

# Club 2150

## Overview



- **Program Objective:** Reduce childhood obesity
- **MTF:** Yokota AFB and Schweinfurt MS Germany
- **Implementation Dates:** 2005 (Germany) – Present (Yokota)
- **To reach local point of contacts, visit [MilitaryInstallations](#)**
- **Total Force Fitness Domains:** Physical, Nutritional, Psychological

## Program Description



- A 10-week afterschool program to teach elementary students about healthy eating and exercise, specifically: “limiting screen time to **2** hours per day, getting **1** hour of physical activity per day, eating **5** servings of fruits and vegetables a day, and consuming **0** sugar-sweetened drinks”
- Meets once a week for two hours each time: 30 minutes lifestyle tips + 30 minutes nutrition education + 1 hour of physical activity
- Since the program began in 2005, about 20 to 30 children have been part of the program each year

## Evidence of Program Effectiveness



- See next slides for summary of 2014 and 2015 pre- and post- program data (BMI, run-times, attitudes)
  - Data indicate positive trends in BMI and shifts towards healthier behaviors and attitudes
- A study of the [Let's Go! program in 12 Maine communities](#) found that teaching 5-2-1-0 significantly increased children's consumption of fruits and vegetables and decreased consumption of sugary drinks <sup>1</sup>
- Because of [5-2-1-0's success in Maine](#), organizations in 36 states have publicized similar messages <sup>2</sup>
- Program utilizes metrics from FitnessGram, a physical fitness data collection system promoted DoDEA-wide, to assess changes in participants' physical fitness levels before and after the program

## Costs and Required Resources



- 1 program coordinator who spends 2-4 hours per week for the duration for the program preparing and running the activities
- 5-10 parent and community volunteers

## Lessons Learned



- Initially, when the program targeted only overweight children, enrollment was low because kids did not want to sign up for “fat camp.” Marketing the program to all children greatly increased interest and enrollment in the club
- Limiting enrollment to grades 3-5, as younger children may not benefit as much from the lessons, is recommended
- To see real improvements in BMI, metrics likely need to be tracked for longer than 10 weeks (the program duration)
- Beneficial to involve parents in the sessions, but need to develop ways to incentivize adults to attend

<sup>1</sup> <http://jpepsy.oxfordjournals.org/content/early/2013/08/10/jpepsy.jst057>

<sup>2</sup> <http://www.lets-go.org/news/5-2-1-0-message-and-lets-go-model-spread-across-the-u-s/>

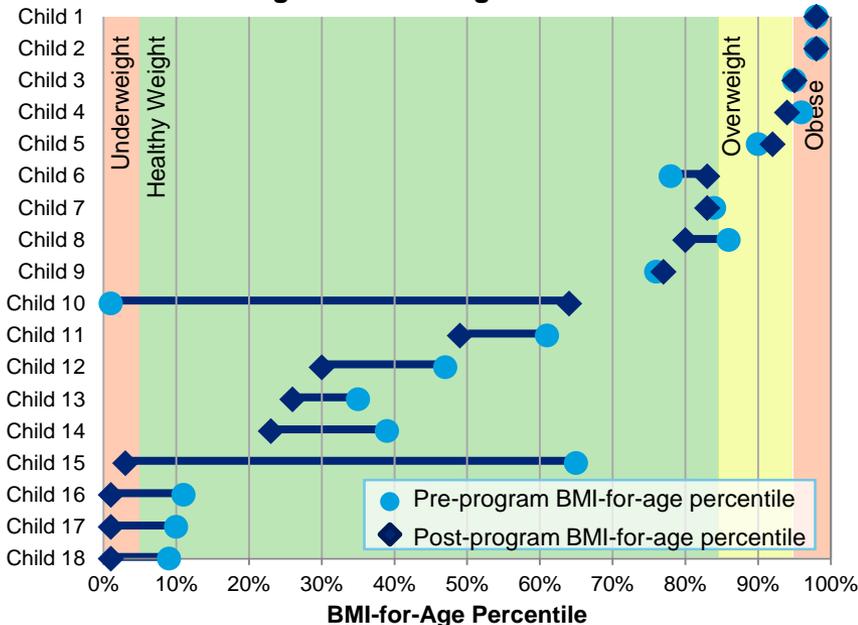
# Analysis of the Impact of Club 2150 (2014 Program Results)

Club 2150 is an afterschool wellness program that has been implemented at Yokota West Elementary School. Initial analysis of data collected from participants in early 2014 suggests that the program both increased students' physical activity and improved students' eating behaviors. BMI trend data is less conclusive, and may require further analysis.

## Impact of the program on BMI

- 18 children aged 5-11 started and completed the Club 2150 program: initially 4 students were obese and 2 overweight
- During the course of the program, the average BMI-for-age percentile of these 18 students dropped from 60% to 55%
  - One student moved from the obese to overweight category
  - One student moved from the overweight to healthy category
  - Four students moved from the healthy to underweight category
  - One student moved from the underweight to healthy category

### Change in BMI-for-Age Percentile



## Impact of the program on fitness and body image

- 14 children took physical activity tests at the beginning and end of the program:



The average fitness score on the Pacer Test increased 22%, from 9.3 to 11.3



The average sit and reach flexibility score increased by 16%, from 10.7 to 12.4



The percent of children who reported exercising at least 3x per week increased from 60% to 84%



93% of participants said they liked themselves better at the end of the program than at the beginning

## Impact of the program on eating habits

- 15 children completed initial and final behavioral surveys:



The percent of children who reported eating breakfast everyday increased from 93% to 100%



The average daily servings of fruit and vegetables increased from 3.1 to 3.9



The average number of times participants ate fast food with their families per week decreased from 2.4 to 1.7

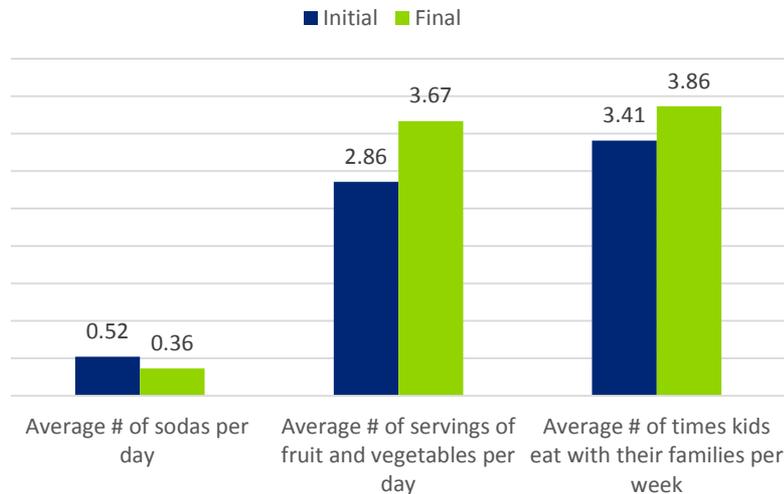


The percent of children who reported eating junk food at least 3x per week decreased from 36% to 20%

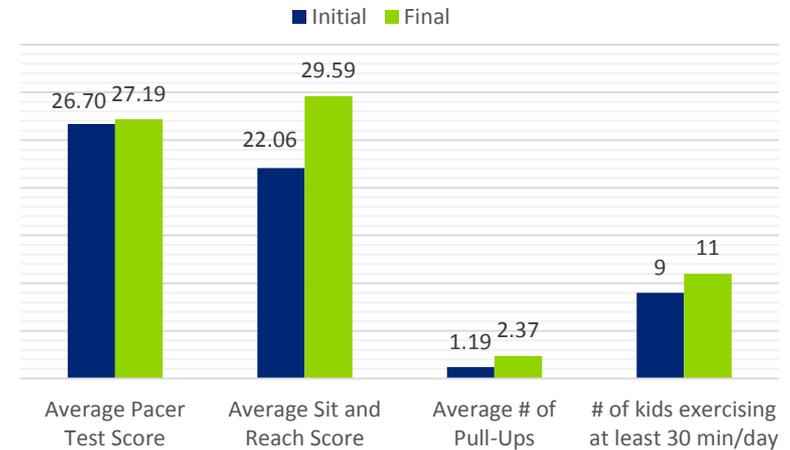
# Analysis of the Impact of Club 2150 (2015 Program Results)

In 2015, Club 2150 operated at both Yokota West Elementary School and Joan K. Mendel Elementary School at Yokota AB. Analysis of data collected from participants in early 2015 is consistent with 2014 program trends and suggests that Club 2150 had a positive impact on students' nutritional habits and fitness scores.

## Changes in Nutritional Habits



## Changes in Fitness Scores and Habits



### Decrease in Soda and Junk Food Consumption:

- 30% decrease in average number of sodas consumed per day
- 47% decrease in the number of students reporting they eat junk food at least 3 times per week



### Consistently Positive Nutritional Habits:

95% of students eat breakfast daily



### Increase in Healthy Choices and Improvement in Healthy Habits:

- 28% increase in average daily servings of fruits and vegetables, from 2.86 to 3.67
- 13% increase in average number of weekly meals students consume with their families



### Increased Speed:

The Pacer Test score increased 1.8%



### Increased Flexibility:

The average sit and reach score increased 34%

### Increased Strength:

The average number of pull-ups increased 98.6%



### Improved Physical Activity Habits:

The number of kids exercising at least 30 minutes/day increased by 22%

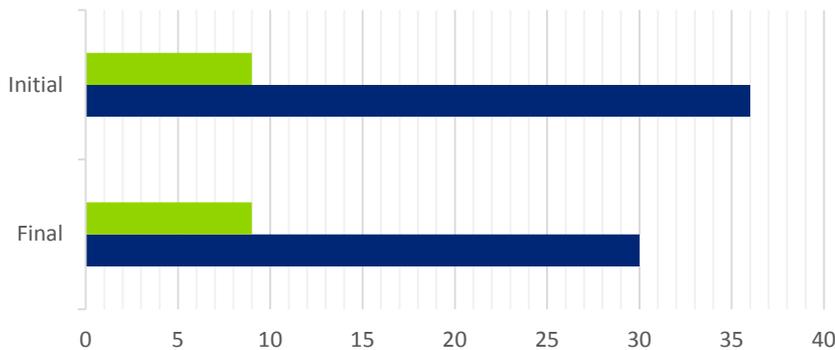
Note: 53 students total participated in the program (YWES and JKMES). All participants complete a fitness assessment and behavioral survey at two data collection points (pre-program and post-program). Due to absences of some students at data collection points, not all 53 students could be compared in a comprehensive analysis. Pre- and post-program comparisons as noted above were made for the 33 students who completed the fitness assessment at both data collection points, and for the 22 students who completed the behavioral survey at both data collection points.

# Analysis of the Impact of Club 2150 (2015 Program Results)

BMI trends were positive, with one student moving from the “Overweight” to “Normal” category. Furthermore, student feedback suggests widespread support for the program and indicates Club 2150 played a role in fostering healthy habits.

## Changes in BMI Percentile for Club 2-1-5-0 Participants

■ Obese (≥95th %ile)    ■ Overweight or Obese (≥85th %ile)



- 33 children aged 7-11 started and completed the Club 2150 fitness assessment, which includes height and weight measurements, at the initial and final data collection points
- Initially, 64% of students were normal weight, 27% were overweight, and 9% were obese
- At the end of the program, 70% of students were normal weight, 21% were overweight, and 9% were obese
  - One student moved from overweight to normal weight range
  - 15 students decreased BMI percentile
  - 18 students increased BMI percentile



## Overall Impact: Key Indicators of Success



### Self-Esteem

19 out of 22 students liked themselves better at the end of the program than at the beginning

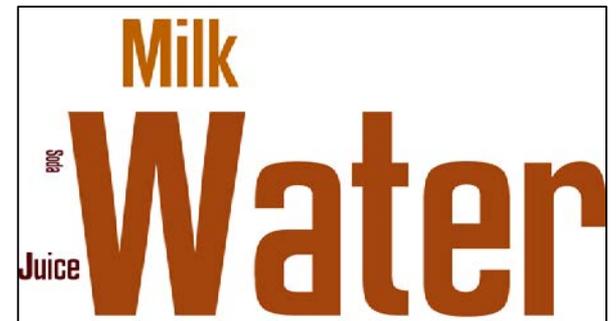
### Student Feedback:

- 94% of students would recommend Club 2150 to a friend
- 94% of students would like Club 2150 continued next year

## Changing Habits at Home

- When asked what drinks are mainly consumed at home with their family, students habits shifted before vs. after the program. As self-reported on behavioral survey:
  - Prevalence of “Water” increased from 53% to 65%
  - Prevalence of “Juice” decreased from 12% to 9%
- By changing students’ habits, Club 2150 can have a positive impact on the entire family, including parents and siblings of the participants**

*Graphic\* depicts prevalence of Water, Milk, Juice and Soda on behavioral surveys completed at the end of Club 2150*

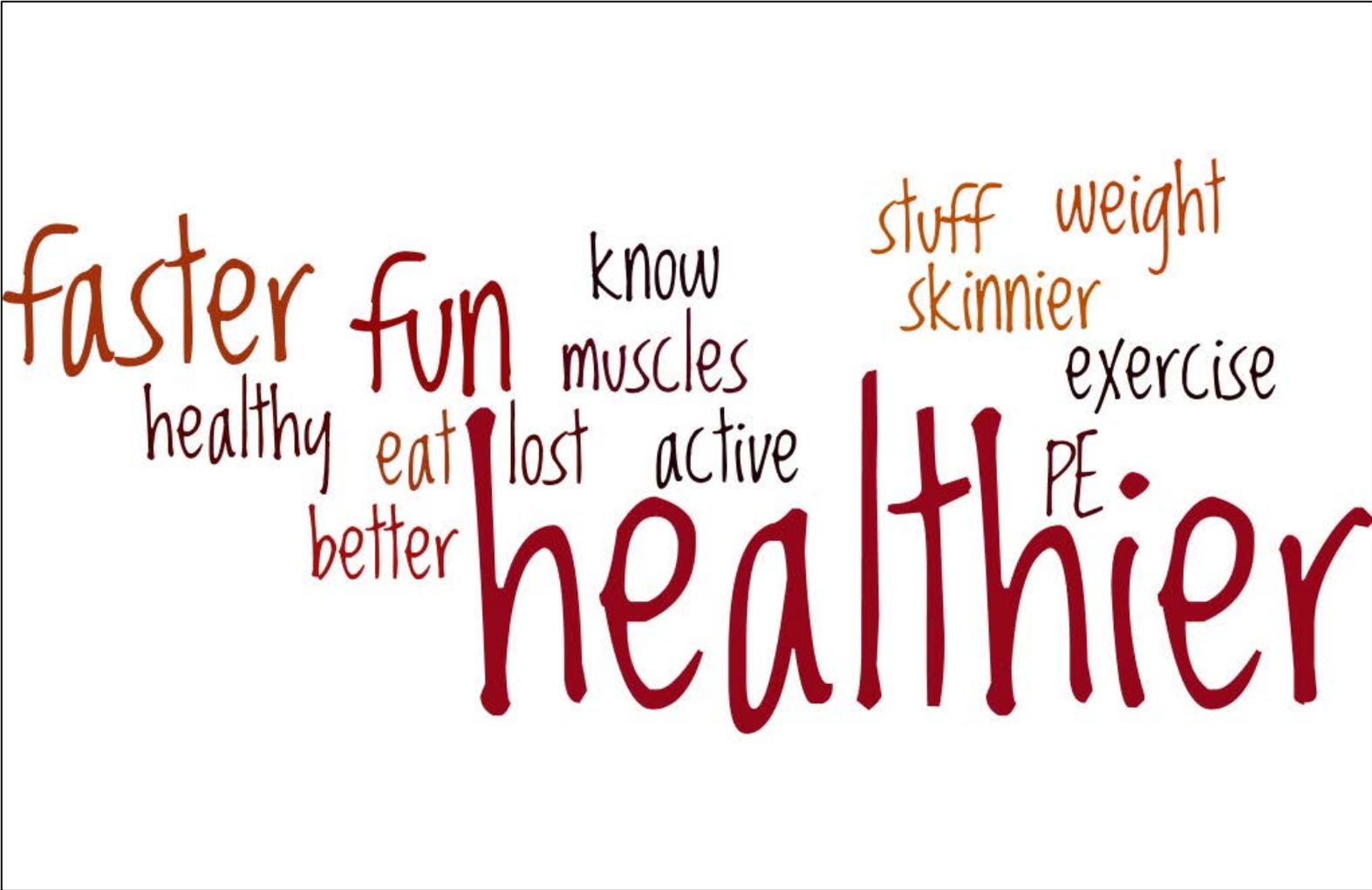


Note: Height and weight measurements were documented during the fitness assessment. BMI and BMI percentile calculations were made using the Children’s BMI Group Calculator, provided by the Centers for Disease Control and Prevention (found at: [http://www.cdc.gov/healthyweight/assessing/bmi/childrens\\_bmi/tool\\_for\\_schools.html](http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/tool_for_schools.html)). Pre- and post-program comparisons as noted above were made for the 33 students who completed the fitness assessment at both data collection points (53 total participants in the program, but several could not complete final fitness assessments due to absences).

\*Wordle generated at [wordle.net/create](http://wordle.net/create) by entering terms found in students’ behavioral surveys.

# Analysis of the Impact of Club 2150 (2015 Program Results)

Most prevalent responses\* provided by students when answering the question “**Explain why you like yourself better now than before you started the program**” on the behavioral survey completed at the end of Club 2150:



\*Wordle generated at [wordle.net/create](http://wordle.net/create) by entering terms found in students' behavioral surveys.

