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 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 elbows 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
**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)

Funded by: NCMHD

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>%/Mean</th>
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<tbody>
<tr>
<td>Age: &gt;35 years</td>
<td>69.8%</td>
</tr>
<tr>
<td>Gender: Female</td>
<td>86.1%</td>
</tr>
<tr>
<td>Ethnicity: African American</td>
<td>53.4%</td>
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<tr>
<td>Ethnicity: Latino/a</td>
<td>33.0%</td>
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<tr>
<td>Education: College grad or higher</td>
<td>43.8%</td>
</tr>
<tr>
<td>Income: $50,000 or less</td>
<td>59.8%</td>
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<tr>
<td>BMI</td>
<td>29.8 kg/m²</td>
</tr>
<tr>
<td>Waist circumference</td>
<td>93.4 cm</td>
</tr>
<tr>
<td>BP (systolic mean/diastolic mean)</td>
<td>120/77 mm Hg</td>
</tr>
<tr>
<td>Met ACSM physical activity recs</td>
<td>56.1%</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Score (of 13 max)</th>
<th>Low soc. support</th>
<th>High soc. support</th>
</tr>
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<tbody>
<tr>
<td>Low worksite PA promotion policy score (0-2 policies)</td>
<td>30 (68.2%)</td>
<td>14 (31.8%)</td>
</tr>
<tr>
<td>Med worksite PA promotion policy score (3-5 policies)</td>
<td>26 (47.3%)</td>
<td>29 (52.7%)</td>
</tr>
</tbody>
</table>

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