



Increasing Physical Activity in California Schools

Three ways to increase physical activity in California schools
and strengthen military readiness

Acknowledgements

Council for a Strong America is a national, bipartisan nonprofit that unites five organizations comprised of law enforcement leaders, retired admirals and generals, business executives, pastors, and prominent coaches and athletes who promote solutions that ensure our next generation of Americans will be citizen-ready.

Mission: Readiness

Retired admirals and generals strengthening national security by ensuring kids stay in school, stay fit, and stay out of trouble

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1 in 3 children in California is overweight or obese

Summary

In California and the U.S., more than one-third of children and adolescents are overweight or obese.¹ Our country needs each generation to be healthy, well-educated and productive in order to remain competitive and strong. Yet a rise in obesity and decline in physical activity is threatening readiness on all three of these fronts.

The more than 600 military leaders that comprise the organization Mission: Readiness are deeply concerned about the effect of the obesity crisis on our future armed forces. A growing number of military recruits and service members do not have the healthy weights required to serve their country. In fact, data from the Department of Defense show that **70 percent of young adults in California cannot serve in the military—nearly one in three because they are too overweight.**²

While some physical deficits can be addressed upon entering the military, long-term security is at risk unless a large-scale change in physical activity takes place in America.

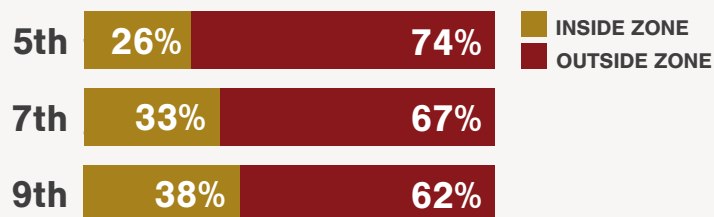
The good news is that schools in California and across the nation are already taking action to help children achieve healthier lives. Recognizing that physical activity is crucial to children's health and academics, school leaders are beginning to focus on getting students active in and out of the classroom, setting ambitious wellness goals, and incorporating nutrition and physical activity strategies into the curriculum.

This report provides a roadmap for further increasing physical activity in California schools within the next several years. It highlights research showing that simple strategies like classroom activity breaks, structured recess and modern approaches

California's Children Are Falling Short of State Physical Fitness Standards

The latest FITNESSGRAM physical fitness tests show more than half of 5th, 7th and 9th grade students scored outside California's Healthy Fitness Zone.^{3*}

PERCENTAGE OF STUDENTS SCORING IN CALIFORNIA'S HEALTHY FITNESS ZONES (MEETING 6 OF 6 FITNESS STANDARDS), BY GRADE



*Note: FITNESSGRAM Standards represent levels of fitness that offer protection against diseases that can result from sedentary living, such as diabetes, heart disease and obesity.

Source: California Department of Education, 2016.

to physical education are not only effective at getting kids active, but can also help them concentrate and perform better in the classroom.

Together, we can increase physical activity in California schools.

Physical activity improves children's health and classroom performance

Regular physical activity contributes to overall health and wellness by increasing strength and endurance, building healthy bones and muscles, regulating weight, and promoting mental health. Physical activity also helps to reduce long-term risks of obesity and chronic illness and establishes a strong foundation for children to remain active into adulthood.⁴

Physical activity during the school day can also improve academic performance.

One rigorous study found that incorporating 20 minutes of physical activity into the school day significantly improved students' test scores in math, reading and spelling.⁵ Another study found that 20 minutes of physical activity improved focus and attention control on tasks among children with ADHD compared to a group of children doing the same tasks after sitting.⁶

Three key ways California schools can increase physical activity during the day

In its Physical Guidelines for Americans, the U.S. Department of Health and Human Services recommends that every child engage in at least 60 minutes of physical activity each day, including aerobic, muscle strengthening, and bone strengthening activities at least three times per week.⁷ Unfortunately, three-quarters of youth are not meeting this standard.⁸

Children spend more than half of their waking hours at school, making these environments ideal locations to promote and support increased physical activity.

If properly structured, recess, activity breaks, and physical education classes offer real opportunities for youth to gain moderate to vigorous minutes of physical activity during the school day.

“Teens who were active in school were 20% more likely to earn an ‘A’ in math or English.”

Source: Active Living Research

Recess

Recess is more than a scheduled break for students in-between classes—it's an opportunity to engage in meaningful physical and social activities. The Society of Health and Physical Activity Educators (SHAPE America) recommends 20 minutes of daily recess for elementary school students.

Providing recess breaks throughout the day can improve students' classroom behavior, attentiveness, and enhance cognitive performance, and learning.⁹ In addition, **children can accumulate up to 40 percent of their total daily physical activity during recess.**¹⁰

Recess best practices

- Incorporate several approaches to increasing physical activity, such as staff training, establishing activity zones on campus, and providing low-cost equipment. For example, students accumulated five more minutes of moderate to vigorous physical activity during a 20-minute recess after the combination of these approaches were implemented at school.¹¹
- Invest in training for recess supervisors. Supervisors can interact with students, play/teach games, serve as wellness role models, and promote physical activity.¹²

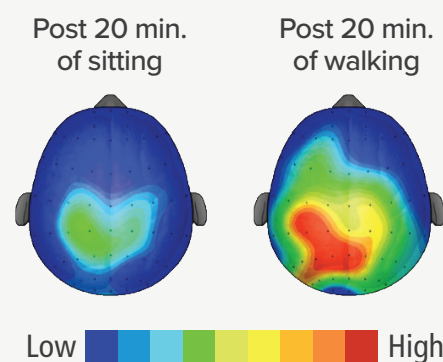
Activity breaks

Breaks during the school day that incorporate physical activity can help meet the guideline of 60 minutes of physical activity. In turn, these breaks can help prevent children from becoming overweight, improve students' attention to classwork, and increase academic achievement.¹³

According to data compiled by Active Living Research, classroom physical activity

Physical Activity Boosts Brain Activity in Kids

Children's average neural activity while taking a test after 20 minutes of sitting compared to 20 minutes of walking. The color blue indicates lower brain activity, while the color red indicates higher brain activity.



Source: Used with permission from Charles Hillman, University of Illinois

breaks can help increase physical activity among children during the school day and complement daily physical education programs. If properly designed, classroom physical activity breaks can be integrated into academic content lessons.

Activity breaks best practices

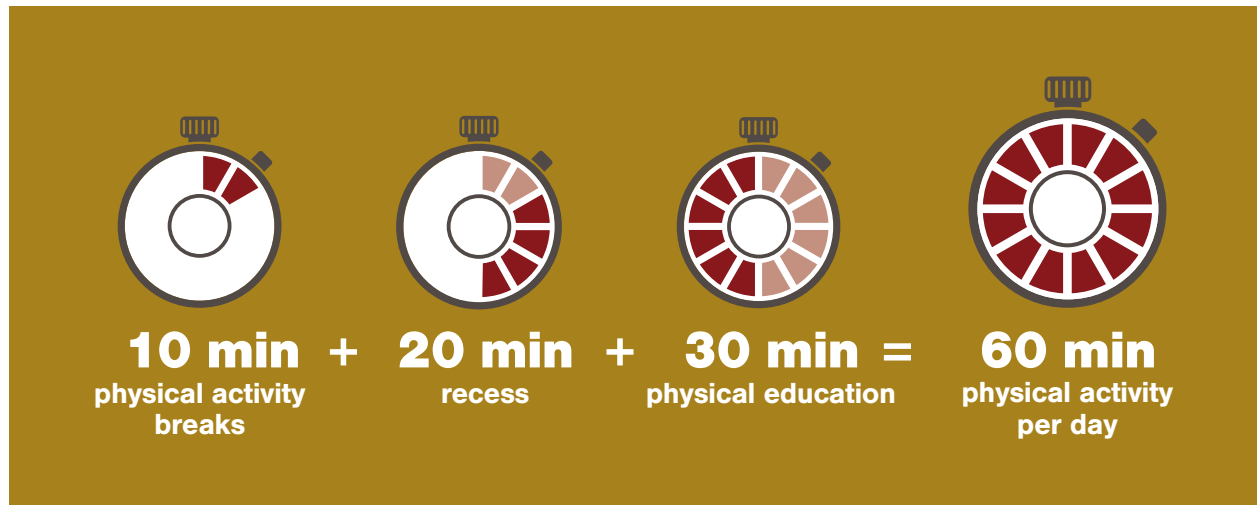
- Explore different ways of incorporating physical activity in the classroom. Multiple, 10-minute active breaks that add up to 75-90 minutes per week can be effective.¹⁴
- Incorporate physical and health education into math, science, and reading curricula to encourage physical activity and good nutrition.
- Incorporate classroom physical activity breaks into daily requirements and

wellness plans, including by enforcing local and statewide mandates for daily physical activity in school.¹⁵

Physical education

Physical education is an integral part of the overall education program for students. It teaches youth how their bodies move and

how to perform a variety of physical activities. Students learn the health-related benefits of regular physical activity and the skills to adopt an active and healthy lifestyle. With high-quality physical education instruction, students can exhibit increased confidence, independence, self-control, resilience, and even improve their academic performance.¹⁶



Solving the physical activity equation

When students are active, they are more focused in class and develop healthy habits that can last a lifetime. Studies confirm what educators already know: students aren't getting the exercise they need.

That is why The Alliance for a Healthier Generation's Healthy Schools Program is challenging California students, school leaders, and parents to achieve 60 minutes of physical activity every school day, including activity before, during and after school.

The solution: 10+20+30=60 in elementary schools—10 minutes of physical activity breaks; 20 minutes of recess; and 30 minutes of physical education. For middle/high schools, the equation changes to 20+40=60. That's 20 minutes of physical activity breaks and 40 minutes of physical education.

To help schools achieve their goals, The Alliance for a Healthier Generation created the Active Schools/Active Minds Initiative. The Initiative, which is supported by Mission: Readiness, provides free guidance, technical assistance and training to schools. Specifically, it offers online assessment and action plan tools that provide a customized roadmap for schools to increase physical activity, and the roadmaps are flexible enough to adapt to changing needs throughout the school year.

Source: The Alliance for a Healthier Generation

Physical education programs that integrate physical activity, nutrition, and goals for active classes into school-wide curriculum for students, result in children who are more physically active. A study of more than 5,000 elementary school students showed that children in quality programs obtained 12 more minutes of moderate to vigorous physical activity each day than other students.¹⁷

For many kids, traditional physical education can reinforce their view that physical activity is embarrassing and something best avoided. Innovative curricula, however, promote games that both keep kids active and are fun for everyone.

An evaluation of one such curricula, the **UCLA Health Sound Body Sound Mind curriculum**, found that it tripled the percentage of students who passed **California's FITNESSGRAM test** in schools where it was implemented—from an average passage rate of 20 percent prior to the curriculum's initiation to an average passage rate of 60 percent after its completion. The study also found that students' confidence levels, enjoyment of physical activity and knowledge about fitness increased following the program.¹⁸

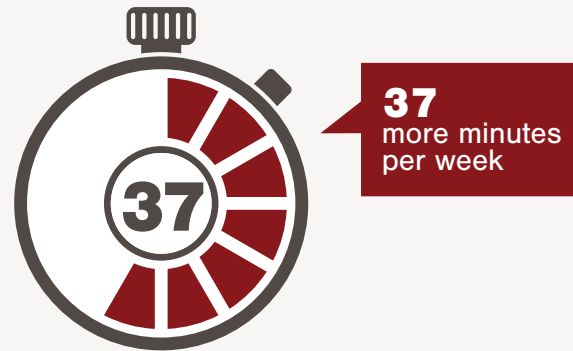
Physical education best practices

According to research on these programs compiled by the American Heart Association and SHAPE America, the best PE programs share the following common elements:

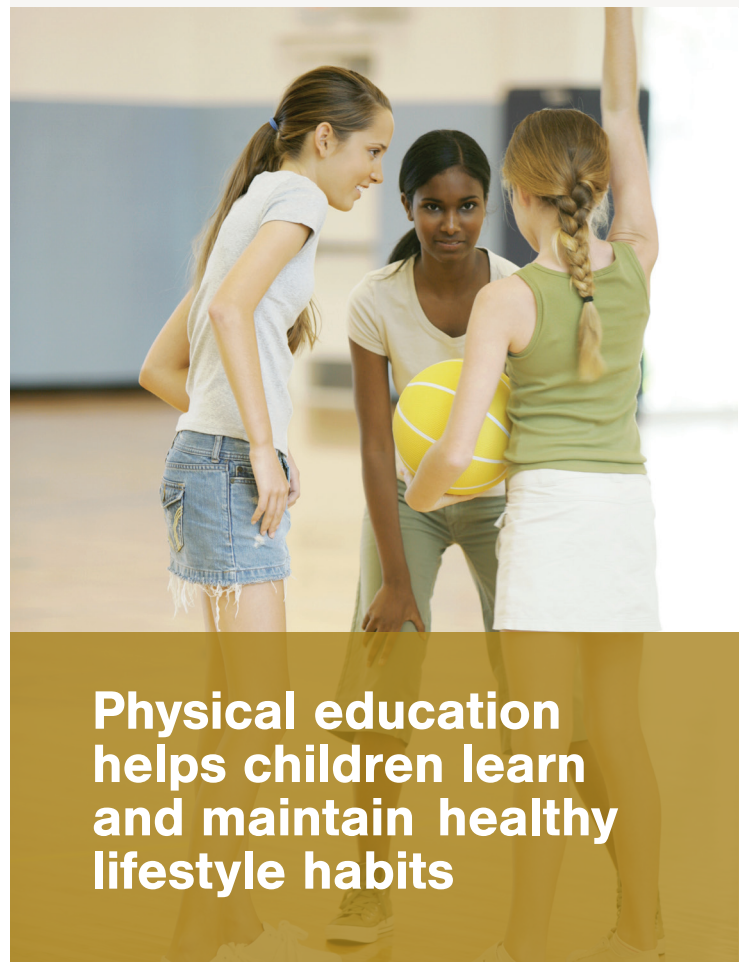
- **High-quality instruction:** The best physical education programs have well-trained (certified) instructors and focus on teaching all students, including those with disabilities, to enjoy being active.¹⁹

Schools can promote physical activity through physical education

In states with physical education requirements, high school girls were active:



Source: Active Living Research



Physical education helps children learn and maintain healthy lifestyle habits



Physical inactivity is hurting our national security

The decline in physical activity has a transcendent, multi-generational effect and the U.S. Armed Forces is not immune. More than 60 percent of non-deployed active duty service members experience a sprain, stress fracture, or other musculoskeletal injury each year due in part to years of low calcium intake, lack of long-term exercise habits and/or excess weight. The military is spending valuable time and resources treating these injuries among active duty personnel and veterans, including more than \$1.5 billion in annual obesity-related health care spending and costs to replace unfit personnel.

- **Adequate resources:** One survey of PE teachers showed that the median annual funding from the school and district budget for a school's PE program is less than \$800.²⁰ Greater resources can help improve programs: one study found that a school district saw its student obesity rates plummet faster than almost any other location nationwide with an investment in new exercise equipment and facilities among other initiatives.²¹
- **Low Student-Teacher Ratios:** A recent review of 40 studies found that school-based physical activity in smaller classes improved students' academic performance significantly more than those in larger groups.²²

- **Adequate class time:** Experts recommend a total of 150 minutes of PE per week in elementary school and 225 minutes per week at the secondary level.²³ In California, Education Code requires only 100 minutes of PE instruction per week in elementary school²⁴ and 200 minutes per week at the secondary level.²⁵
- **Assessment and accountability:** Assessments of physical education programs and student fitness levels, like FITNESSGRAM, provide schools and districts with apples-to-apples comparisons and encourage sharing of best practices.
- Use FITNESSGRAM test results to plan physical education curriculum, help prepare students with functional and relevant exercises, educate parents, and encourage students to set personal, realistic goals for improvement.²⁷

Energy for activity

Active students burn energy when they engage in physical activity. Therefore, it's important they fuel their bodies with healthy, nutritious foods and hydrate with safe, clean drinking water.

Other creative ways to increase physical activity during the school day

- Establish school or district-wide goals for increasing total physical education minutes each day, month, and year.
- Continue to review, update, and share local wellness policies to ensure they adhere to recommended state and federal standards for physical activity.²⁶
- Design, build, and modernize school facilities that take into account the physical, mental, and social health of students.
- Since children consume up to half of their daily calories while at school, these settings are critical to ensuring healthy choices that provide students with the necessary energy to engage in recess, activity breaks, and physical education.
- Water is an essential, calorie-free alternative that can be used to help combat childhood obesity and improve students' readiness to learn by maintaining proper hydration.²⁸ Schools are a great place to start promoting water so that students can begin to learn how to incorporate consumption of water into their daily routines.

Conclusion

We can no longer afford to surrender more of our young people to obesity knowing that the negative health effects will last a lifetime, hindering their ability to lead healthy lives and qualify to join the military should they choose to do so. Increasing the quality and quantity of physical activity in schools is a critical step in addressing the childhood obesity crisis and preserving our national security.

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