

Lessons Learned for Physical Inactivity Prevention Opportunities & challenges in the Workplace

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WORKING Project

RATIONALE & BACKGROUND

Population Obesity Control:

Early stage in development

Strategically, why focus on PA promotion **first**?

- Less controversy, conflict, stigma than surrounding diet/nutrition, especially in culturally diverse context
- “Deep pocket” business interests, e.g., Nike & 24-Hour Fitness, stand to *benefit* from success of efforts (vs. “Big Food” losing \$ because can’t as readily induce over-consumption of H₂O, whole grains, legumes, F+V)
- Cheaper & easier—10 minutes supply one-third (1/3) of PA “RDA” while supplying one healthy meal much more time- and resource-intensive
- May positively influence food preferences



Translating Evidence-Based CDC/ACSM Recs into Culturally-Targeted Intervention

Integrating 10-' PA bouts into organizational routine:

- Minimal intensity environmental intervention, e.g., stair prompts
- Short bouts accommodate higher proportion sedentary individuals (incremental change)
- Variable (max moderate) intensity, low-impact PA accommodates higher proportion overweight/obese and disabled individuals (higher perceived exertion, discomfort, functional limitations)
- “Push” (vs. “pull”) strategy relies less on individual motivation, supportive cultural values & norms, and facility access & appeal

Translating Evidence-Based CDC/ACSM Recs into Culturally-Targeted Intervention

Integrating 10-' PA into organizational routine:

- *Movement to music integral to African-American, Latino culture—dancing normative for adults*
- Short bouts minimize perspiration, hairstyle disturbance
- *Social support & conformity desires drive participation (collectivist vs. indiv. orientation)*
- Addresses less activity conducive outdoor environments (safety, utility, aesthetics)
- Designed for organizational settings for work, worship, other purposes--less disposable t, \$

Lift Offs Work!:

the Rapidly Growing Evidence Base

- Documented individual and **organizational receptivity** to integrating PA on paid work time
- Contribute meaningfully to daily accumulation of MVPA
- Motivational “**teachable moment**” linking sedentariness to health status for inactive folks
- Improvements in clinical outcomes from as little as one 10-min. break/day—**BP, BMI, waist circ.**, mood, attention span, cumulative trauma disorders
- “**Spill-over**” or **generalization** to inc. active leisure
- Favorable cost-benefit ratio, eg, L.L. Bean mfg plant

Fuel Up Lift Off!

Your How-to Guide for 10-Minute Aerobic Exercise Breaks

The following are a sample of exercises that may be used while *Lifting those huns off the chairs*. Exercises are targeted to sedentary, overweight adults. Guiding principles are:

- ◆ Work your upper and lower body at the same time, beginning with legs, adding arms.
- ◆ Alternate more vs. less strenuous movements.

- ◆ If you get tired, slow your pace and/or lower your arms.
 - ◆ Build slowly, both in intensity and duration; reduce your own pace or stop if you experience discomfort or are too breathless to talk.
- As long as you are moving and smiling, a Lift Off is in progress!

The Hulk

March in place. Bend forward at the hips while maintaining a straight back. While bending forward, let your arms hang to the floor with your hands in loose fists. Bend at the elbow to form a 90-degree angle, spread your arms to sides at the same time until your palms face the floor (elbows should still be at a 90-degree angle); and your hands are at about ear height; squeeze. Slowly return to starting position and repeat.



Rock step

Beginning with your feet shoulder width apart, rock from side to side. As you rock to the right, tap your left toe in place; rock to the left and tap your right toe in place. Repeat

Punches

Begin with the rock step. As you tap your right toe, punch in front of your body with your right arm; as you tap left, punch with the left arm. Be sure not to straighten your arm completely as you punch.



Shoulder Press

March in place. Touch thumbs to your shoulders, palms facing out. Push your arms to ceiling until your elbows are nearly straight; return to start position; repeat.



The Surgeon General recommends that you get 30 minutes of physical activity **every day**. And, don't forget to eat at least 5 servings of fruits and vegetables a day.

A message from the California Department of Health Services, funded by the U.S. Department of Agriculture.



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**PRELIMINARY
STUDIES**



Instant Recess

- DVD/CD direct marketing to kids—colorful labels = trading discs (= trading cards) via PAC website (www.athletescouncil.com)
- DVD/CD package tool kit to help educators re-integrate “recess” or PA enjoyment back into school day
 - 10 minutes of athlete-led group activity experiences or brief structured exercise bouts inv. simple aerobic/resistance movements to music, using split-screen or PIP technique to feature “Ask-the-Doc,” “Chef Allen,” and other fruit & vegetable promotion segments
 - Teacher guide with tips for sustaining interest of youth beyond *Instant Recess*
 - Emphasizes not only the importance of physical activity and eating nutritious foods, but also, more subtly, academic excellence and goal-setting and striving to achieve socially constructive aspirations

The Rossum Kick Off Lift Off

Your 10-minute
Instant Recess

A Lift Off inspired by
The Professional Athletes's Council

Created and Produced by
Toni Yancey, MD, MPH

Led by
Allen Rossum
of the NFL Atlanta Falcons

STATS

Position: Kick Returner
Speed: 4.2 Sec 40-yd dash
Favorite Meal: Grilled
Chicken, Brown Rice
with Green Beans



PAC
Instant
Recess

Instant Recess

Pre-testing at the Champion charter school in Phoenix, AZ—comments from teachers:

- “feasible to use daily because helps kids settle down after lunch”
- “kids, girls especially, perform better in PE because *IR* exercises build their confidence”
- “kids taking ownership and bringing their own music”
- “Think You Got Moves?” contest

WORKING organizational wellness project

“Working Out Regularly Keeps Individuals Nurtured & Going” (WORKING)

**Randomized 30 sites:
n=10-25 employees/site**

- 10 sites assigned to 6-month wait list control
- 20 sites assigned to two intervention levels: basic & comprehensive

Selected 6 month outcomes:

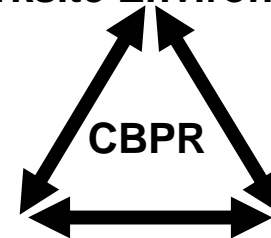
- waist circumference
- Body Mass Index (BMI)
- aerobic fitness (3-minute YMCA step test)

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- Physical environment at worksite and surrounding community
- Organizational policy and capacity
- Social norms
- Cultural influences
- Role models
- Social support and cohesion

Worksite Environment



Cognition & Affect

- Outcome expectations, i.e., physical, social and self-evaluative benefits
- Exercise/Eating self-efficacy
- Beliefs, e.g. perceived social support
- Depression, anxiety, stress
- Ethnic identity

Obesity Prevention & Control Behaviors

- Increase fruits, vegetables and whole grains intake
- Decrease processed foods consumption (e.g. juices, candy)
- Decrease fat and refined carbohydrate intake
- Increase physical activity (PA)
- Increase self-monitoring of PA
- Instigation of PA and use of healthy refreshments during group meeting

Figure 2 A *simplified* conceptual framework

WORKING project intervention strategies

Trained employee worksite “program champions:”

- Lead ≥ 1 daily Lift Off--10-min. bout of worksite physical activity (PA) and encourage use of PA breaks during long meetings
- Organize walking meetings at least weekly
- Post stair prompts and model group stair use during workday
- Facilitate access to healthful food choices, esp. fruits & vegetables, thru vendor/vending changes, procurement policy/practice changes, fruit baskets in common areas, etc.
- Organize cooking demonstrations, healthy “pot lucks” and other forms of experiential nutrition education
- Encourage use of individual PA promotion counseling (“coaching”) via project-specific link at www.diabetespreventionsource.com

WORKING: Sample characteristics: 1st cohort enrolled (10 orgs)—n=108

Variable	%/Mean
Age: >35 years	69.8%
Gender: Female	86.1%
Ethnicity: African American	53.4%
Latino/a	33.0%
Education: College grad or higher	43.8%
Income: \$50,000 or less	59.8%
BMI	29.8 kg/m ²
Waist circumference	93.4 cm
BP (systolic mean/diastolic mean)	120/77 mm Hg
Met ACSM physical activity recs	56.1%

WORKING Baseline data:

Organizational social support & PA

Individual PA levels (IPAQ measure—met ACSM) significantly correlated with the following co-worker social support perceptions (Treatwell 5-a-day-adapted measure—Sorensen et al., *AJPH*, 1999):

- Complimenting attempts to be physically active (p=0.011)
- Suggesting or demonstrating an activity, e.g., a new dance step (p=0.018)
- Initiating or leading an exercise or movement break (p=0.010)
- Suggesting or conducting a walking meeting (p=0.049)

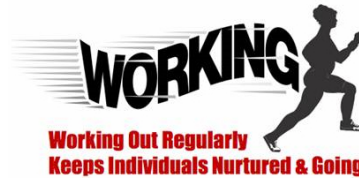
WORKING baseline preliminary findings:

Organizational policy & social support

Score (of 13 max)	Low soc. support	High soc. support
Low worksite PA promotion policy score (0-2 policies)	30 (68.2%)	14 (31.8%)
Med worksite PA promotion policy score (3-5 policies)	26 (47.3%)	29 (52.7%)
		p=0.037

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Contact information:



UCLA Center to Eliminate Health Disparities

310/794-6197

www.ph.ucla.edu/cehd

To download *Lift Off* DVDs or CDs:

http://www.ph.ucla.edu/cehd/activity_breaks

www.dhs.ca.gov/cpns/pa

www.athletescouncil.com

