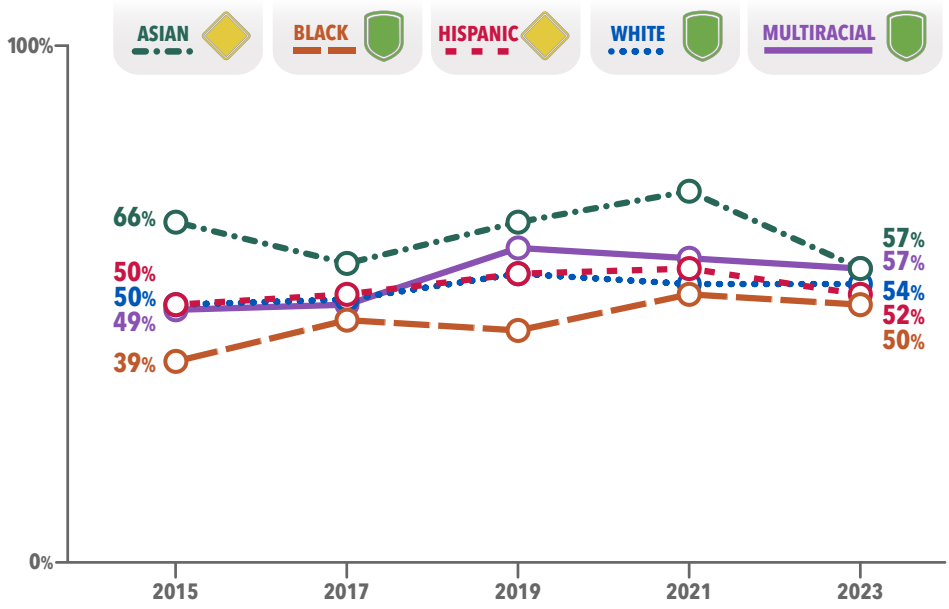


2-Year Change by Sex

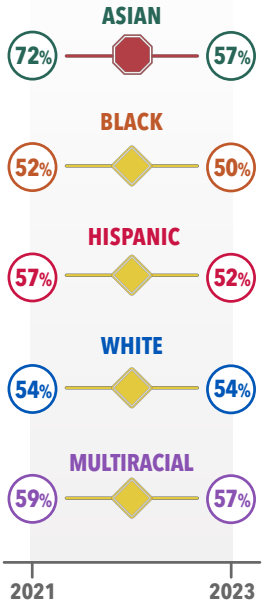


The percentage of female and male students who drank plain water at least 3 times per day increased from 2015 to 2023 but did not change from 2021 to 2023.

8-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of students from most racial and ethnic groups who drank plain water at least 3 times per day increased from 2015 to 2023 but did not change from 2021 to 2023. The percentage of Asian and Hispanic students who drank plain water at least 3 times per day did not change from 2015 to 2023. However, the percentage of Asian students who drank plain water at least 3 times per day decreased from 2021 to 2023.

In right direction

No change

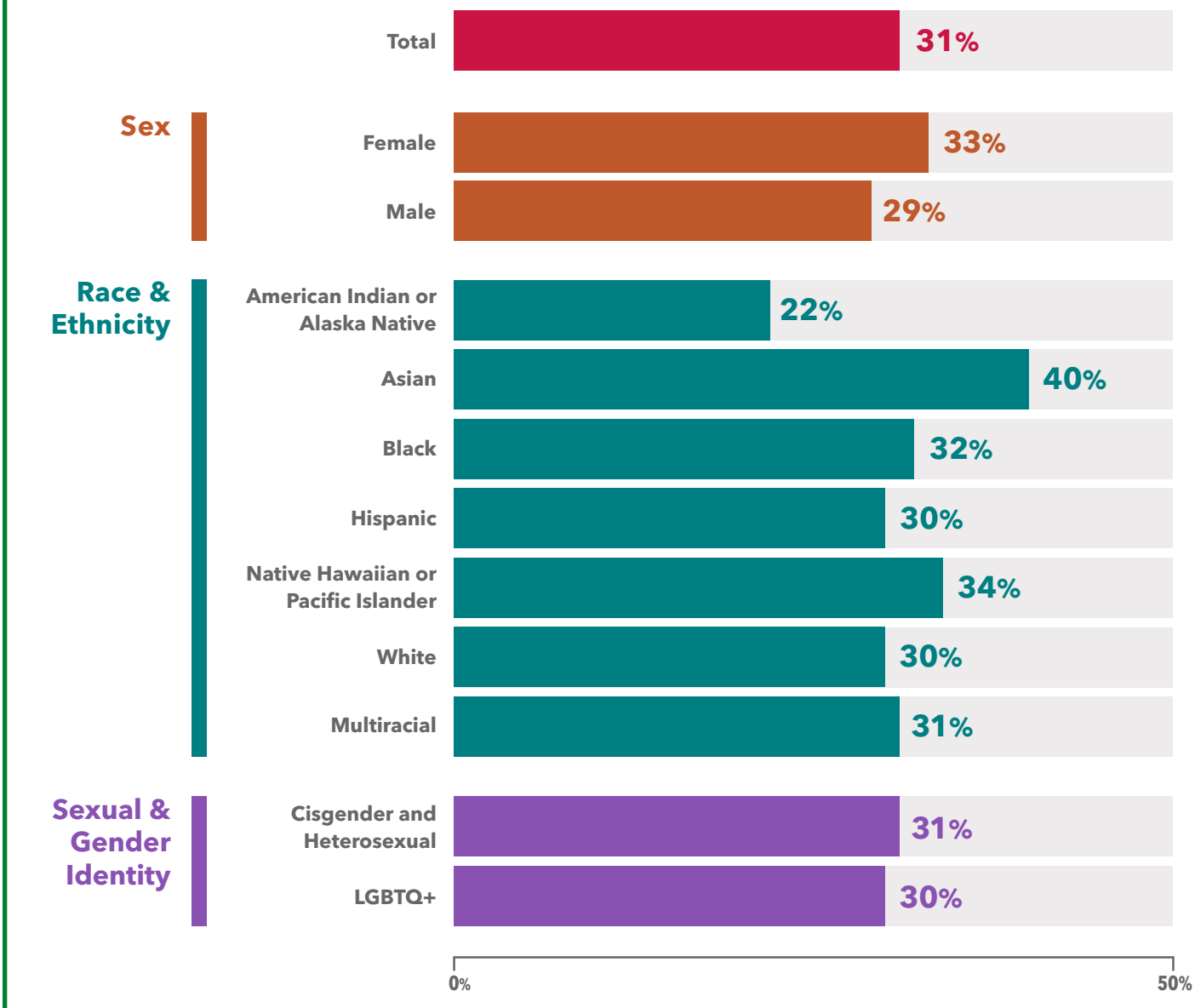
In wrong direction

DID NOT DRINK SODA

During 2023, 31% of high school students did not drink soda during the past 7 days. Female students were more likely than male students to not drink soda. Asian students were more likely than students from most other racial and ethnic groups to not drink soda.

Percentage of High School Students Who

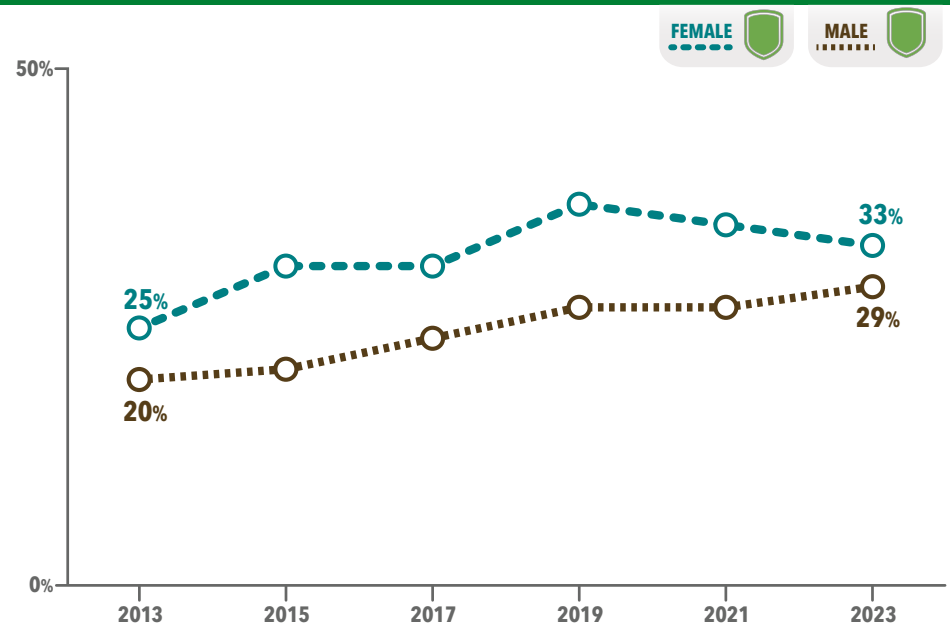
Did Not Drink Soda During the Past 7 Days, by Demographic Characteristics, United States, YRBS, 2023



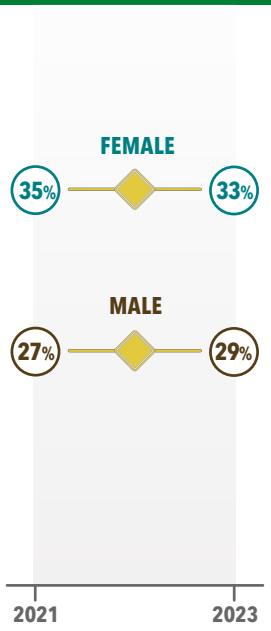
Trends in the Percentage of High School Students Who

Did Not Drink Soda During the Past 7 Days, United States, YRBS, 2013–2023

10-Year Trend by Sex

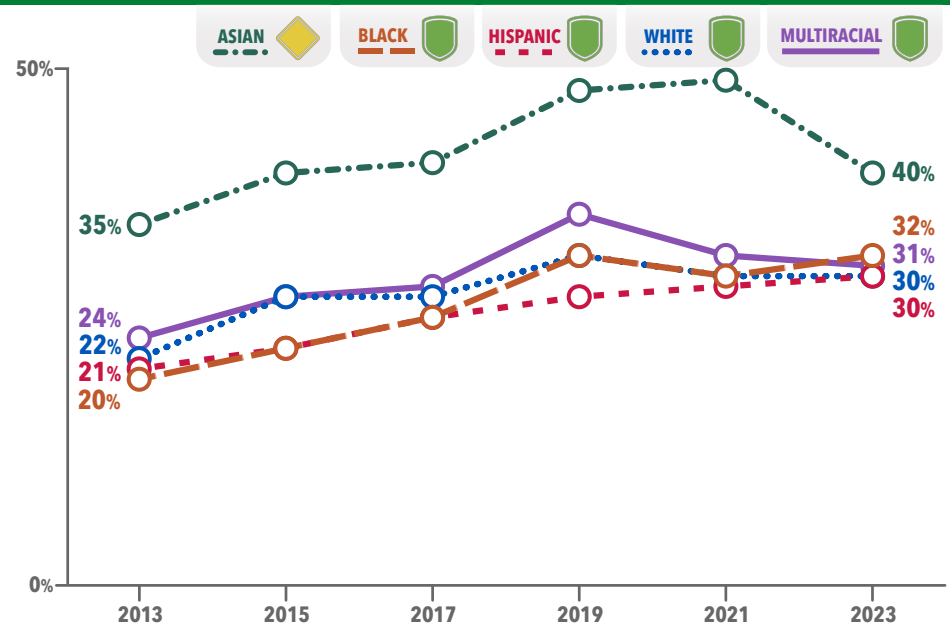


2-Year Change by Sex

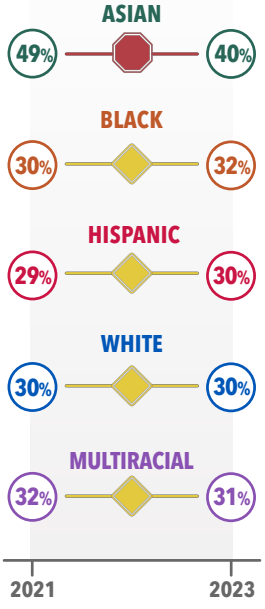


The percentage of female and male students who did not drink soda increased from 2013 to 2023 but did not change from 2021 to 2023.

10-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of students from most racial and ethnic groups who did not drink soda increased from 2013 to 2023 but did not change from 2021 to 2023. However, the percentage of Asian students who did not drink soda did not change from 2013 to 2023 but decreased from 2021 to 2023.

In right direction

No change

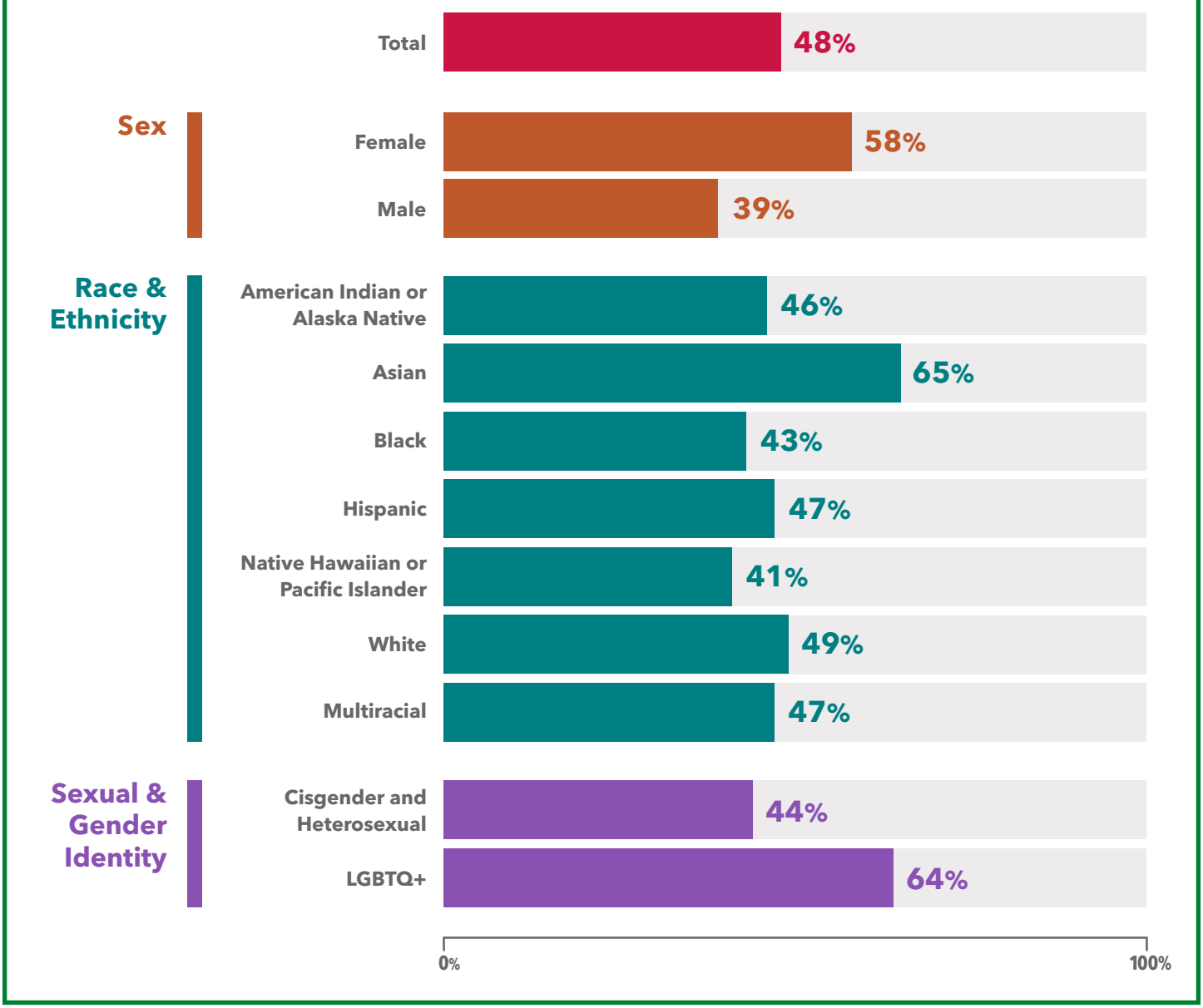
In wrong direction

DID NOT DRINK SPORTS DRINKS

During 2023, 48% of high school students did not drink sports drinks during the past 7 days. Female students were more likely than male students to not drink sports drinks. Asian students were more likely than students from most other racial and ethnic groups to not drink sports drinks. LGBTQ+ students were more likely than cisgender and heterosexual students to not drink sports drinks.

Percentage of High School Students Who

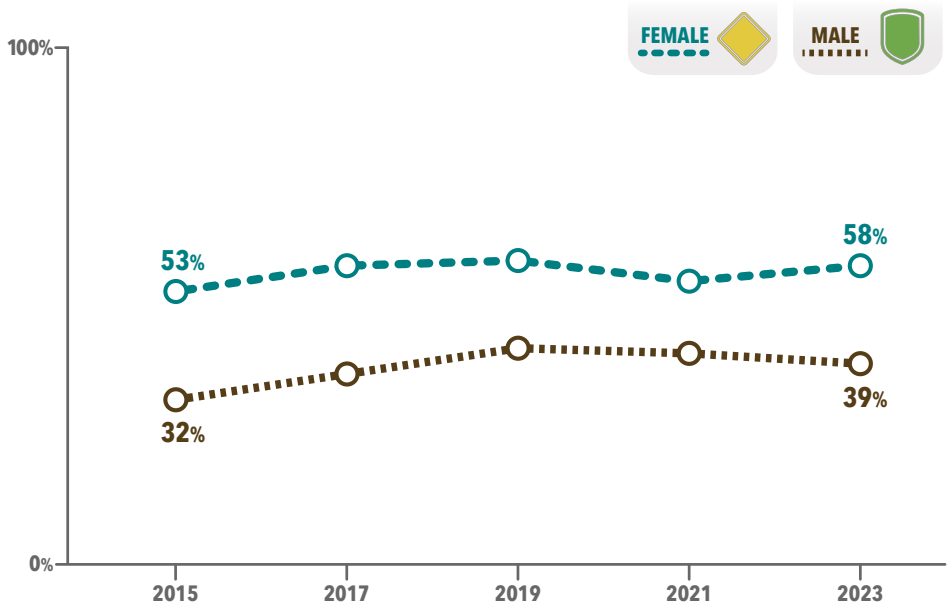
Did Not Drink Sports Drinks During the Past 7 Days, by Demographic Characteristics, United States, YRBS, 2023



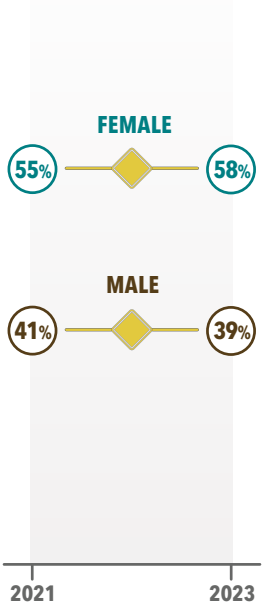
Trends in the Percentage of High School Students Who

Did Not Drink Sports Drinks During the Past 7 Days, United States, YRBS, 2015–2023

8-Year Trend by Sex

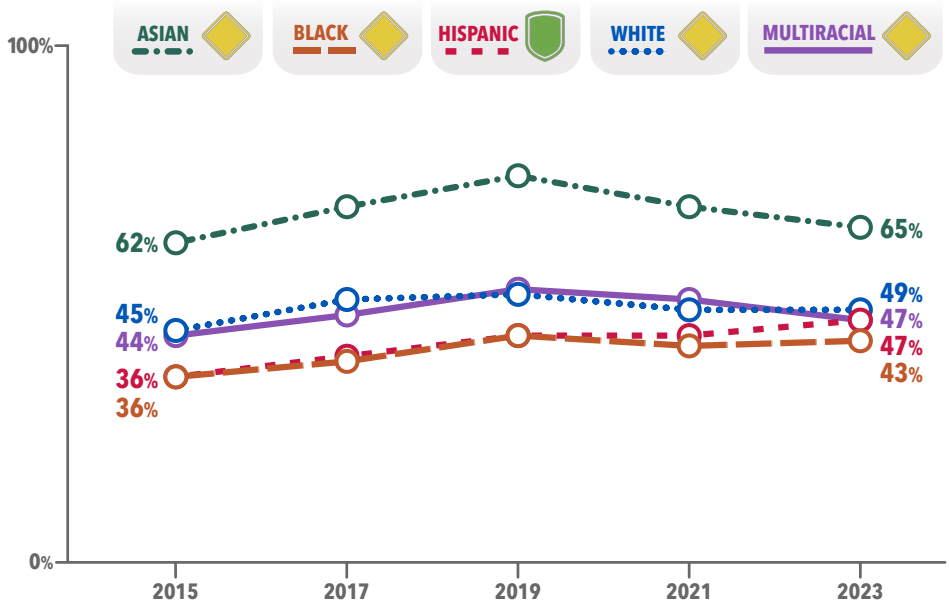


2-Year Change by Sex

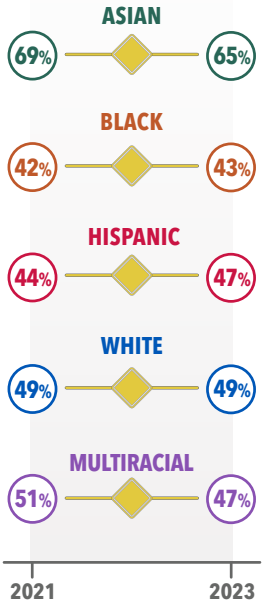


The percentage of female students who did not drink sports drinks did not change from 2015 to 2023 or from 2021 to 2023. The percentage of male students who did not drink sports drinks increased from 2015 to 2023 but did not change from 2021 to 2023.

8-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of Hispanic students who did not drink sports drinks increased from 2015 to 2023 but did not change from 2021 to 2023. The percentage of students from all other groups who did not drink sports drinks did not change across both time periods.

In right direction

No change

In wrong direction

FOCUS AREA

PHYSICAL ACTIVITY AND SLEEP BEHAVIORS

PROGRESS AT A GLANCE FOR

PHYSICAL ACTIVITY AND SLEEP BEHAVIORS

Getting regular physical activity and sufficient sleep during adolescence is important for promoting lifelong health and well-being. Yet, adolescents often do not get the recommended amount of physical activity and sleep, which increases their risk for chronic conditions across the lifespan.[5,31] This report examines five physical activity behaviors including daily physical activity, muscle-strengthening activities, meeting both the aerobic and muscle-strengthening guidelines, participating in physical education, and playing on a sports team. Additionally, it examines sleep duration on an average school night. Although the 10-year trends show declines, recent 2-year changes show signs of progress for some behaviors.

The Percentage of High School Students Who:*	2013 Total	2015 Total	2017 Total	2019 Total	2021 Total	2023 Total	Trend (All Years Available)	2-Year Change (2021-2023)
Were physically active for at least 60 minutes daily†	27	27	26	23	24	25		
Strengthened muscles at least 3 days per week‡	52	53	51	49	45	51		
Met both the aerobic and muscle-strengthening guidelines§	22	20	20	17	16	16		
Attended physical education daily¶	29	30	30	26	19	27		
Played on a sports team**	54	58	54	57	49	52		
Got at least 8 hours of sleep††	32	27	25	22	23	23		

*For the complete wording of YRBS questions, refer to Appendix A.

†Met the federal aerobic physical activity guideline.

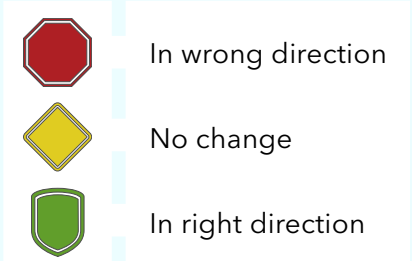
‡Met the federal muscle-strengthening physical activity guideline.

§This means that students were physically active for at least 60 minutes daily and strengthened muscles at least 3 days per week.

¶During an average week of school.

**During the past 12 months run by their school or community groups.

††On an average school night.



KEY FINDINGS FOR

PHYSICAL ACTIVITY AND SLEEP BEHAVIORS

DURING 2023:

About **1 in 4** high school students were **physically active for at least 60 minutes daily**.

60 mins

Just over half of high school students **played on a sports team.**

About **1 in 4** high school students **attended a physical education class daily.**

About **1 in 6** **high school students met federal guidelines** for both **aerobic physical activity** and **muscle-strengthening activity**.

About **1 in 4** high school students got **at least 8 hours of sleep on an average school night**.

FROM 2013 TO 2023:

There was a **decrease** in the percentage of high school students engaged in all five of the physical activity behaviors **(daily physical activity, muscle-strengthening activity, federal guidelines for both aerobic physical activity and muscle-strengthening activity, daily physical education, and sports team participation).**

The percentage of high school students who got at least 8 hours of sleep on an average school night **decreased**.

FROM 2021 TO 2023:

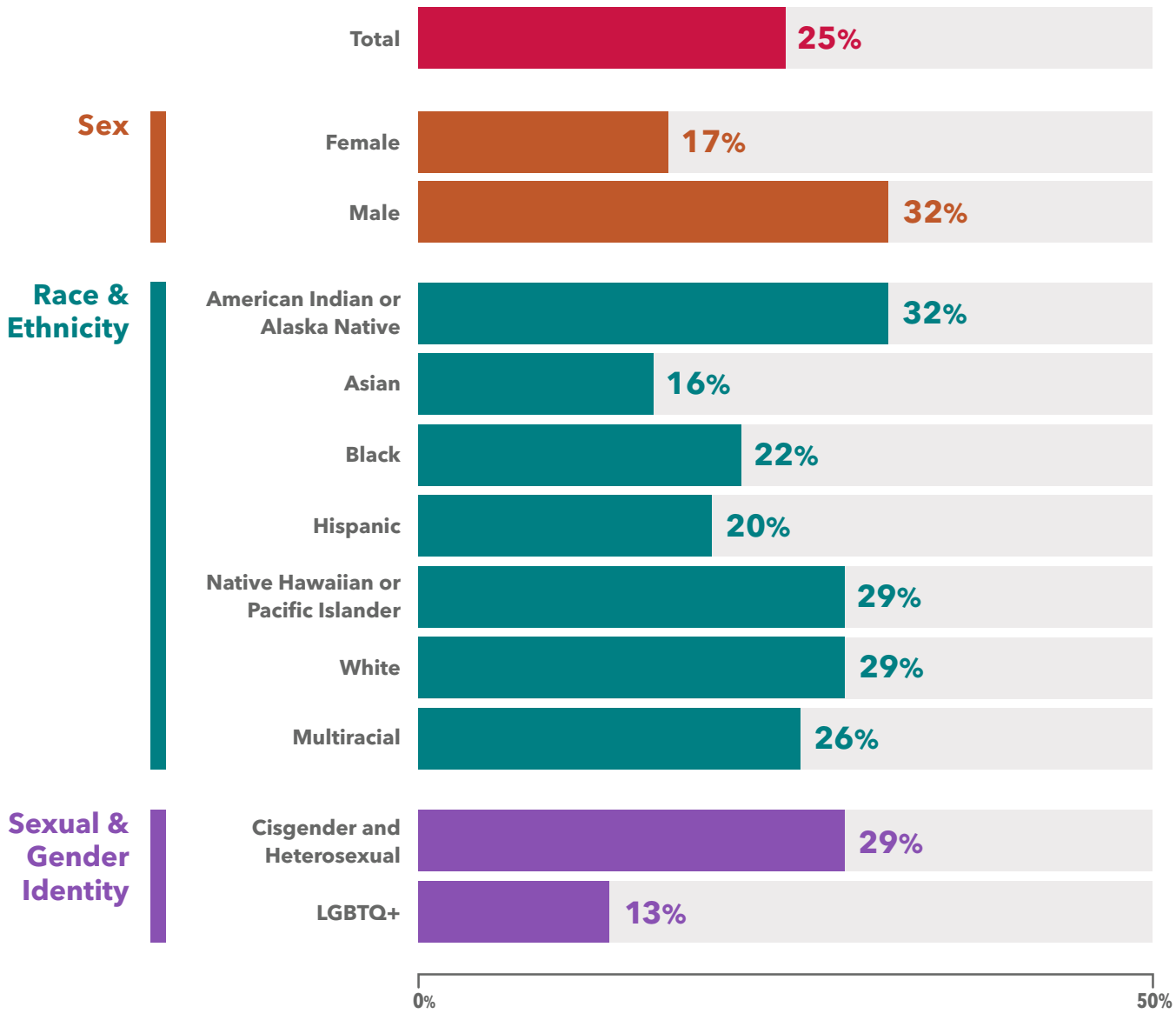
The percentage of high school students who strengthened muscles at least 3 times per week and attended physical education classes daily **increased**.

DAILY PHYSICAL ACTIVITY

During 2023, 25% of high school students were physically active for at least 60 minutes daily during the past 7 days (i.e., met the federal aerobic physical activity guideline).[5] Male students were more likely than female students to be physically active for at least 60 minutes daily. Asian students were less likely than students from most other racial and ethnic groups to be physically active for at least 60 minutes daily. Black and Hispanic students were less likely than White and Multiracial students to be physically active for at least 60 minutes daily. Cisgender and heterosexual students were more likely than LGBTQ+ students to be physically active for at least 60 minutes daily.

Percentage of High School Students Who

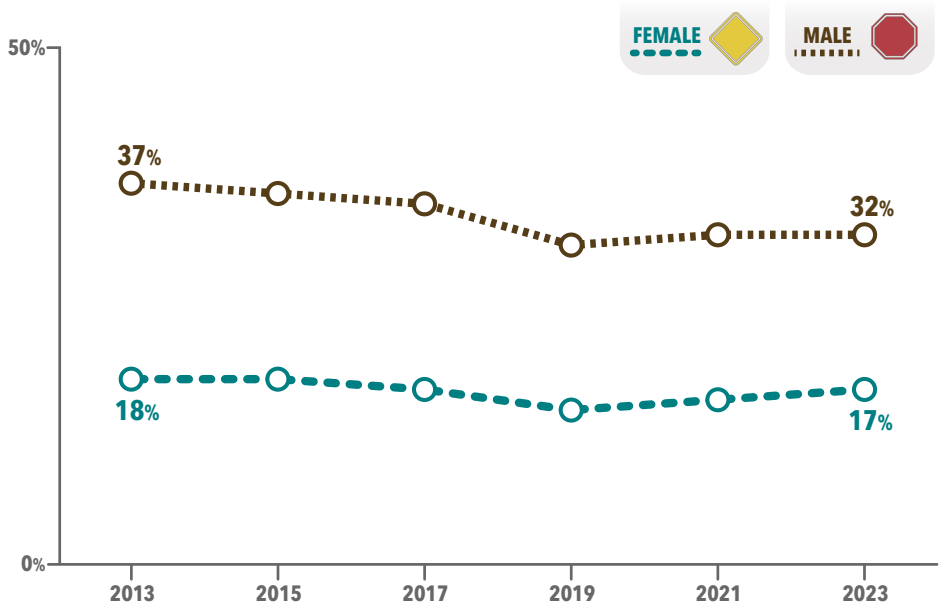
Were Physically Active for at Least 60 Minutes Daily During the Past 7 Days by Demographic Characteristics, United States, YRBS, 2023



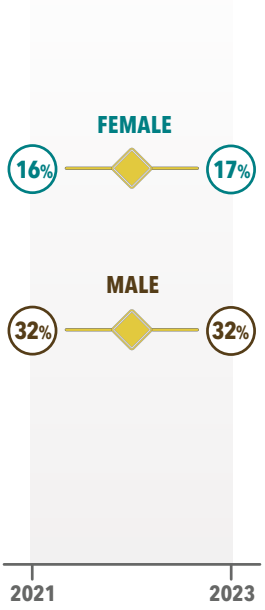
Trends in the Percentage of High School Students Who

Were Physically Active for at Least 60 Minutes Daily During the Past 7 Days, United States, YRBS, 2013–2023

10-Year Trend by Sex

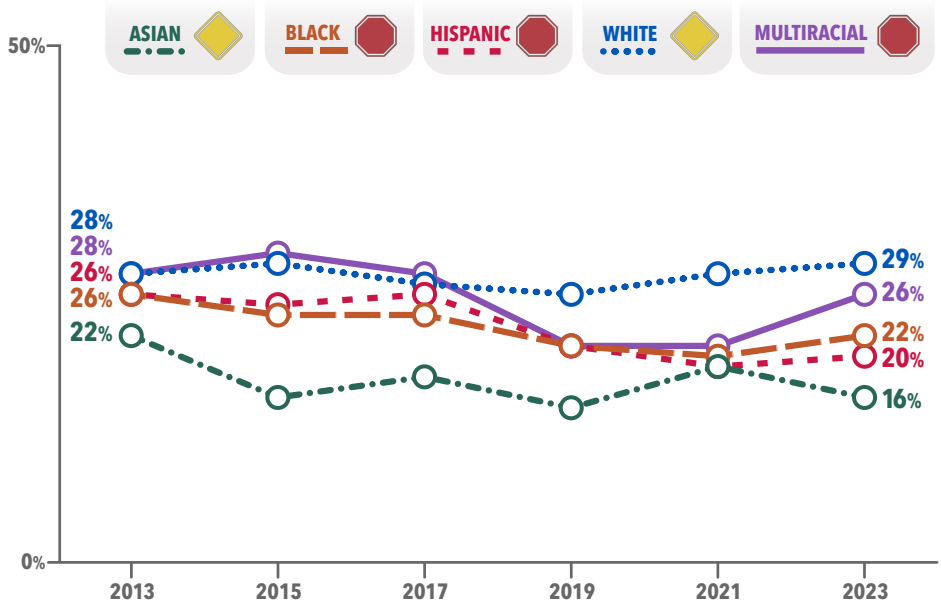


2-Year Change by Sex

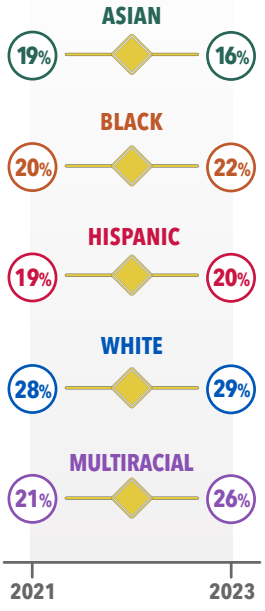


The percentage of female students who were physically active for at least 60 minutes daily did not change from 2013 to 2023 or from 2021 to 2023. The percentage of male students who were physically active for at least 60 minutes daily decreased from 2013 to 2023 but did not change from 2021 to 2023.

10-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of students from most racial and ethnic groups who were physically active for at least 60 minutes daily decreased from 2013 to 2023 but did not change from 2021 to 2023. The percentage of Asian and White students who were physically active for at least 60 minutes daily did not change from 2013 to 2023 or from 2021 to 2023.

In right direction

No change

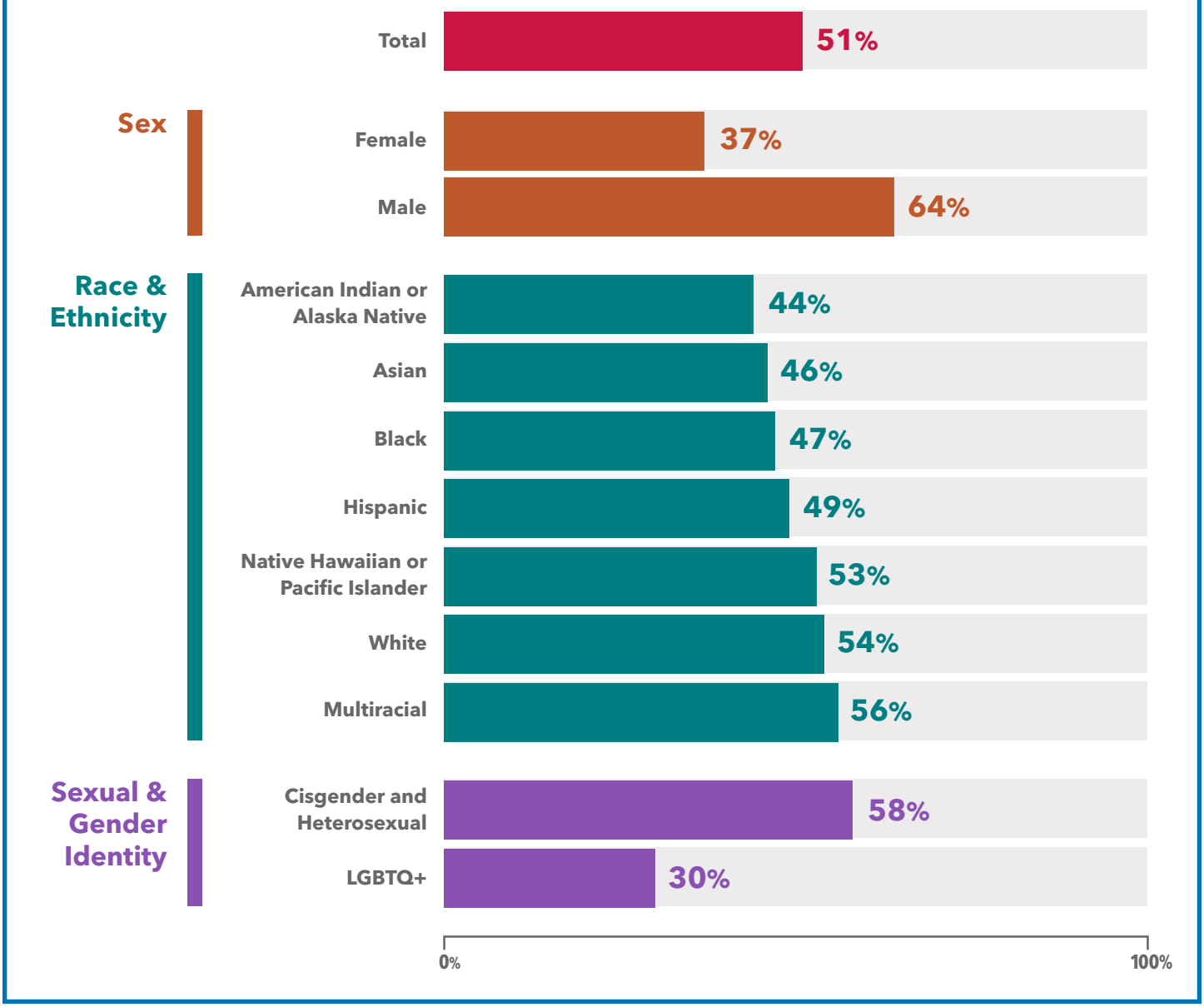
In wrong direction

MUSCLE-STRENGTHENING ACTIVITIES

During 2023, 51% of high school students did exercises to strengthen or tone muscles on 3 or more days during the past 7 days (i.e., met the federal muscle-strengthening physical activity guideline).[5] Male students were more likely than female students to strengthen muscles at least 3 days per week. Asian and Black students were less likely than White and Multiracial students to strengthen muscles at least 3 days per week. Cisgender and heterosexual students were more likely than LGBTQ+ students to strengthen muscles at least 3 days per week.

Percentage of High School Students Who

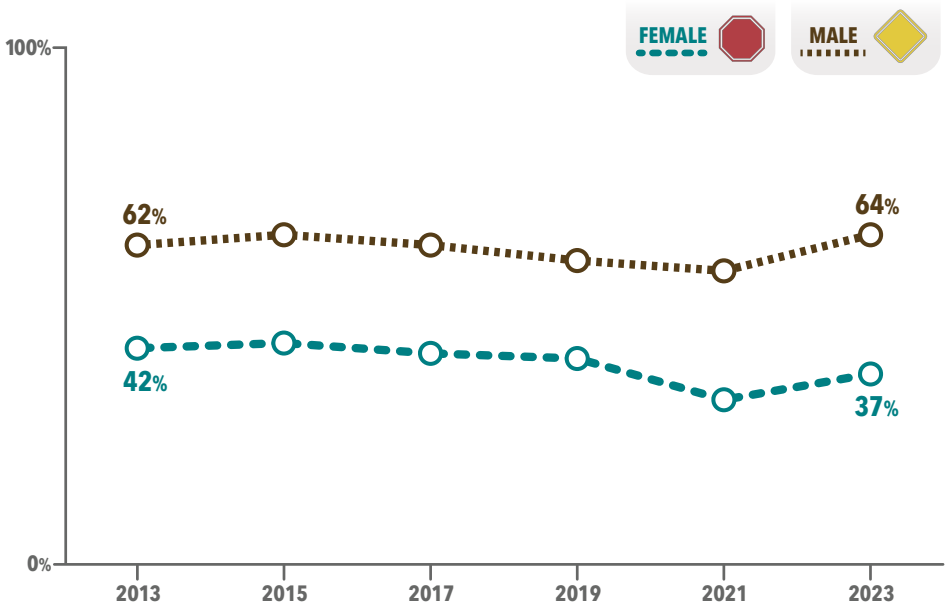
Strengthened Muscles at Least 3 Days Per Week During the Past 7 Days, by Demographic Characteristics, United States, YRBS, 2023



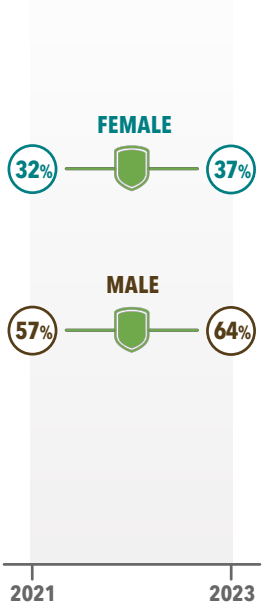
Trends in the Percentage of High School Students Who

Strengthened Muscles at Least 3 Days Per Week During the Past 7 Days, United States, YRBS, 2013–2023

10-Year Trend by Sex

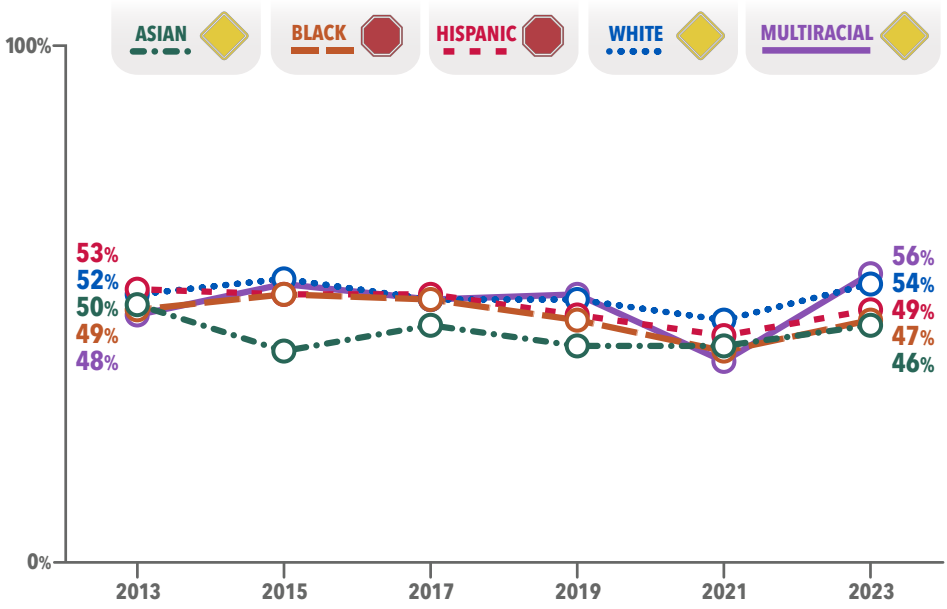


2-Year Change by Sex

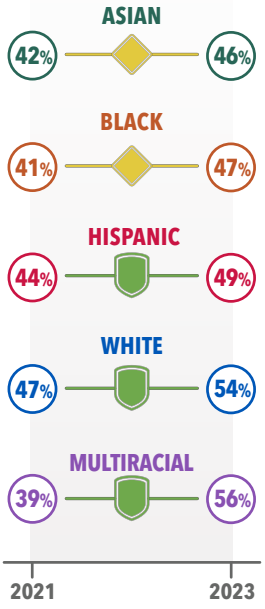


The percentage of female students who strengthened muscles at least 3 days per week decreased from 2013 to 2023 but increased from 2021 to 2023. The percentage of male students who strengthened muscles at least 3 days per week did not change from 2013 to 2023 but increased from 2021 to 2023.

10-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of students from most racial and ethnic groups who strengthened muscles at least 3 days per week did not change from 2013 to 2023 but increased from 2021 to 2023. The percentage of Black and Hispanic students who strengthened muscles at least 3 days per week decreased from 2013 to 2023. The percentage of Asian and Black students who strengthened muscles at least 3 days per week did not change from 2021 to 2023.

In right direction

No change

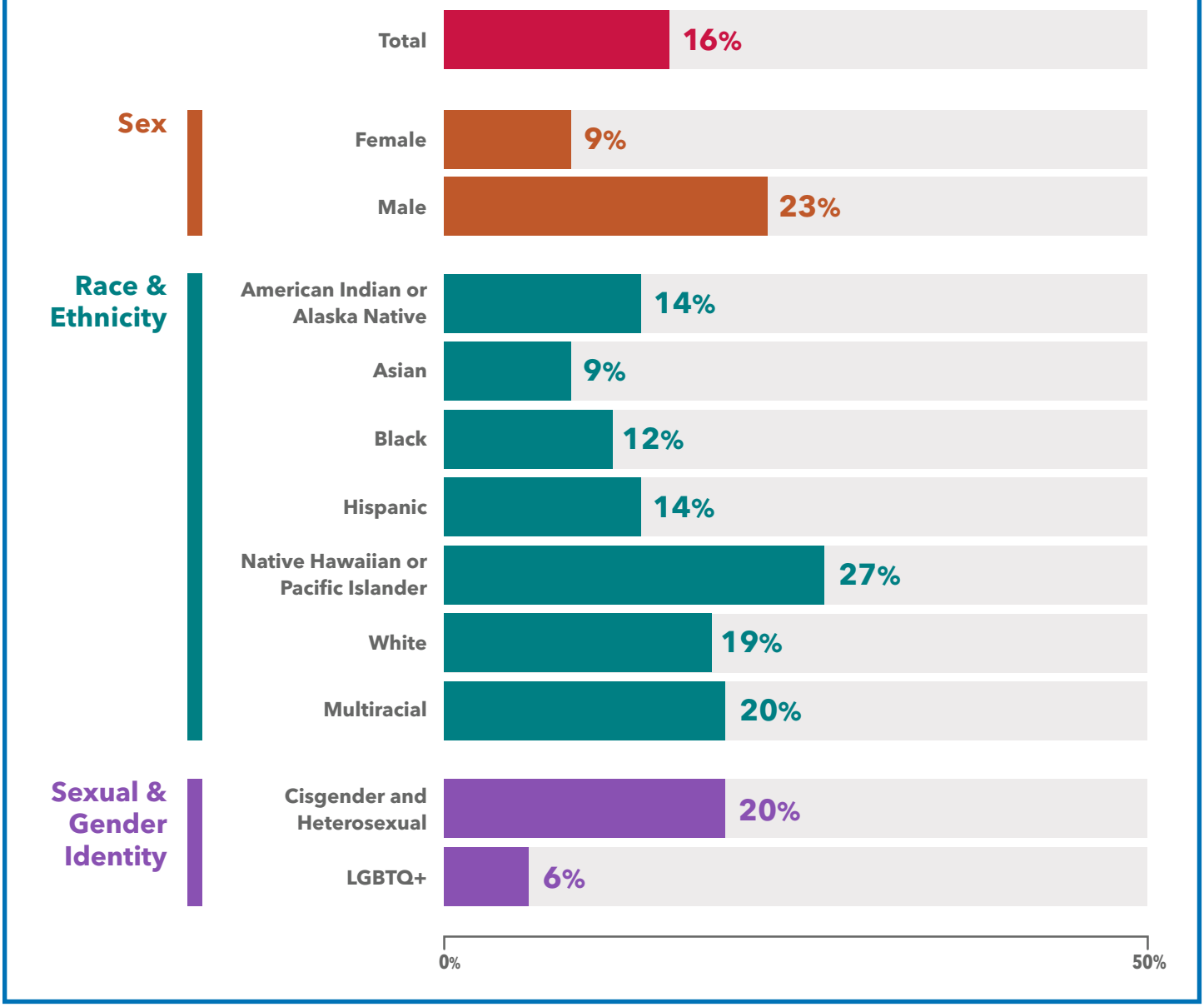
In wrong direction

MET PHYSICAL ACTIVITY GUIDELINES

During 2023, 16% of high school students met both guidelines during the past 7 days (i.e., students were physically active for at least 60 minutes daily and strengthened muscles at least 3 days per week).[5] Male students were more likely than female students to meet both the aerobic and muscle-strengthening guidelines. Asian students were less likely than students from most other racial and ethnic groups to meet both the aerobic and muscle-strengthening guidelines. Black and Hispanic students were less likely than Native Hawaiian or other Pacific Islander, White, and Multiracial students to meet both the aerobic and muscle-strengthening guidelines. Cisgender and heterosexual students were more likely than LGBTQ+ students to meet both the aerobic and muscle-strengthening guidelines.

Percentage of High School Students Who

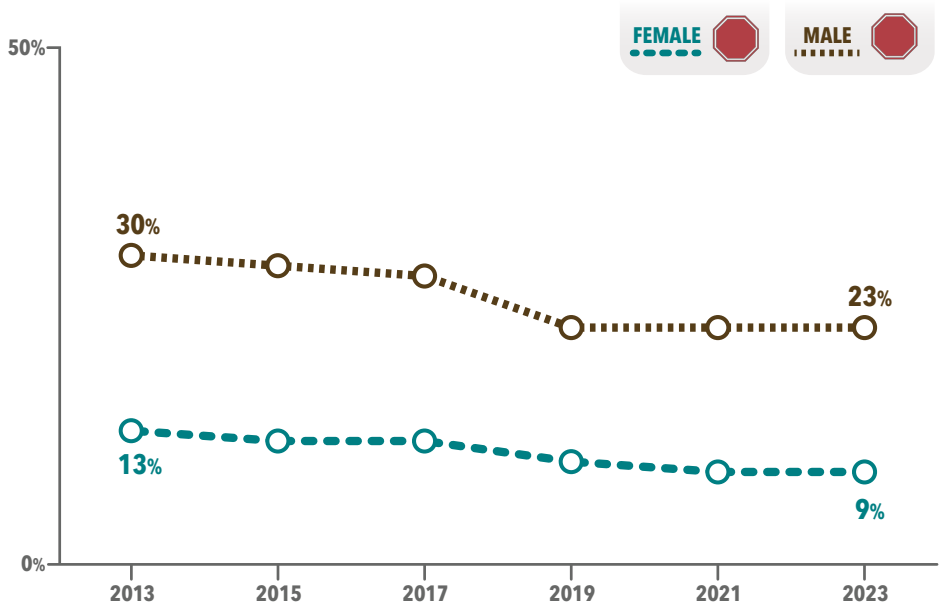
Met Both the Aerobic and Muscle-Strengthening Guidelines During the Past 7 Days by Demographic Characteristics, United States, YRBS, 2023



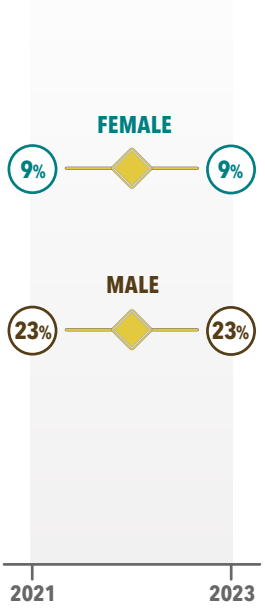
Trends in the Percentage of High School Students Who

Met Both the Aerobic and Muscle-Strengthening Guidelines During the Past 7 Days, United States, YRBS, 2013–2023

10-Year Trend by Sex

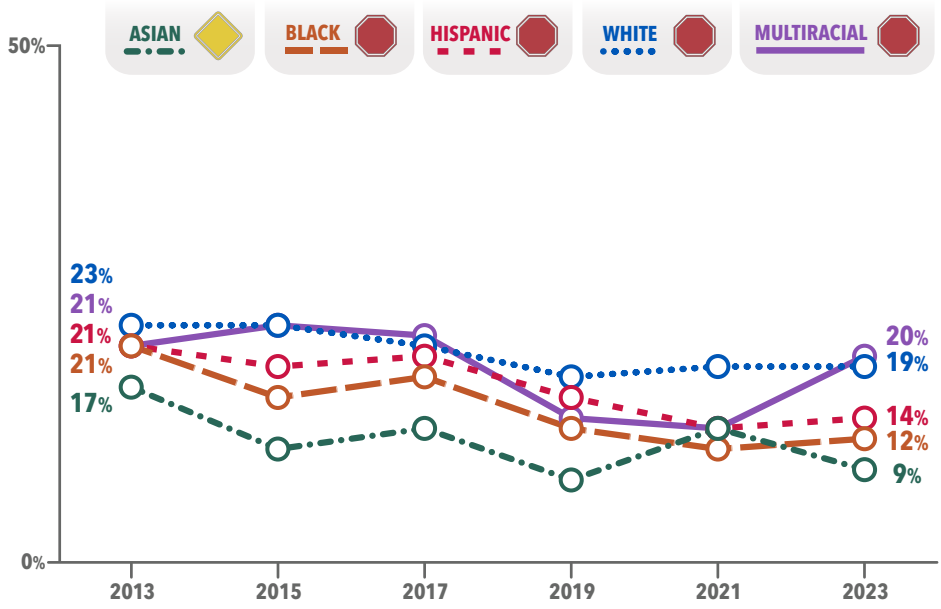


2-Year Change by Sex

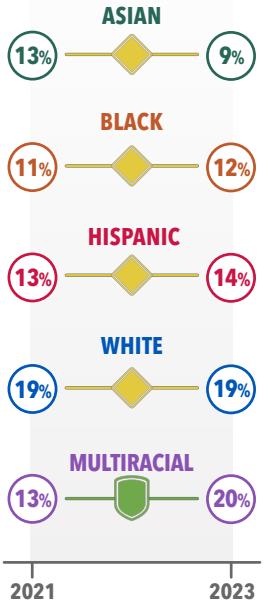


The percentage of female and male students who met both the aerobic and muscle-strengthening guidelines decreased from 2013 to 2023 but did not change from 2021 to 2023.

10-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of students from most racial and ethnic groups who met both the aerobic and muscle-strengthening guidelines decreased from 2013 to 2023. The percentage of Asian students who met both the aerobic and muscle-strengthening guidelines did not change from 2013 to 2023. The percentage of students from most racial and ethnic groups who met both the aerobic and muscle-strengthening guidelines did not change from 2021 to 2023, but the percentage of Multiracial students who met both the aerobic and muscle-strengthening guidelines increased from 2021 to 2023.

In right direction

No change

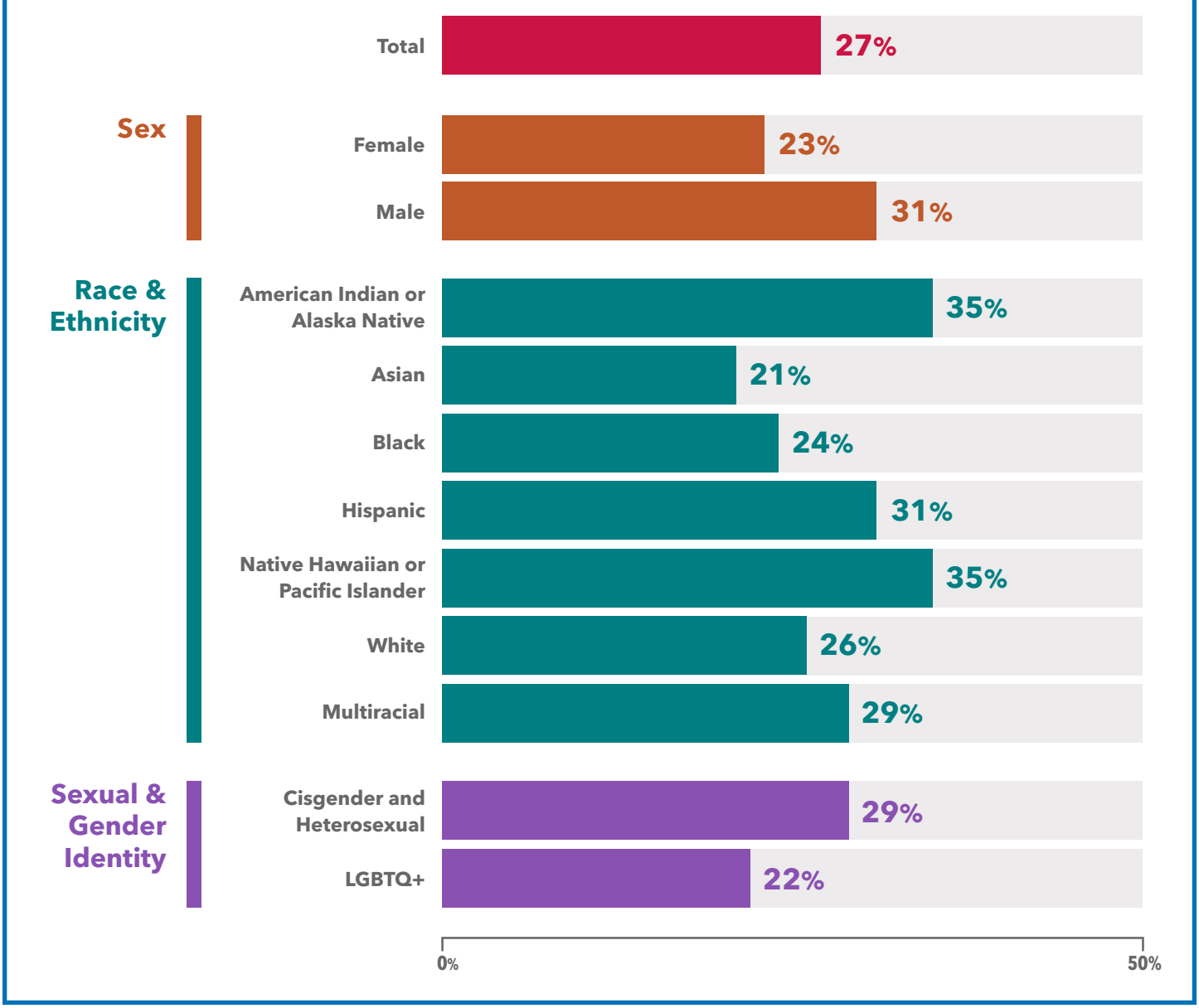
In wrong direction

DAILY PHYSICAL EDUCATION

During 2023, 27% of high school students attended physical education classes on all 5 days during an average school week. Male students were more likely than female students to attend physical education classes daily. Asian students were less likely than Hispanic and Multiracial students to attend physical education classes daily. Cisgender and heterosexual students were more likely than LGBTQ+ students to attend physical education classes daily.

Percentage of High School Students Who

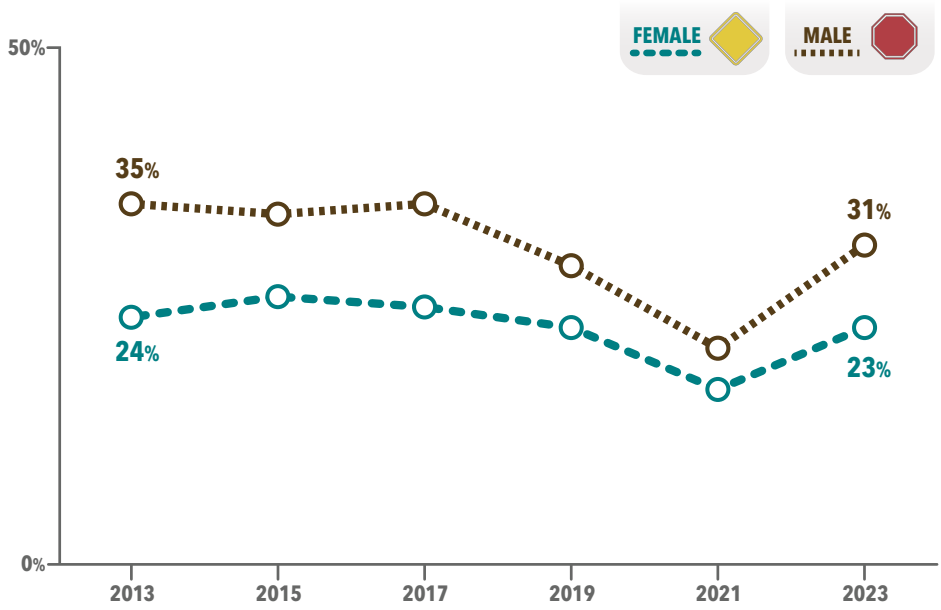
Attended Physical Education Classes Daily During an Average School Week by Demographic Characteristics, United States, YRBS, 2023



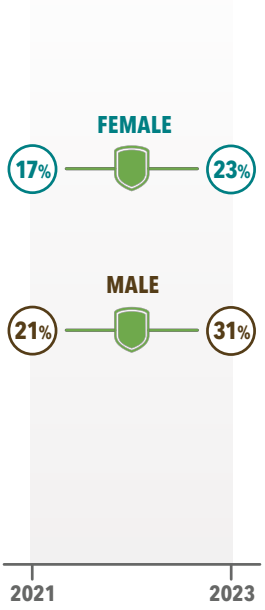
Trends in the Percentage of High School Students Who

Attended Physical Education Classes Daily During an Average School Week, United States, YRBS, 2013–2023

10-Year Trend by Sex

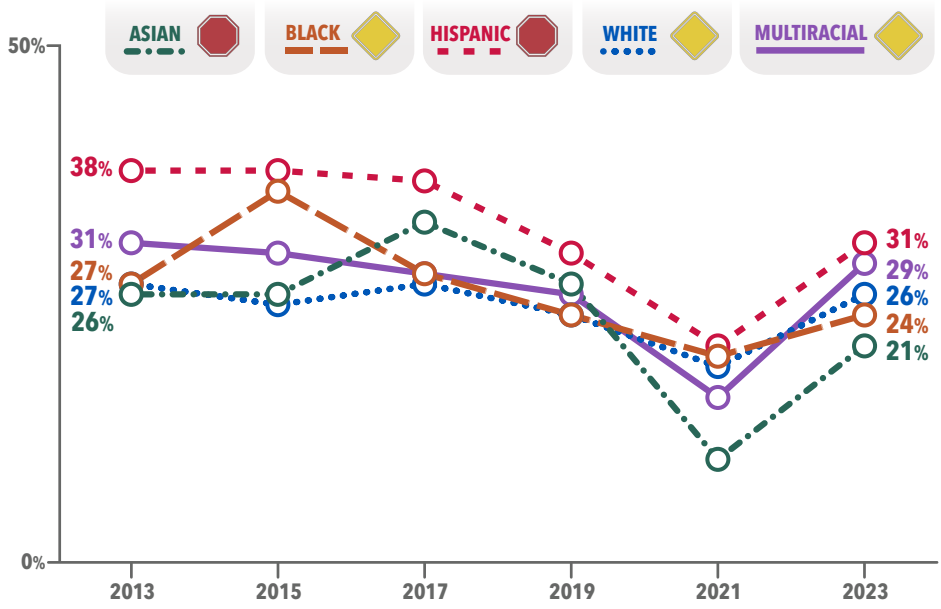


2-Year Change by Sex

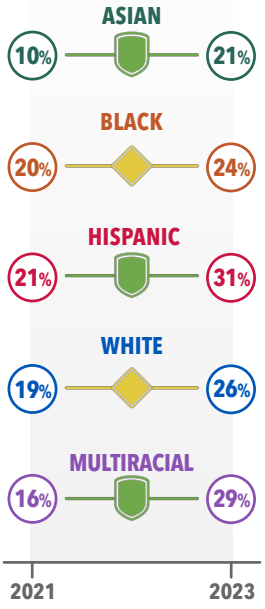


The percentage of female students who attended physical education classes daily did not change from 2013 to 2023 but increased from 2021 to 2023. The percentage of male students who attended physical education classes daily decreased from 2013 to 2023 and increased from 2021 to 2023.

10-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of students from most racial and ethnic groups who attended physical education classes daily did not change from 2013 to 2023. The percentage of Asian and Hispanic students who attended physical education classes daily decreased from 2013 to 2023. The percentage of students from most racial and ethnic groups who attended physical education classes daily increased from 2021 to 2023. The percentage of Black and White students who attended physical education classes daily did not change from 2021 to 2023.

In right direction

No change

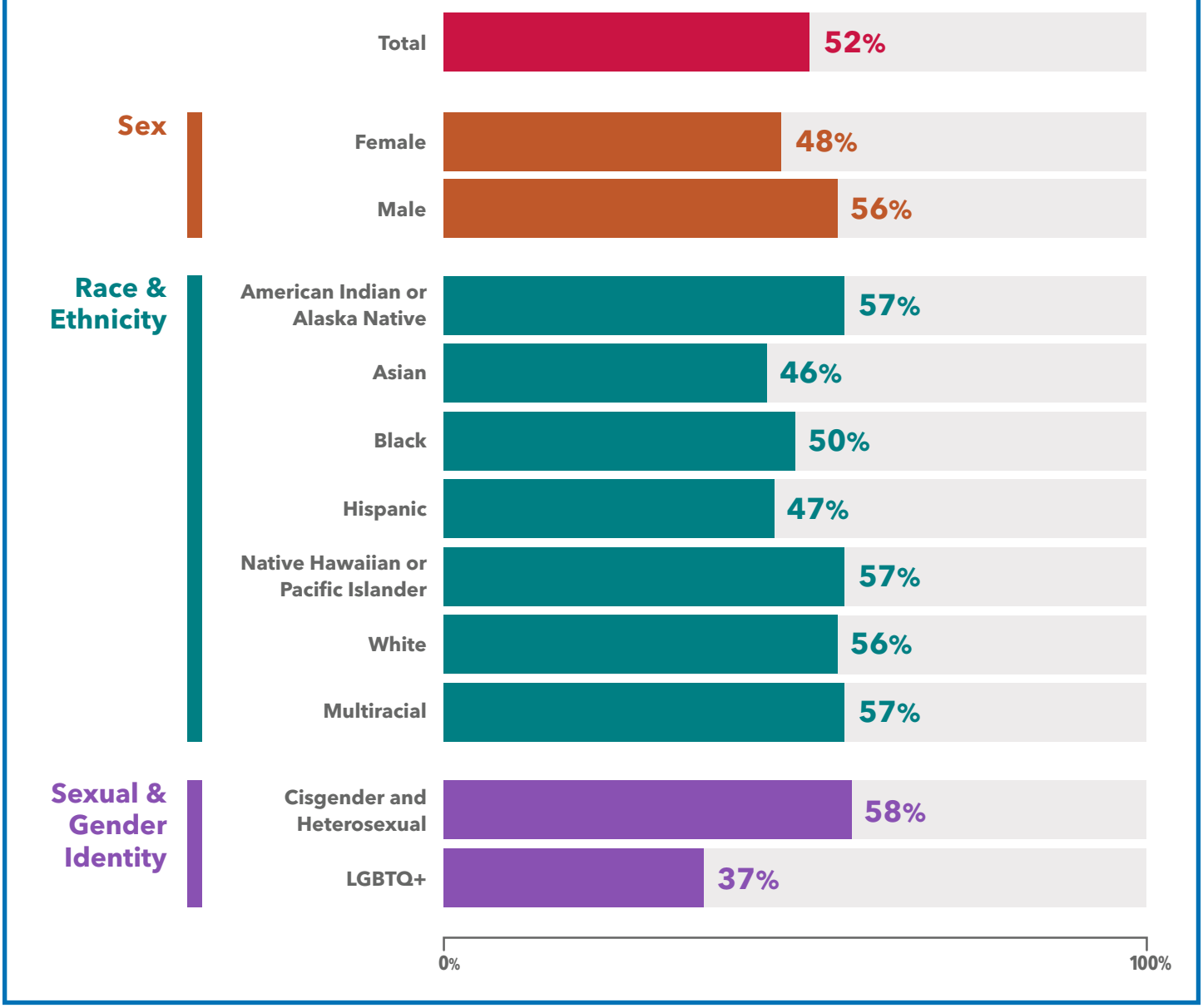
In wrong direction

PLAYED ON A SPORTS TEAM

During 2023, 52% of high school students played on a school or community sports team during the past 12 months run by their school or community groups. Male students were more likely than female students to play on a sports team. Asian, Black, and Hispanic students were less likely than White and Multiracial students to play on a sports team. Cisgender and heterosexual students were more likely than LGBTQ+ students to play on a sports team.

Percentage of High School Students Who

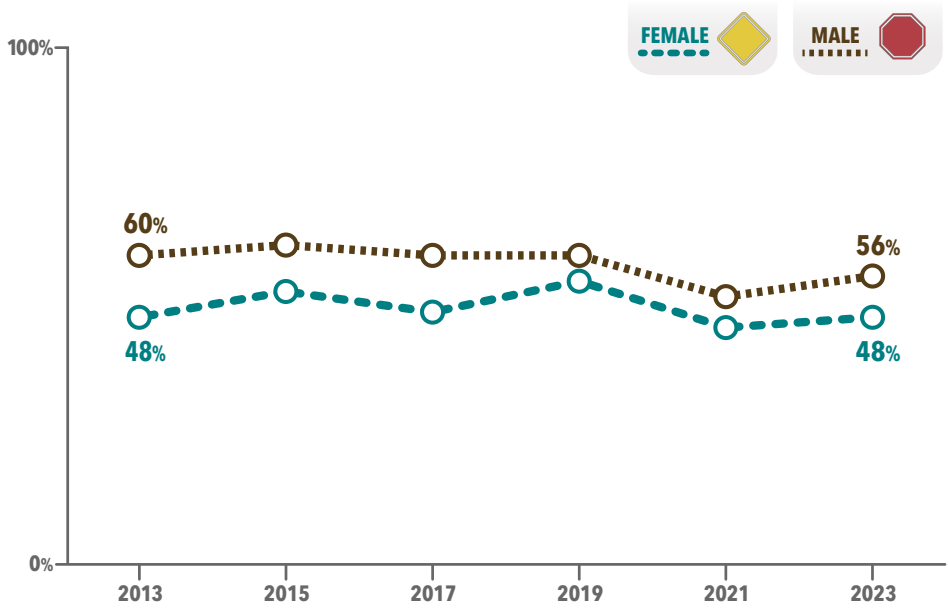
Played on a Sports Team During the Past 12 Months by Demographic Characteristics, United States, YRBS, 2023



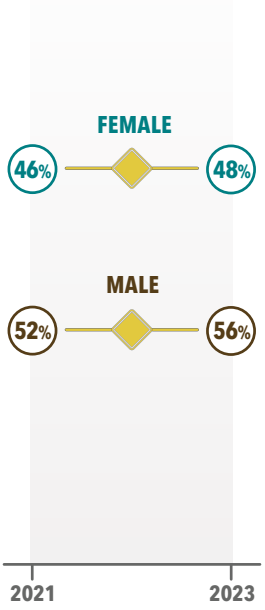
Trends in the Percentage of High School Students Who

Played on a Sports Team During the Past 12 Months, United States, YRBS, 2013–2023

10-Year Trend by Sex

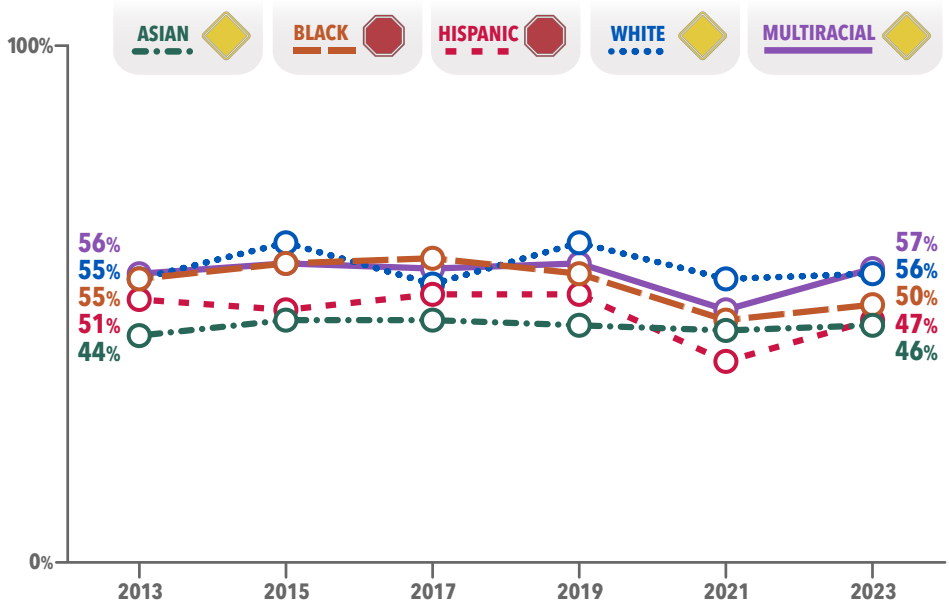


2-Year Change by Sex

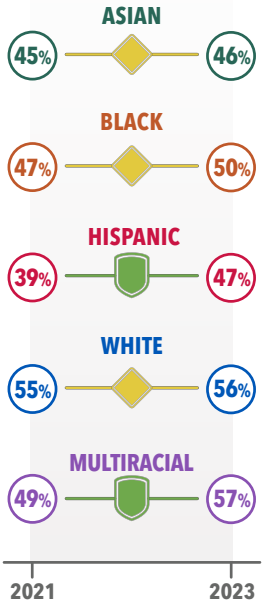


The percentage of female students who played on a sports team did not change from 2013 to 2023 or from 2021 to 2023. The percentage of male students who played on a sports team decreased from 2013 to 2023 but did not change from 2021 to 2023.

10-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of Asian, White, and Multiracial students who played on a sports team did not change from 2013 to 2023 or from 2021 to 2023. The percentage of Black and Hispanic students who played on a sports team decreased from 2013 to 2023. However, the percentage of Hispanic and Multiracial students who played on a sports team increased from 2021 to 2023.

In right direction

No change

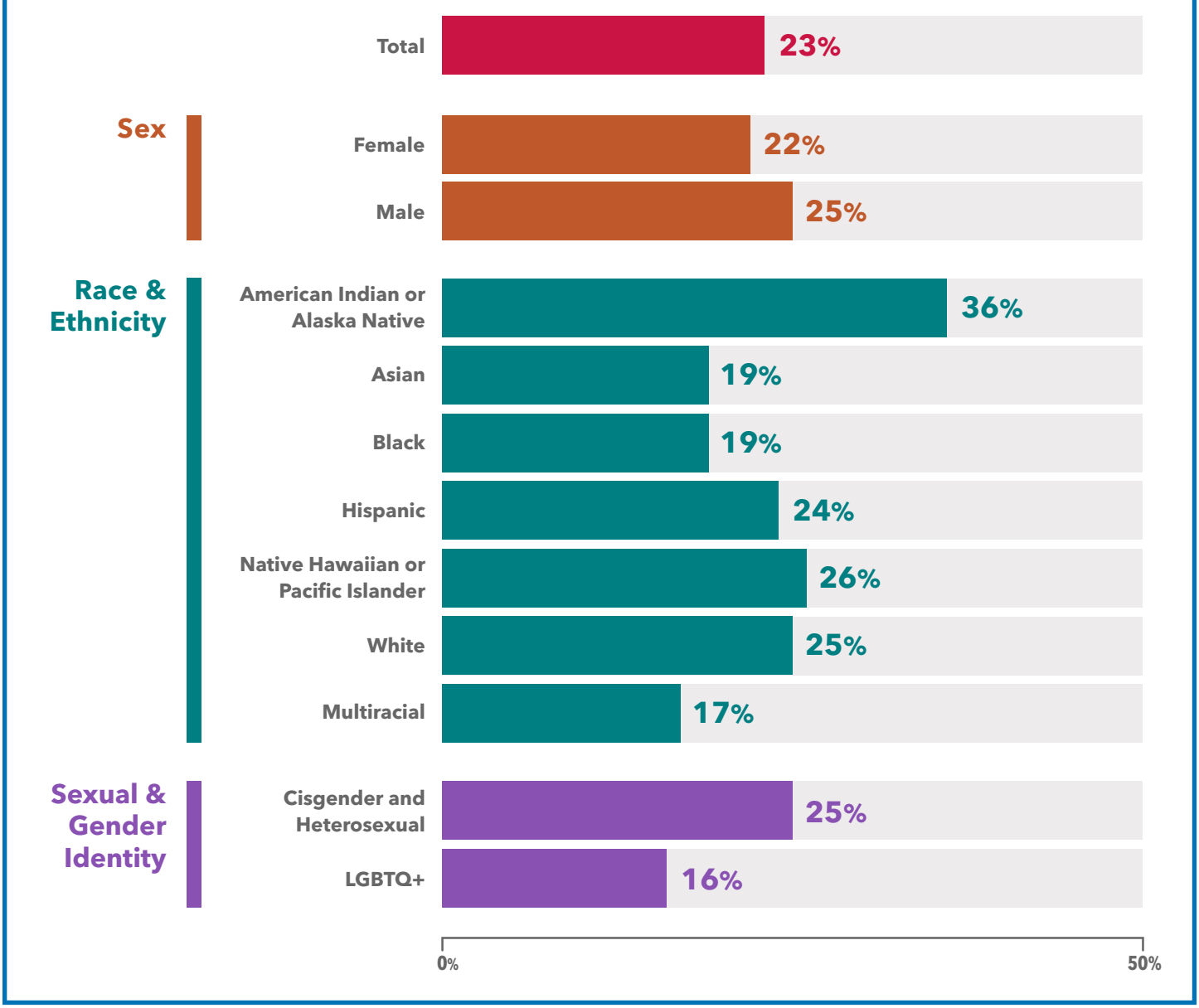
In wrong direction

SUFFICIENT SLEEP

During 2023, 23% of high school students got at least 8 hours of sleep on an average school night. Male students were more likely than female students to get at least 8 hours of sleep on an average school night. White students were more likely than Asian, Black, and Multiracial students to get at least 8 hours of sleep on an average school night. Cisgender and heterosexual students were more likely than LGBTQ+ students to get at least 8 hours of sleep on an average school night.

Percentage of High School Students Who

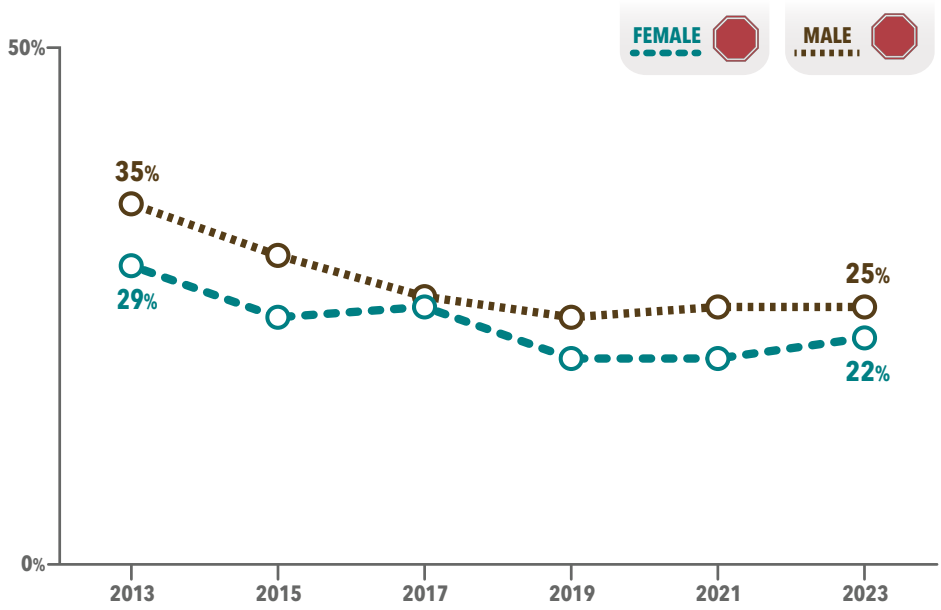
Got at Least 8 Hours of Sleep on an Average School Night, by Demographic Characteristics, United States, YRBS, 2023



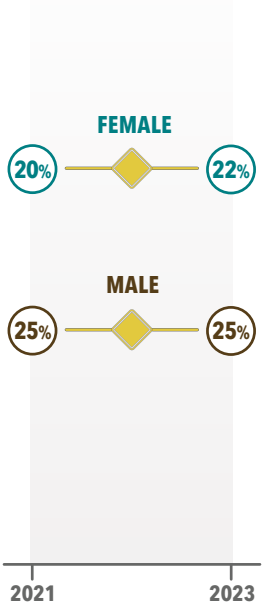
Trends in the Percentage of High School Students Who

Got at Least 8 Hours of Sleep on an Average School Night, United States, YRBS, 2013–2023

10-Year Trend by Sex



2-Year Change by Sex



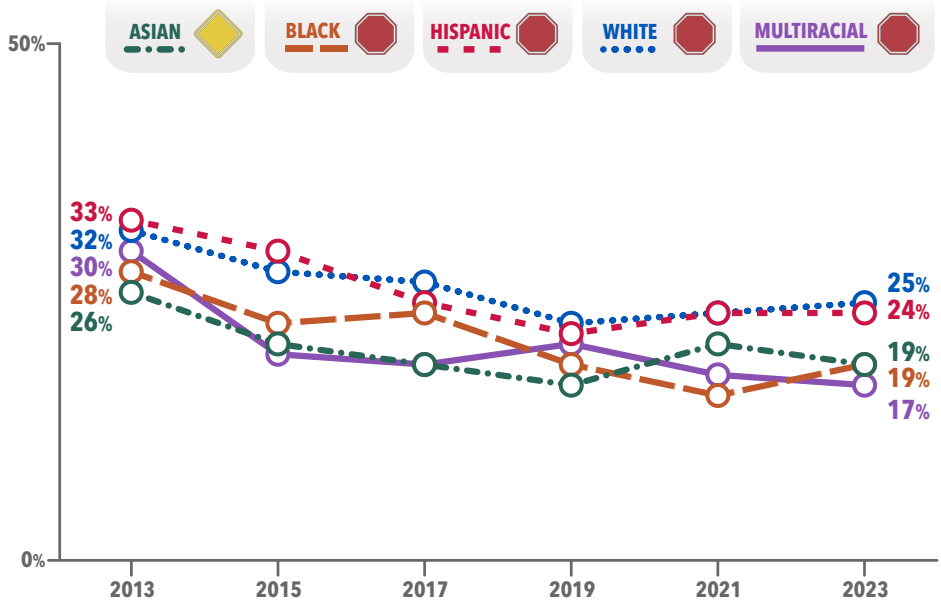
In right direction

No change

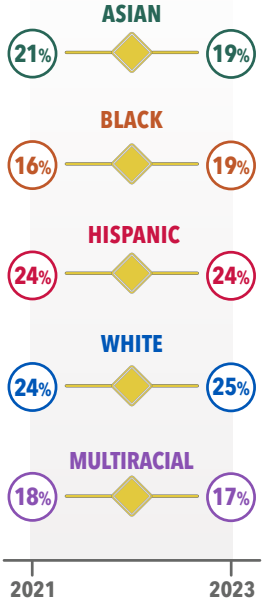
In wrong direction

The percentage of female and male students who got at least 8 hours of sleep on an average school night decreased from 2013 to 2023 but did not change from 2021 to 2023.

10-Year Trend by Race & Ethnicity



2-Year Change by Race & Ethnicity



The percentage of students from most racial and ethnic groups who got at least 8 hours of sleep on an average school night decreased from 2013 to 2023. The percentage of Asian students who got at least 8 hours of sleep on an average school night did not change from 2013 to 2023. The percentage of students from all racial and ethnic groups who got at least 8 hours of sleep on an average school night did not change from 2021 to 2023.

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TECHNICAL NOTES

The source of all data in this report is the 2013 to 2023 cycles of the national Youth Risk Behavior Survey (YRBS), a school-based survey conducted biennially by the Centers for Disease Control and Prevention. The survey captures data on student demographics, age, grade, and various adolescent health risk behaviors, experiences, and conditions, including those related to sexual activity, injury and violence, bullying, diet, physical activity, obesity, indicators of mental health, suicide risk behaviors, and substance use (illicit drugs, prescription opioids, tobacco, alcohol, and marijuana). The 2023 survey also covered topics of emerging interest, including experiences of racism at school, transgender identity, and social media use.

SAMPLING

The sample for the 2023 national YRBS included two components: the main sample, designed to provide nationally representative data, and the supplemental sample, also designed to provide nationally representative data, but used in combination with the main sample to increase the number of American Indian and Alaska Native (AI/AN) students. The sampling design for the main sample was the same as for previous YRBS cycles. That is, in each survey cycle, the national YRBS uses a three-stage cluster sample design to produce a nationally representative sample of students in grades 9–12 attending public (including charter schools), Catholic, and other non-public schools in the 50 states and the District of Columbia. For the first stage of sampling, the frame consists of primary sampling units (PSUs). These PSUs are either counties; groups of smaller, adjacent counties; or parts of larger counties. The PSUs are categorized into 16 strata according to their metropolitan statistical area (MSA) status (i.e., urban or non-urban) and the percentages of non-Hispanic Black and Hispanic students in the PSU. PSUs are sampled with probability proportional to overall school enrollment size for the PSU. For the second stage of sampling, secondary sampling units (SSUs) are identified. An SSU is defined as a physical school with grades 9–12 or a school created by combining nearby schools to provide all four grades. From the selected PSUs, SSUs are sampled with probability proportional to school enrollment size. For the third stage of sampling, one or two classrooms in each of grades 9–12 from either a required subject (e.g., English or social studies) or a required period (e.g., homeroom or second period) are randomly sampled. All students in sampled classes who can complete the questionnaire independently are eligible to participate. Schools, classes, and students that refuse to participate are not replaced.

For the supplemental sample, the sampling frame was constructed using the same data sources and process used for the main sampling frame but was restricted to public schools with an estimated enrollment of 28 students or more in each grade to most efficiently reach AI/AN students. Although this more restricted frame limited the coverage when using the supplemental sample alone, sample representation of the AI/AN population was expanded when the supplemental sample was combined with the main sample, which represents all schools, including schools with <28 students in each grade as well as non-public schools. As with the main sample, the supplemental sample used a three-stage cluster sampling design. The first-stage sampling frame was the same as for the main sample. At the second stage, SSUs were sampled with probability proportional to the aggregate AI/AN school enrollment size in grades 9–12. The third stage of sampling followed the same process as for the main sample, except that two classrooms in each grade were selected to participate to maximize the number of AI/AN students.

DATA COLLECTION PROCEDURES

Survey procedures are designed to protect students' privacy by allowing for anonymous and voluntary participation. Before survey administration, local parental permission procedures are followed. Students complete the self-administered questionnaire during one class period using tablets that had been programmed with the survey instrument.

DATA PROCESSING PROCEDURES AND RESPONSE RATES

For the 2023 national YRBS, 20,386 questionnaires were completed in 155 schools. The data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. After editing, 20,103 questionnaires were usable. The school response rate was 49.8%, the student response rate was 71.0%, and the overall response rate, which is the product of the school and student response rates, was 35.4%.

QUESTIONNAIRE

During 2023, the national YRBS questionnaire consisted of 107 questions and was offered in both English and Spanish. The questionnaire included questions to identify student demographic characteristics. Student sex was assessed with the question, "What is your sex?" Response options were "Female" and "Male." Race and ethnicity were ascertained from two questions: (1) "Are you Hispanic or Latino?" (response options were "yes" or "no"), and (2) "What is your race?" Response options were "American Indian or Alaska Native," "Asian," "Black or African American," "Native Hawaiian or other Pacific Islander," or "White." For the second question, students could select more than one response option.

Students were classified into the following seven racial and ethnic categories: non-Hispanic American Indian or Alaska Native (AI/AN), Hispanic or Latino, non-Hispanic Asian (Asian), non-Hispanic Black (Black), non-Hispanic Native Hawaiian or other Pacific Islander (NH/OPI), non-Hispanic White (White), and non-Hispanic persons of multiple races (Multiracial).

Sexual identity was ascertained with the following question: "Which of the following best describes you?" Response options were "heterosexual (straight)," "gay or lesbian," "bisexual," "I describe my sexual identity in some other way," "I am not sure about my sexual identity (questioning)," and "I do not know what this question is asking." Gender identity was ascertained with the following question: "Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender?" Response options were "no, I am not transgender," "yes, I am transgender," "I am not sure if I am transgender," and "I do not know what this question is asking." This question was included on the national questionnaire for the first time during 2023. For this report, students who responded "heterosexual (straight)" and "no, I am not transgender" were classified as cisgender and heterosexual. Students who responded, "gay or lesbian," "bisexual," "I describe my sexual identity in some other way," "I am not sure about my sexual identity (questioning)," "yes, I am transgender," or "I am not sure if I am transgender" were classified as LGBTQ+.

WEIGHTING

For the 2023 YRBS, weights were calculated separately for the main sample and AI/AN supplemental sample. The calculation of the weights followed the same process for both samples. First, a weight based on student sex, race and ethnicity, and grade was applied to each record to adjust for school and student non-response and, in the case of the main sample, for the oversampling of Black and Hispanic students. Next, the two weighted datasets were concatenated and combined weights were calculated as final survey weights. Finally, the overall weights were scaled so that the weighted count of students equals the total sample size, and the weighted proportions of students in each grade match the national population proportions. Therefore, in the national dataset, weighted estimates are nationally representative of all students in grades 9–12 attending U.S. public and non-public schools.

ANALYTIC METHODS

Statistical analyses were conducted on weighted data using SAS and SUDAAN software to account for the complex sampling design. T-tests were used to determine pairwise differences between subpopulations. Differences between prevalence estimates were considered statistically significant if the t-test p-value was <0.05.

To identify temporal trends in behaviors from 2013 to 2023, only variables with identically worded questions were examined. Logistic regression analyses, adjusted for any changes in the prevalence of sex, grade, and race or ethnicity over time, were used to assess linear trends. A p-value associated with the regression coefficient that was <0.05 was considered statistically significant.

More information about the national YRBS methodology is available at https://www.cdc.gov/yrbs/index.html.

APPENDIX A

SURVEY QUESTION WORDING FOR VARIABLES IN REPORT

Dietary Behaviors*

1. During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)
2. During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)
3. During the past 7 days, how many times did you eat green salad?
4. During the past 7 days, how many times did you eat potatoes? (Do not count french fries, fried potatoes, or potato chips.)
5. During the past 7 days, how many times did you eat carrots?
6. During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes, or carrots.)
7. During the past 7 days, how many times did you drink a bottle or glass of plain water? (Count tap, bottled, and unflavored sparkling water.)
8. During the past 7 days, how many times did you drink a can, bottle, or glass of a sports drink such as Gatorade or Powerade? (Do not count low-calorie sports drinks such as Propel or G2.)
9. During the past 7 days, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? (Do not count diet soda or diet pop.)
10. During the past 7 days, on how many days did you eat breakfast?

Physical Activity and Sleep Behaviors

1. During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.)
2. During the past 7 days, on how many days did you do exercises to strengthen or tone your muscles, such as push-ups, sit-ups, or weight lifting?
3. During an average week when you are in school, on how many days do you go to physical education (PE) classes?
4. During the past 12 months, on how many sports teams did you play? (Count any teams run by your school or community groups.)
5. During an average school night, how many hours of sleep do you get?

More information about the national YRBS questionnaire is available at www.cdc.gov/healthyyouth/data/yrbs/index.htm.

*These questions were preceded by the following instructions: "The next 10 questions ask about food you ate or drank during the past 7 days. Think about all the meals and snacks you had from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else." Questions 1 and 2 are reported individually and as a composite measure of fruit intake; Questions 3–6 are reported as a composite measure of vegetable intake. The approach for developing these composites can be found in the 2023 YRBS Data User's Guide for QNFR1 and QNVEG1.

APPENDIX B

SIGNIFICANT DIFFERENCES BY DEMOGRAPHIC CHARACTERISTICS IN YRBS 2023 DATA

Dietary Behaviors*

2023	Ate fruit daily†	Ate vegetables daily‡	Ate breakfast daily§	Drank plain water at least 3 times per day¶	Did not drink soda**	Did not drink sports drinks††
Sex: Female (F), Male (M)						
Pairwise Comparison	M>F	No significant difference	M>F	M>F	F>M	F>M
Race and Ethnicity: American Indian or Alaska Native (AI/AN), Asian (A), Black (B), Hispanic (H), Native Hawaiian or Other Pacific Islander (NH/OPI), White (W), Multiracial (MR)						
Pairwise Comparison	H>W	AI>B A>B,H,NH,W,M, B<W,M,H H<W	AI<A,H,W,M A>B,H W>B,H	B<NH,M NH>H,W	A>AI,B,H,W,M	A>AI,B,H,NH,W,M
Sexual and Gender Identity: Lesbian, Gay, Bisexual, Transgender, Questioning, Other Non-Heterosexual Identity (LGBTQ+), Cisgender and Heterosexual (CH)						
Pairwise Comparison	CH>LGBTQ+	No significant difference	CH>LGBTQ+	CH>LGBTQ+	No significant difference	LGBTQ+>CH

*During past 7 days.

†Ate fruit or drank 100% fruit juices 1 or more times per day.

‡Ate vegetables 1 or more times per day.

§Ate breakfast on all 7 days.

¶Drank a bottle or glass of plain water 3 or more times per day.

**Did not drink a can, bottle, or glass of soda or pop.

††Did not drink a sports drink.

Physical Activity and Sleep Behaviors

2023	Were physically active for at least 60 minutes daily*	Strengthened muscles at least 3 days per week†	Met both the aerobic and muscle-strengthening guidelines‡	Attended physical education daily§	Played on a sports team¶	Got at least 8 hours of sleep**
Sex: Female (F), Male (M)						
Pairwise Comparison	M>F	M>F	M>F	M>F	M>F	M>F
Race and Ethnicity: American Indian or Alaska Native (AI/AN), Asian (A), Black (B), Hispanic (H), Native Hawaiian or Other Pacific Islander (NH/OPI), White (W), Multiracial (MR)						
Pairwise Comparison	A<B,NH,W,M B<W,M H<W,M	A<W,M B<W,M H<M	AI<NH A<H,NH,W,M B<NH,W,M H<NH,W,M	A<H,M	A<W,M B<W,M H<W,M	A,B,M<W M< H
Sexual and Gender Identity: Lesbian, Gay, Bisexual, Transgender, Questioning, Other Non-Heterosexual Identity (LGBTQ+), Cisgender and Heterosexual (CH)						
Pairwise Comparison	CH>LGBTQ+	CH>LGBTQ+	CH>LGBTQ+	CH>LGBTQ+	CH> LGBTQ+	CH> LGBTQ+

*Were physically active at least 60 minutes per day on all 7 days during the past 7 days. If students did this, they met the federal aerobic physical activity guideline.

†Did exercises to strengthen or tone muscles on 3 or more days during the past 7 days. If students did this, they met the met federal muscle-strengthening physical activity guideline.

‡This means that students were physically active for at least 60 minutes daily and strengthened muscles at least 3 days per week during the past 7 days.

§Attended physical education (PE) classes on all 5 days during an average week of school.

¶During the last 12 months run by their school or community groups.

**During an average school night.

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Division of Adolescent
and School Health

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