

California Children's Power Play! Campaign

Impact on Student Intake of Fruits and Vegetables and Physical Activity Behavior

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BACKGROUND

The *Network for a Healthy California—Children's Power Play! Campaign* is a multi-channel social marketing initiative that:

- Encourages children to eat 3-5 cups of fruits and vegetables and get at least 60 minutes of physical activity daily.
- Targets ethnically diverse, low-income 9- to 11-year-old children and their families throughout California.

STUDY DESIGN

- Cluster randomized controlled study
- ~3500 4th and 5th grade children (1571 intervention, 1892 control)
- 44 low-resource public schools in San Diego County, California

MAIN OUTCOMES

- Daily intake of fruits, vegetables, and both combined
- Daily minutes of physical activity during the school day and total

DATA ANALYSIS

- Means and standard deviations computed
- Multivariate linear regression models, controlling for cluster design effects and sociodemographic factors

FINDINGS

Intake of Fruits and Vegetables (FV): FIGURE 1

- Intakes below recommended amount (1.9±1.4 cups/day) at baseline
- Students in *Power Play!* reported a significantly greater change in FV consumption (0.26 or ¼ cups/day more) at follow-up than students not receiving *Power Play!*

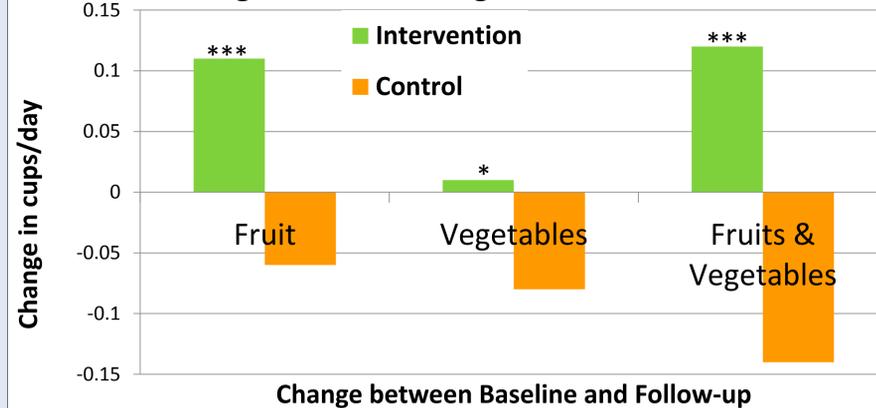


Time Spent in Physical Activity (PA): FIGURE 2

- PA was higher than recommended levels at baseline (118±120 min/day).
- Students in both groups gained more minutes of PA overall, but the difference was not significant.
- Students in the *Power Play!* group gained significantly more PA during recess (5 min), but less PA afterschool than students not receiving *Power Play!*.

FINDINGS cont'd

FIGURE 1: Change in Fruit and Vegetable Intake



Vegetables exclude fried potatoes and legumes. All analyses are adjusted for gender, race/ethnicity, language spoken at home, age, grade, and cluster design effects. *P < 0.01 ** P < .001 ***P < 0.0001

FIGURE 2: Change in Time Spent in Physical Activity

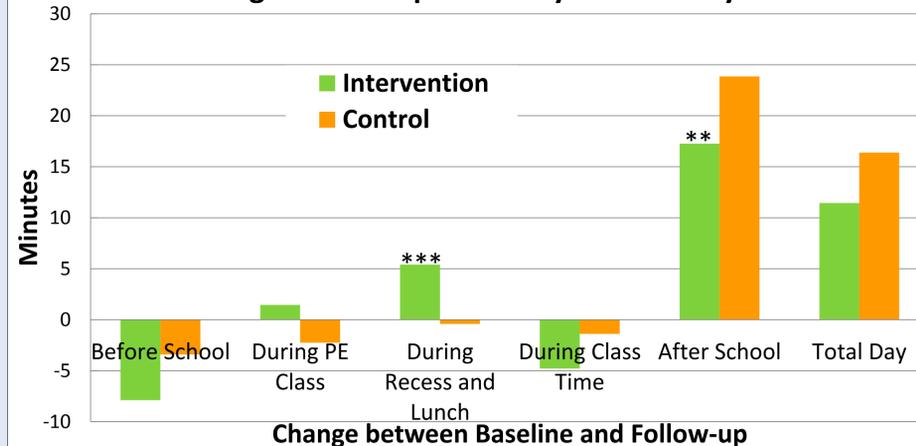
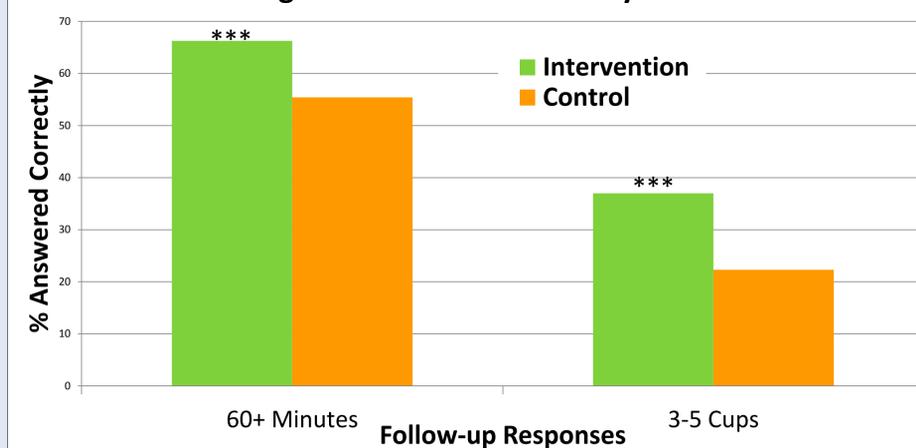


FIGURE 3: Knowledge of Recommended Daily FV and PA



FINDINGS cont'd

Knowledge of FV and PA Requirements: FIGURE 3

- At baseline less than 25% of all students knew the number of cups of FV recommended per day for their age group and approximately 50% knew how many minutes/day of PA were recommended.
- From baseline to follow up, an additional 14% of intervention students answered 3-5 cups of FV (22% to 37%) and an additional 16% responded 60+ minutes of PA (50% to 66%) are recommended daily. Students in the control group did not have similar gains in knowledge.



CONCLUSIONS

Power Play! had a statistically significant impact on children:

- Increasing fruit and vegetable consumption, and
- Increasing knowledge about how many fruits and vegetables and minutes of physical activity are recommended daily.

Although there were no overall gains in minutes of physical activity per day for children participating in *Power Play!*, they did report participating in 5 more minutes of physical activity during recess than children in control schools.

PROJECT INFORMATION

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