

Data Shows Physically Fit Kids Perform Better Academically

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March 2007



HOW DID THEY KNOW?

“When health is absent, wisdom cannot reveal itself, art cannot become manifest, strength cannot be exerted, wealth becomes useless, and reason becomes powerless.”

HEROPHILUS, GREEK PHYSICIAN 300 B.C.



“Orandum est ut
sit mens sana in
corpore sano”

We should pray
that there be a
sound mind in a
sound body. Juvenal
(65-128 A. D.)

“You must have
a healthy body to
learn to read, and
you must be able
to read to be
healthy”.

Thomas Jefferson



Delaine Eastin

“This statewide study provides compelling evidence that the physical well-being of students has a direct impact on their ability to achieve academically.”



Statewide Study

Individually matched scores from the spring 2001 Stanford Achievement Test, Ninth Edition (SAT-9) with the state-mandated physical fitness test, (FITNESSGRAM) given in 2001 to students in 5th, 7th, and 9th grade.



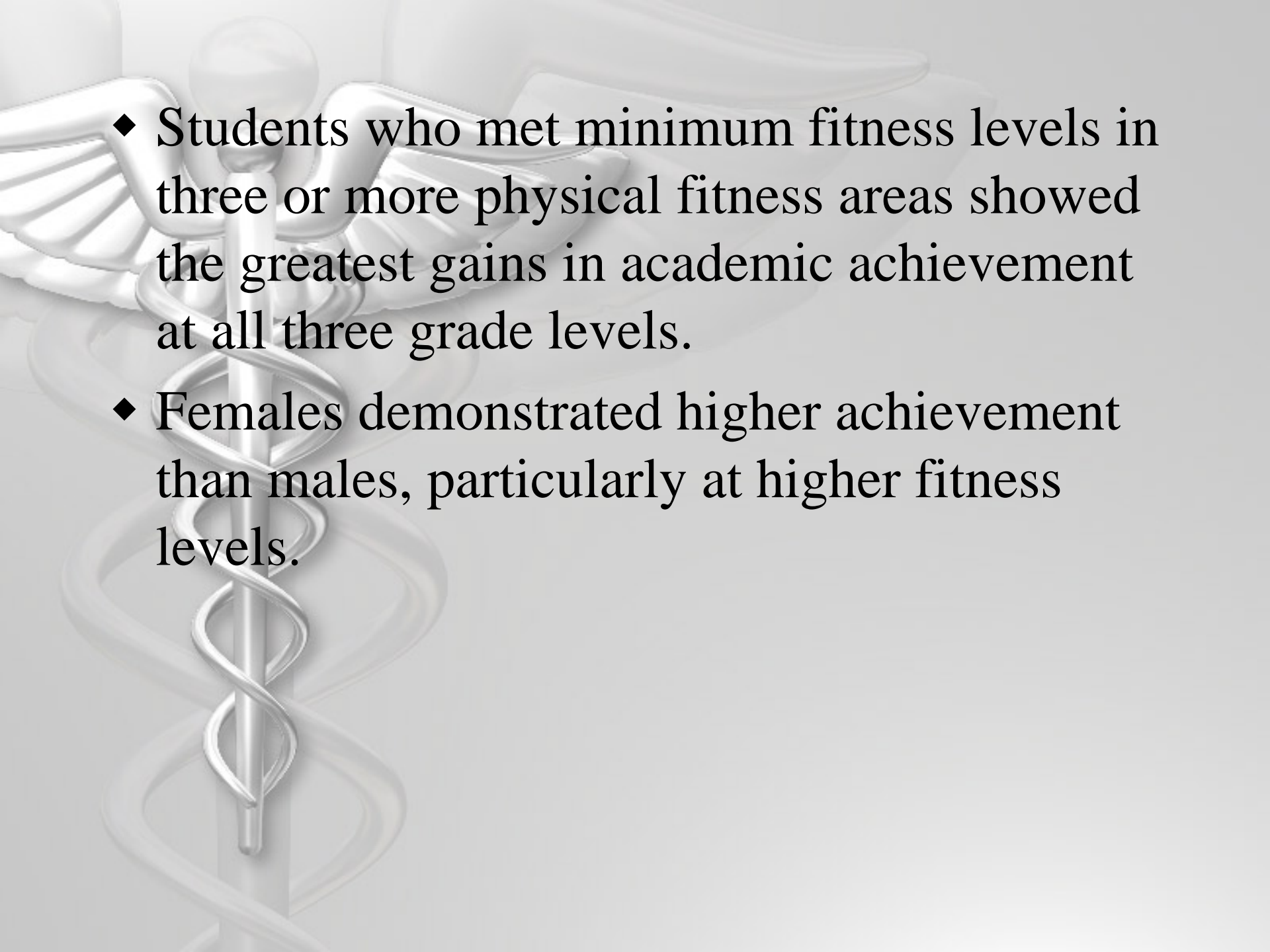
STUDY DESIGN

- ◆ Reading and mathematics scores matched with fitness scores
- ◆ 353,000 fifth graders
- ◆ 322,000 seventh graders
- ◆ 279,000 ninth graders



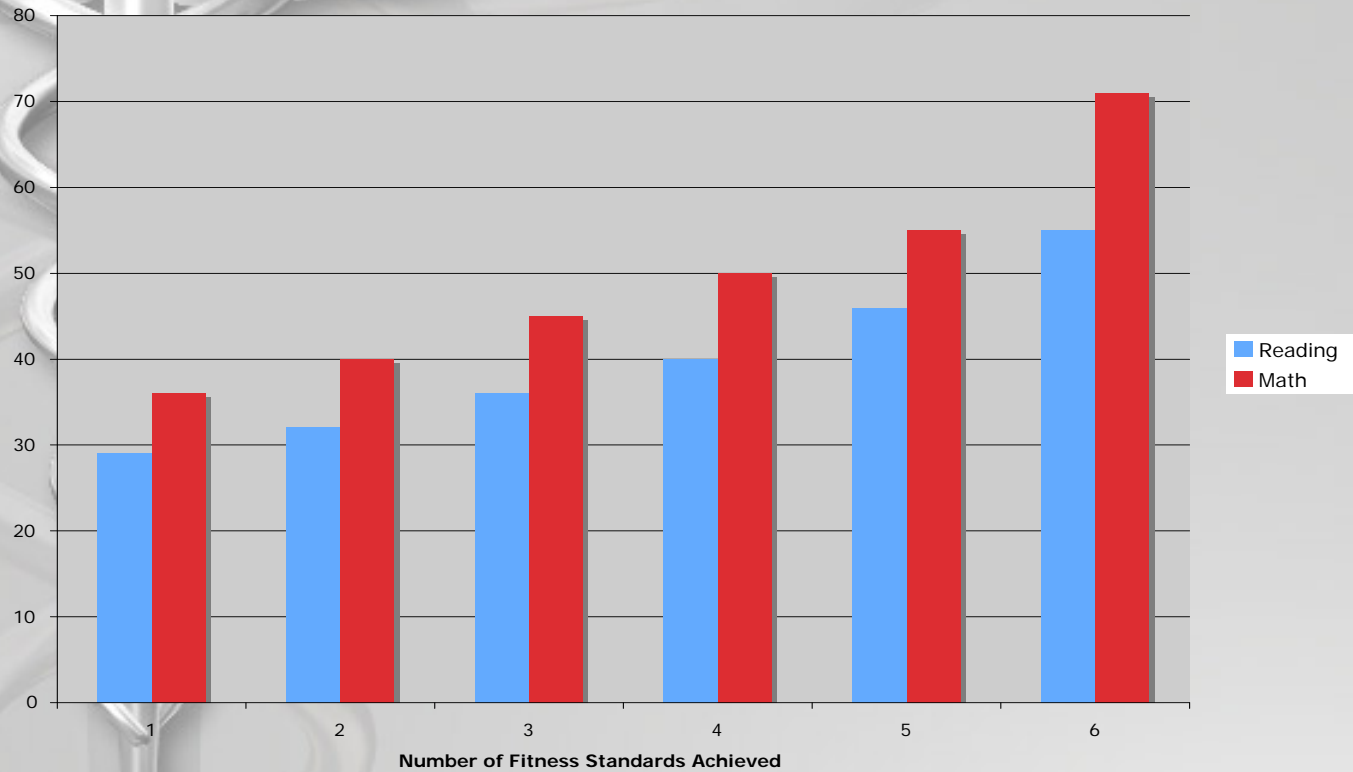
KEY FINDINGS

- ◆ Higher achievement was associated with higher levels of fitness at each of the three grade levels measured.
- ◆ The relationship between academic achievement and fitness was greater in mathematics than reading, particularly at higher fitness levels.

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- ◆ Students who met minimum fitness levels in three or more physical fitness areas showed the greatest gains in academic achievement at all three grade levels.
 - ◆ Females demonstrated higher achievement than males, particularly at higher fitness levels.

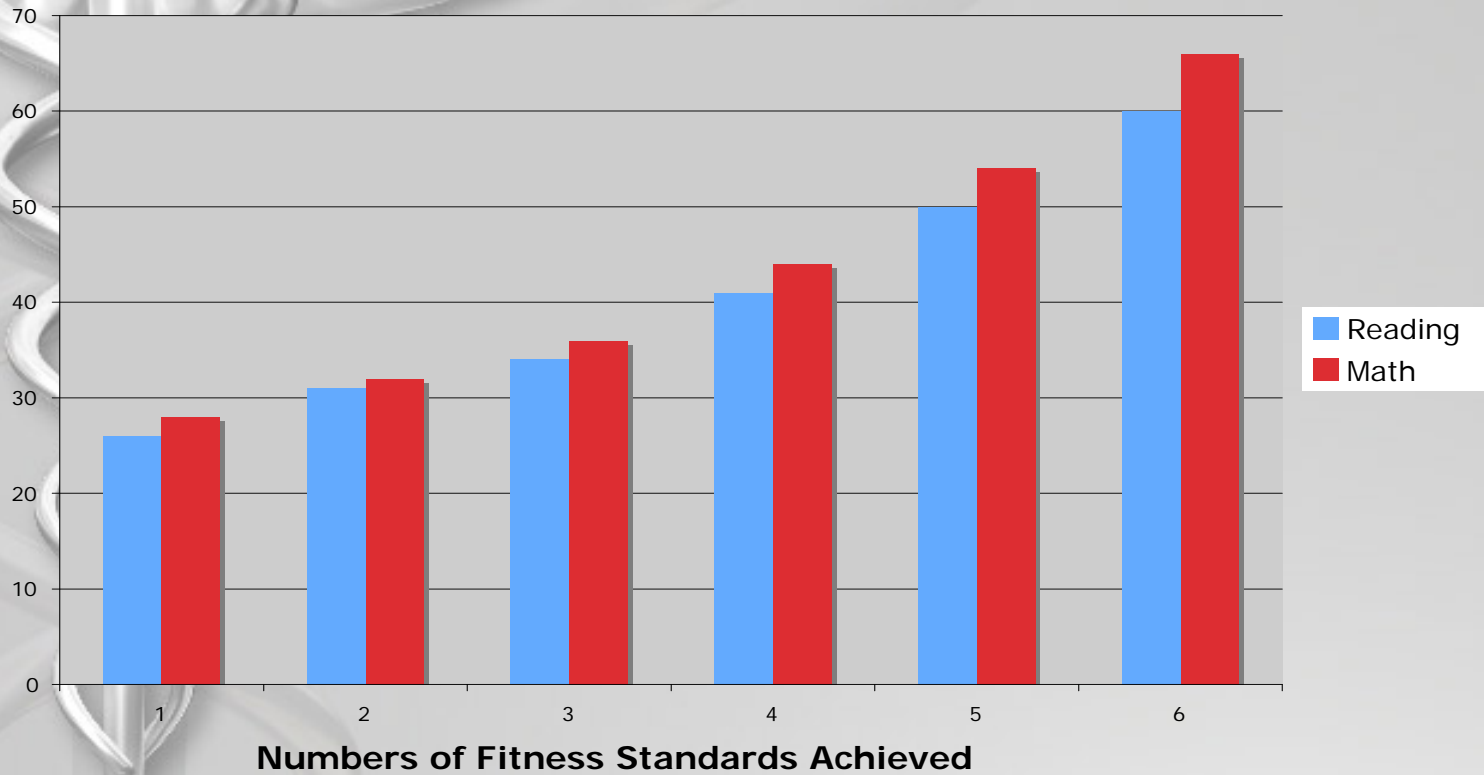
Graphical Summary 5th Grade

5th Grade - SAT 9 percentile and Fitnessgram Performance



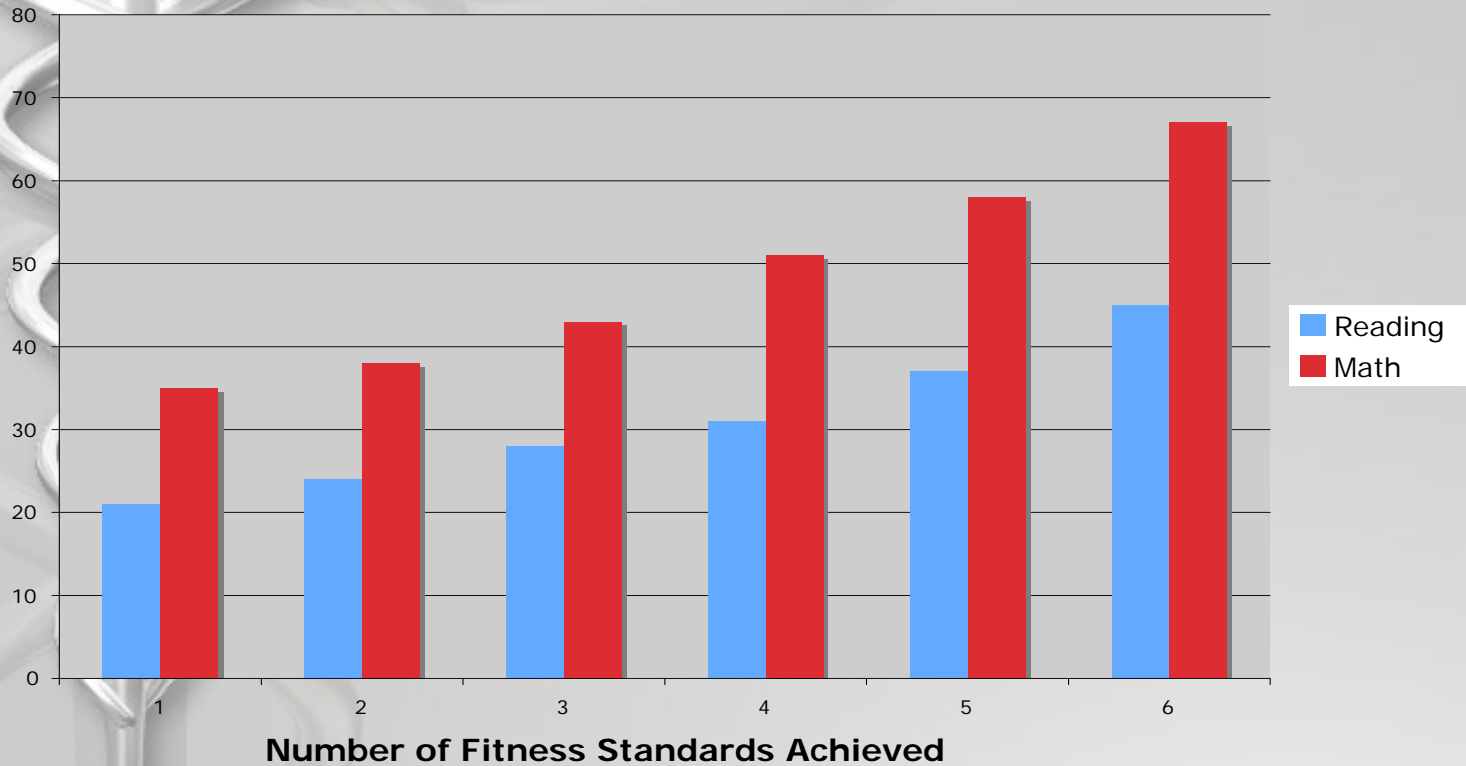
Graphical Summary 7th Grade

7th Grade - SAT 9 percentile and FG Performance



Graphical Summary 9th Grade Grade

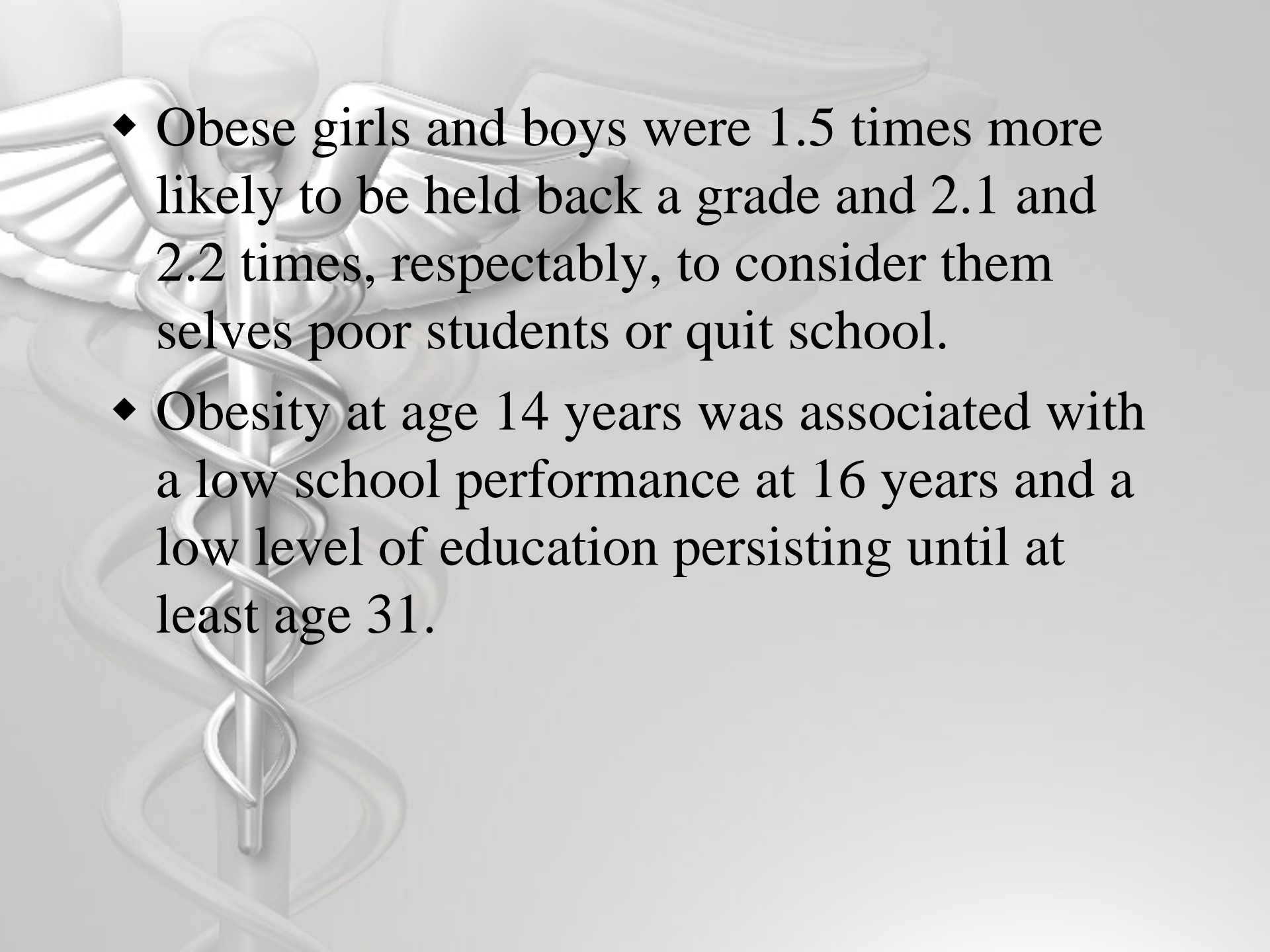
9th Grade - SAT 9 Percentile and Fitnessgram Performance

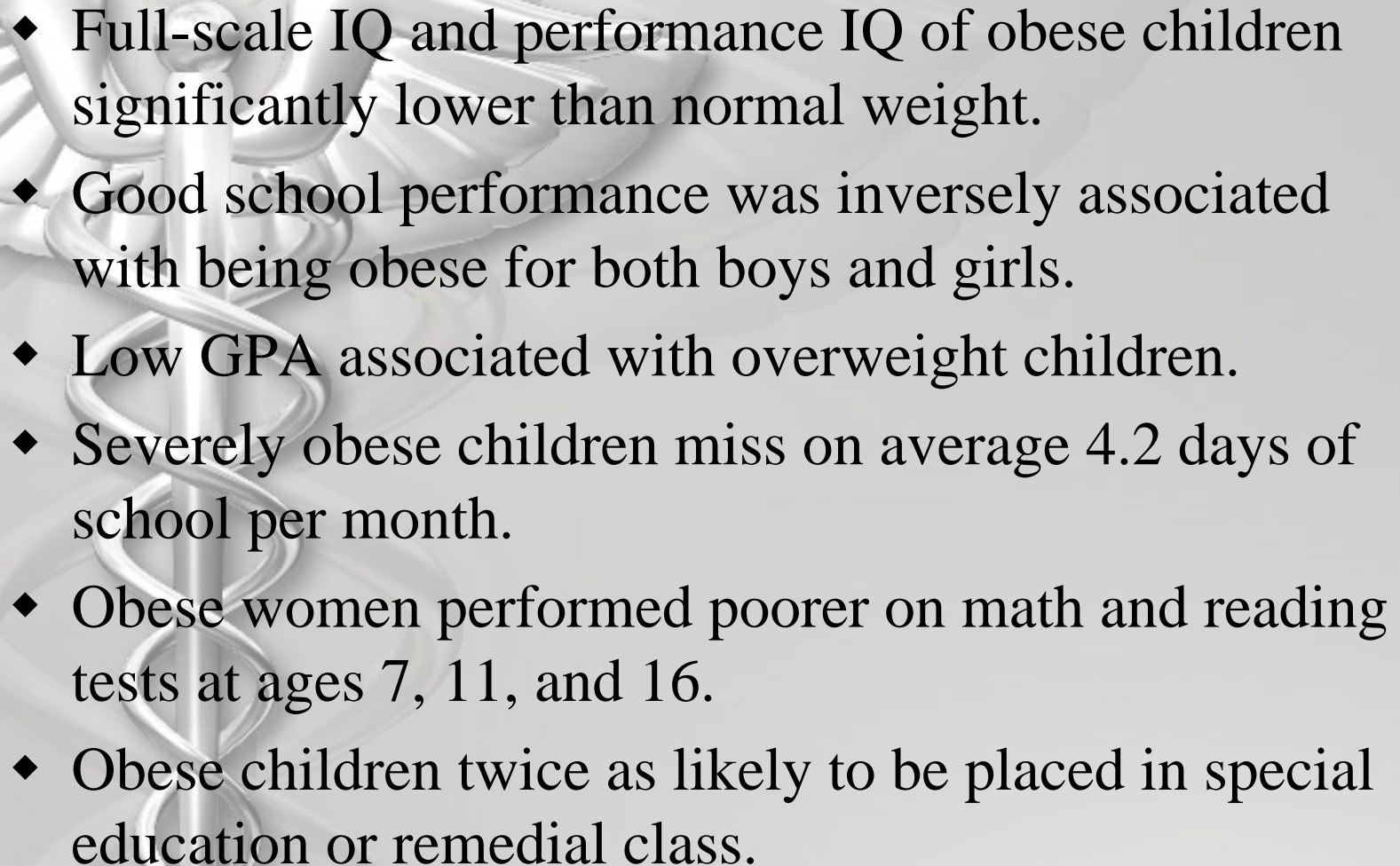




OBESITY SPECIFIC

- ◆ Children with normal height/weight ratios had significantly better performance in IQ, wider range of interests, better capacity for social adaptability, and greater speed and dexterity.
- ◆ Overweight children had significantly lower math and reading scores.

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- ◆ Obese girls and boys were 1.5 times more likely to be held back a grade and 2.1 and 2.2 times, respectively, to consider themselves poor students or quit school.
 - ◆ Obesity at age 14 years was associated with a low school performance at 16 years and a low level of education persisting until at least age 31.

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- ◆ Full-scale IQ and performance IQ of obese children significantly lower than normal weight.
 - ◆ Good school performance was inversely associated with being obese for both boys and girls.
 - ◆ Low GPA associated with overweight children.
 - ◆ Severely obese children miss on average 4.2 days of school per month.
 - ◆ Obese women performed poorer on math and reading tests at ages 7, 11, and 16.
 - ◆ Obese children twice as likely to be placed in special education or remedial class.



*Dr. Ratey from Harvard
University*

“Exercise is like miracle grow for the brain”.



CONCLUSION

The facts show that there is a correlation between fitness and academic achievement. Despite the lack of understanding about why this association is there, we need to make changes in school policy and practices to take advantage of this data.



*QUESTIONS &
ANSWERS*

THANK YOU FOR YOUR TIME!