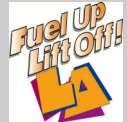




Building a Fit Nation 10 MINUTES AT A TIME

UCLA Kaiser Permanente Center for Health Equity



# Instant Recess® Works!: The Rapidly Growing Evidence

## LOOK INSIDE

### Snapshots of Success

Read about programs that have been tested (successfully) in both schools and the workplace around the world.

### References

Find more detailed information about different research studies or more background information about the field.

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## What's happening where we live?

Studies have shown just how sedentary we have become: the average adult only gets about 6-10 minutes of moderate physical activity each day (Troiano et al., 2008) and in Los Angeles County, more than 40% of adults get **less than 10 minutes each week** of continuous moderate-to-vigorous physical activity (Yancey 2004a).

## What does this mean?

Nearly two-thirds of all adults in this country are overweight. (Flegal et al., 2002) Among children of color, one-third are overweight, too. (Ogden et al., 2002) This means we need to take action now to start making changes in how we all eat and exercise, to make sure these numbers don't keep going up.

## What's being done about this?

Dozens of demonstration projects from public health department service programs as well as university and corporate research studies have shown that brief bouts of exercise built into an organization's routine can be an easy and useful part of the solution:

- interventions with brief bouts of exercise have been used in schools, workplaces, and churches
- both individuals and organizations are receptive to the incorporation of these exercise bouts
- brief bouts of exercise (even 10 minutes) help individuals reach daily goals for moderate to vigorous physical activity
- Increased activity at school or work can spillover into leisure time, increasing total minutes of daily activity

## How do short exercise breaks help?



Lowered blood pressure  
Improved mood states



Increased attention span  
Decreased classroom  
disruptiveness



Increased productivity

# SNAPSHOTS OF SUCCESS

## Westinghouse Strength & Flexibility Program (Pronk, 1995)

- Daily 10-minute flexibility and strength exercises to prevent lower back and carpal tunnel injury (on company time)
- Computer-board assembly employees
- Group-randomized, controlled, pretest/posttest intervention

### Outcomes

- 97-100% employee participation rate
- After 6 months, employees had improved wrist flexion/extension, lower back flexibility, mood; decreased fatigue and anger

## Los Angeles County Department of Health Services Lift Off Feasibility Study (Yancey, 2004c)

- 10-minute exercise break (Lift Off) during staff meetings and training seminars over an hour
- Held in 26 meetings with 449 employees (mostly overweight, middle-aged women of color)

### Outcomes

- Over 90% participation rate by meeting attendees
- Feasible to engage people in brief group exercise regardless of weight status or physical activity change status
- Instead of focusing on individual motivation, group exercise breaks adds social conformity factor to influence participation

## African Americans Building a Legacy of Health (AABLH) (Yancey et al., 2004d)

- Part of CDC's REACH 2010 initiative to have Los Angeles community-based organizations incorporate physical activity into organizational routine
- Four levels of organizational support, from low (group exercise participation-only at REACH meetings and events) to high (subcontracting with REACH to provide physical activity-related programs and services)
- 240 organizations: 66% overweight, 30% obese, over 40% completely sedentary, 33% hypertensive, 26% hypercholesterolemic, 86% female, 73% African American, 22% college educated

### Outcomes

- Almost 50% participated at intermediate-high level and more than 25% participated at high level

## Steppin' Up to Better Health African Americans Building a Legacy of Health Organizational Wellness Program (Yancey et al., 2006a)

- 12-week (later shortened to 6-week) training curriculum on how to incorporate physical activity and healthy food choices into businesses
- 35 public and private non-profit organizations (over 700 individuals; mostly overweight/obese African-American women)
- 66% attendance and 92% retention for 6-week curriculum (37% retention for 12-week program)

### Outcomes

- *12-week program*: significantly decreased feelings of sadness/depression, increased fruit/vegetable intake; slight decrease in BMI
- *6-week program*: significantly increased days of vigorous physical activity per week

# SNAPSHOTS OF SUCCESS

## FitWIC Wellness Programs (Crawford et al., 2004)

- Pilot staff wellness intervention at 6 WIC sites at 3 California agencies

### Outcomes

- More workplace support for healthy food choices and physical activity
- Healthier foods at meetings
- Greater priority for physical activity at workplace
- Staff more likely to encourage WIC participants to be active with children
- Staff more sensitive to weight-related issues

## Health-e-AME Faith-Based Physical Activity Initiative (Wilcox et al., 2006)

- 3-year, CDC-funded, statewide initiative of University of South Carolina/Medical University of South Carolina
- 98 African Methodist Episcopal churches (215 representatives)
- In addition to nutrition promotion program, additional strategies available for individual churches to implement
- Of those implementing at least one program, 66% are using 10-minute exercise breaks
- Project staff hold exercise breaks at all annual AME pastors' conferences and post-conference meetings
- Random sample of 571 members:
- All African-American, 29% regularly active, 18% sedentary, 71% women, 75% overweight/obese, 56% 50+ years old, 50% less than high school education

## Pausa para tu salud! (Lara et al., 2007)

- 10-minute midday exercise break (during work time)
- 335 employees at Mexican Ministry of Health
- 24% overweight, 38% obese, 81% of women with waist circumference over 80 cm

### Outcomes

- After 1 year, on average (271 employees) decreased weight by 1 kg and waist circumference by 1.6 cm

## L.L. Bean Manufacturing Worker In-House Studies (California Department of Health Services, 2004; Simon, 2006)

- Since 1982, the sporting goods manufacturing company in Maine has provided 5-minute stretch breaks on company time in addition to regular breaks

### Outcomes

- The program has increased employee productivity where a total of 15 minutes invested into daily stretching returns 30 minutes of productivity

## Making the Grade with Diet and Exercise (Sibley, 2008)

- Teachers led 15 minutes of physical activity before school each morning
- Also had free breakfast and changed recess to before lunch

### Outcomes

- 67% decline in nurse visits, 58% decline in disciplinary referrals
- Improved academic performance (after 4 years, went from passing 2/5 to 5/5 state achievement tests)

# SNAPSHOTS OF SUCCESS

## East Carolina University "Energizers" Study (Mahar et al., 2006)

- 12-week program of 10-minute physical activity breaks among 3rd and 4th graders
- Breaks integrated learning materials and required no equipment

### Outcomes

- Students in the intervention took significantly more steps than those in the control group
- On-task behavior improved overall by 8% and by 20% among the least on-task students

## Moving School Study (Cardon et al., 2004)

- Elementary schools in Germany redesigned their furniture to be more ergonomic and restructured the day to allow for shorter lessons and more student movement during these lessons

### Outcomes

- Students spent more time in dynamic sitting, standing, and walking around vs static sitting

## Action Schools BC (Reed et al., 2008)

- Teachers led 15 minutes of physical activity before school each morning

### Outcomes

- 67% decline in nurse visits, 58% decline in disciplinary referrals

## JUMP-in (Jurg et al., 2006)

- Class Moves® used regular physical activity breaks during normal classroom lessons among 4th-6th graders in Amsterdam

### Outcomes

- Activity levels of intervention group remained stable, compared to decrease in control group

## Take 10! Or Physical Activity Across the Curriculum (DuBose et al., 2008; Honas et al., 2008; Gibson et al., 2008)

- 3-year, NIH-funded study of non-PE teachers conducting 10-minute exercise breaks in 14 low-income Kansas schools
- Included paid training and follow-up focus group for teachers

### Outcomes

- Gradual increase in teachers engaged each year with almost 50% reaching goal of 90-100 minutes/week
- Mean energy expenditure of 3.4 METs

## Happy 10! (Liu et al., 2008)

- Modeled on Take 10!, 10-minute exercise breaks in two schools in urban Beijing, China

### Outcomes

- Modest increase in physical activity and energy expenditure among intervention group, but not BMI
- Small significant difference between changes in weight and BMI among girls in intervention vs control

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