Instant Recess:
Building a Fit Nation
10 MINUTES AT A TIME

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Co-Director, UCLA Kaiser Permanente Center for Health Equity
Board Member, Public Health Institute

UCLA
Kaiser Permanente Center for Health Equity
Poll #1
Please select your answer and press submit
Troiano et al. (2008): 
Mean PA Levels, US adults = 6-10 min/d <5% adults, <10% teens, <50% elem. kids meet recs

<table>
<thead>
<tr>
<th>District</th>
<th>Sedentary (&lt;10 min/wk)</th>
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<tbody>
<tr>
<td>County</td>
<td>41</td>
</tr>
<tr>
<td>Compton</td>
<td>45</td>
</tr>
<tr>
<td>South</td>
<td>50</td>
</tr>
<tr>
<td>Inglewood</td>
<td>46</td>
</tr>
<tr>
<td>Long Beach</td>
<td>37</td>
</tr>
<tr>
<td>West</td>
<td>31</td>
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How Did We Get Here?

Need to move for transportation, work, recreation has been engineered out of post-modern society

Ex: Students walking to school

48% in 1969 vs. <16% in 2001

- Cutbacks in public school physical education (PE), a universal mechanism for building movement proficiency, self-efficacy & habituation

- Pervasive marketing of sedentary goods & services creating secondary demand, with scant marketing of physical activity (PA)-promoting goods/svcs

- Primary demand for PA \(\downarrow\): evolutionary selection advantage conferred by leisure sedentariness

- Cultural barriers to PA engagement among women
"Hey, we have one of those. You hang your laundry on it."
<table>
<thead>
<tr>
<th>Time Period</th>
<th>Occupation</th>
<th>Average Energy Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 million yrs ago</td>
<td>Hunter-gatherers</td>
<td>5000 cal</td>
</tr>
<tr>
<td>10,000 yrs ago</td>
<td>Agriculture</td>
<td>6000 cal</td>
</tr>
<tr>
<td>1915</td>
<td>Laborers</td>
<td>3000 cal</td>
</tr>
<tr>
<td>2000</td>
<td>Office Workers</td>
<td>1800 cal</td>
</tr>
<tr>
<td>2010</td>
<td>Mouse potatoes</td>
<td>1500 cal?</td>
</tr>
</tbody>
</table>
OUTSIDE IS SO OVERRATED.

ULTIMATE ELECTRONICS

JVC
PE classes in lower income schools spend less time being active
(Yancey et al., 2007, www.calendow.org)

Percent (% of time) in MVPA, by percent (%) of students eligible for Free and Reduced Price Lunch (FRPL)

<table>
<thead>
<tr>
<th>Percent (%) of students eligible for FRPL</th>
<th>Percent (%) of PE time in MVPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-74%</td>
<td>43%</td>
</tr>
<tr>
<td>75-100%</td>
<td>34%</td>
</tr>
</tbody>
</table>
“Instead of passing the fat tax on soda, the government requires that people do 10 chin-ups before the cooler will open.”
Where Do We Go From Here?

An ounce of prevention is worth a pound of cure!
Prevention vs. Treatment

- Most experts agree that diet is most critical for weight loss (treating obesity), but physical activity (PA) is most critical for preventing weight gain (PAGAC, 2008).

- Without increases in PA at a population level, impossible to decrease caloric intake sufficiently to achieve energy balance and get essential micronutrients (Hill et al., 2005).

- White hunger drives eating, there is no inherent biological drive to be active in adulthood—therefore push strategies necessary to achieve population-wide PA increases (Yancey, 2009; 2010).
Public Health Successes of the late 20th Century

- Tobacco control
- EtOH consumption & driving
- Seatbelts & child safety seats
- Breastfeeding
Meta-Volition Model (MVM)
A dynamic bio-psychosocial ecological model of collective action to improve population health
meta-volition - a neologism defined as the impetus to change individual behavior arising, not from conscious intention by the individual, but rather from leaders or decision makers concerned about organizational performance or the public good.
Fig. 1. Meta-volition model. A dynamic bio-psychosocial ecological theory of population health behavior change.
MVM Change Processes

- **Initiating phase** - from leader to leader
- **Catalyzing phase** - from organization to individual
- **Viral marketing phase** - from individual to organization
- **Accelerating phase** - from organization to organization
- **Anchoring phase** - from organization to community
- **Institutionalizing phase** - from community to individual
Population benefit estimates of risk factor change: PA

- 3-minute bouts of PA 10 times per day lowers serum triglycerides to same extent as 1 continuous 30-minute bout of PA (Miyashita et al., 2006)

- Number of bouts of PA associated with overweight independent of PA volume in youth (Mark & Janssen, 2009)

- Sedentary behaviors (e.g., TV watching) as well as sub-optimal >moderate PA levels contributed to DM & obesity risk over 6 yrs in women (Hu et al., 2003)
Push Approaches to Integrate Physical Activity into the Workday & School Day

- Integrating 10-minute *Instant Recess* breaks at scheduled time(s) of day & in meetings
- Restricting nearby parking spaces for disabled
- Moving student/employee drop-off & pick-up locations farther from building entrance
- Scheduling walking meetings at least weekly
Poll #2
Please select your answer and press submit
Multitasking—the healthy way

NEED TO MEET with the dean of nursing? These days, you may want to bring along your trainers. As one of her 2006 New Year’s resolutions, Dean Catherine Gilliss decided to schedule one “walking appointment” each day. “Our faculty and staff are interested in exercise, and this is one way to incorporate it into our lives,” says Gilliss, pictured here during a walking meeting with Kathy Trotter, assistant professor of nursing.
Instant Recess

Integrating 10-min. *Instant Recess* breaks into organizational routine:

- Short bouts easier for sedentary individuals, minimizes sweating & hairstyle disturbance

- Variable intensity, low-impact activity to accommodates overweight, unfit or disabled
Instant Recess

Integrating 10-min. *Instant Recess* breaks into organizational routine (cont.):

- Social support + desire to conform drive participation
- Associated with fun, play and stress release, vs. exercise=work, obligation
- Framing as entitlement to employees & students, competitive or market advantage to administrators
Poll #3
Please select your answer and press submit
California Fit WIC Staff Wellness Training

Significant findings:

- Increased perceived workplace support for staff PA (96 vs. 58%, p=0.002)

- Increased self-reported counseling behaviors with WIC parents promoting physical activity (64 vs. 35%, p<.05)

Crawford, Gosliner, Strode et al., AJPH, 2004; 94: 1480-1485
Pausa para tu Salud
Mexican Ministry of Health, Mexico City

- 10-15 minute exercise breaks to music broadcast thru intercom system
- Mandatory
- Secondary analysis of data, n=335, collected annually on all employees
- Not study volunteers—75% retention at 1 yr
- 1 kg weight loss (0.4 kg/m²) + 1.6 cm “waist” loss after 1 year

Lara et al., Prev Chr Dis, 2008
Baseline sample:
N = 391, 25 sites, health & human services government & non-profit work units
Predominantly female (89.77%) & African American/Latino (78.24%)
Mean age = 43.5 yrs
Mean BMI = 30.0 kg/m²
Mean WC = 90.5 cm (35.6 in)

6-Month follow-up (Cohort 3 only):
Preliminary findings:

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Control</th>
</tr>
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<tbody>
<tr>
<td>BP (mm Hg)</td>
<td>-1.3</td>
<td>+1.2</td>
</tr>
<tr>
<td>(effect size = -2.5)</td>
<td></td>
<td>(effect size = -0.4)</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>+0.01</td>
<td>+0.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(effect size = -0.4)</td>
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</table>
**Instant Recess® Breaks Work!**

The rapidly growing evidence base

- 40 studies in schools and worksites identified in systematic review of literature (Barr-Anderson et al., AJPM, in press)
- Documented individual and organizational receptivity to integrating activity on paid work time/during school day
- Contribute to daily accumulation of activity
- Motivational “teachable moment” helping inactive people link sedentariness to health status
- As little as 10 min./day improves BP, weight, waist circumference, mood, attention span, cumulative trauma, bone mineral density, academic performance, discipline
- “Spill-over” to increases in active leisure
- Favorable return on investment — LL Bean mfg. plant gets 30 min. productivity for 15-min. investment (three 5-min. breaks per shift)
Aim:
Make prolonged sitting as socially unacceptable as smoking or drinking & driving

San Diego Padres’ PETCO Park on Sunday home game “family” days
Forsyth County, NC
Community-Based Dissemination of *Lift Off!* Breaks

- Focused on feasibility of dissemination in schools and churches
- $500 mini-grants given to 10 organizations
  - Develop innovative ways to incorporate the *Lift Off* concept into regularly scheduled organizational activities
  - Each funded site recruited 20 participants
  - Organizations conducted activities for at least 6 months and participated in pre- and post-program evaluation
- Physical activity data were collected using accelerometers and questionnaire. Demographic data and process measures were also collected
Forsyth County, NC IR implementation in churches & afterschool programs

Physical Activity Change measured by IPAQ - Continuous Activity

Accelerometer Changes

- Sed. - 1 min. bouts
- Light 1 min. bouts
- Mod. - Vig. 1 min. bouts
- Sed. - 10 min. bouts
- Light 10 min. bouts
- Mod. - Vig. 10 min. bouts

Pre Mean (SE)  Post Mean (SE)
Forsyth County, NC USD

Evaluation of IR in implementation of policy change to require 30 minutes of daily PA in elementary school day: 8 school pilot study

- Increase in % of children doing fitness skills (IR) in class
  - Intervention (+9%) vs. Control (0%), p < 0.05
- Increase in % of children who were “on-task”
  - Intervention (+6%) vs. Control (-5%), p < 0.05

Now being taken to scale throughout district
CDC Reach US Legacy & Pilot projects: Example of DC Pacifica radio station (WPFW)

- First-ever broadcast media adoption of Instant Recess
  - PI is show host who works in health promotion for DC DOH
  - Production of different 10-minute breaks, incl. line dancing, belly dancing & go go/hip hop breaks choreographed by local fitness instructors
  - Voice-overs by selected DJs and show hosts
  - Daily 1pm EDT on-air IR breaks for 3-month pilot—can be streamed online or downloaded as audio files (podcasts)
  - 10-20 key participating local community partners (unions, schools, govt. agencies, non-profits)

- National Pacifica Network partnering in National PA Plan
  - CEO attended National Press Club launch, IR= “calling card”

- WPFW leveraged $25K seed grant into $75K DOH grant to continue Instant Recess implementation for 1 year
CDC Reach US Legacy & Pilot projects: Example (cont.)

- DC City Council member and local Teamsters Union president supporting introduction of legislation to allow employees 10-minute structured group activity breaks on paid time.
- Framing for employees as entitlement to move: prolonged sitting hazardous to health.
- Framing for leaders and managers as:
  1) contributing to enhanced productivity and lower health care costs
  2) important to model and promulgate culture change to address high childhood obesity rates

Junior Investigators: Whitt-Glover, Glenn, Keith, Alhassan

Post-docs: Bell-Lewis, Hasson

Students: Hopkins, AuYoung, Jackson, Leak, Woods

Administrators/Business Leaders: Wilson, Anderson, Bernert, Eisenberg, Flores, Graham, Harding, Keith, Kimbrough, Levine, Miles, Nevarez, Osby, Overton, Pittman, Ross, Sanchez, Standish

Pro Athletes/Talent: Rossum/PAC, Winfield, Jones, Milton

Instant Recess® team
Time to move!

CalEndow Here & Now!
Poll #4
Please select your answer and press submit
Overall Discussion
Forthcoming from UC Press this fall
Information & Resources

www.healthequity.ucla.edu

www.gramercyresearch.com -- register for free access to Instant Recess materials

www.tonyancey.com

www.youtube.com/tonikyancey

www.healcitiescampaign.com

www.wpfw.org

www.physicalactivityplan.org


www.cbs2.com/video/?id=119370@kcbs.dayport.com

www.wxii12.com/health/22833126/detail.html


www.dhs.ca.gov/cpns/pa

www.padres.com/friarfit

Just out from UC Press this month!

“Instant Recess” by Toni Yancey, MD, MPH

This lively, inspiring, and informative book proposes a new paradigm for fitness and public health that promises vitality, well-being, and a greater sense of community—demonstrating, Dr. Yancey argues, that what’s good for the waistline is good for the bottom line.

“The Instant Recess effect is real. Today, more than ever, we need to encourage our children to get off their computers and off the couch and become more active through periodic breaks from prolonged sitting.” SENATOR TOM HARKIN, D-IA, Chairman, Senate HELP Committee

“Instant Recess can work equally well in the corporate boardroom, school classroom, or for fans at a sporting event, for that matter.” DAVE WINFIELD, National Baseball Hall of Fame 2001, Executive Vice President and Senior Advisor, San Diego Padres

“It’s a simple idea with a powerful impact. Instant Recess could get America moving again.” DAVID SATCHER, M.D., M.P.H., 19th Surgeon General of the United States

“Instant Recess is not just a product for a healthy lifestyle. It’s a product for a healthy economy. It’s a product for a healthy society. It’s a product for a healthy planet.” FRANCINE KAUFMAN, Head of the Center for Diabetes, Endocrinology and Metabolism at Children’s Hospital Los Angeles

“For the overweight person, or anyone who is between the ages of 30 and 60, Instant Recess offers an easy and free solution to creating a healthier lifestyle.” SHARON KAUFMAN, Medical Director of the Department of Public Safety and Correctional Services for the state of Maryland

“The practical guidance necessary to help anyone start making physical activity a part of their life and their community again.” MARK FENTON, PBS television host and author of The Complete Guide to Walking for Health, Weight Loss, and Fitness

Toni Yancey, MD, MPH, is Professor in the Department of Health Services and Co-Director of the UCLA Kaiser Permanente Center for Health Equity at the School of Public Health, University of California, Los Angeles.

Cover design by Jennifer Miller
Cover photograph by John Thodosian

ISBN 978-0-520-28378-0
UNIVERSITY OF CALIFORNIA PRESS
BERKELEY 94704 WWW.UCPRESS.EDU

Toni Yancey, MD, MPH

“Part personal memoir, part public health manifesto, and part poetry, this book chooses with Yancey’s warmth and enthusiasm.” Miriam Meislah, author of What If I Fail
Part personal memoir, part public health manifesto, and part poetry, Yancey’s warmth and enthusiasm shine through this book.”

--Marion Nestle, PhD, Food Politics & What to Eat

"In Instant Recess, Dr. Yancey provides the tools to get America moving, in a very accessible style with the scientific research to back it up…”

--Sen. Tom Harkin (D-IA), Chairman, Senate HELP Committee

“Instant Recess…can work equally well in the corporate boardroom, school classroom, or for fans at a sporting event… I’m all for breaking our national inertia with a musical beat and a smile on our face.”

--Dave Winfield, National Baseball Hall of Fame 2001

“Dr. Yancey writes on a topic about which she is both passionate and knowledgeable. Instant Recess is scientifically valid and culturally sensitive. Doable in just about any setting….it could get America moving again.”

--David Satcher, MD, PhD, 16th Surgeon General of the US
Organizational Profiles & Case Studies

- **City of Duarte, CA** - incl. 3-min. PA breaks in every City Council meeting past 6 yrs

- **Delta Sigma Theta Sorority, LA** - turns up air conditioning 15 min. before IR break in each meeting & reimburses members only for healthy refreshments past 5 yrs

- **Orange Co. Health Care Agency, CA** - trained entire health promotion staff in implementing IR breaks, and now disseminating to other county agencies past 3 yrs

- **St. John’s CME Church, NC** - occasional IR breaks during Sunday service increased participation in gospel aerobics classes
Instant Recess: Building a Fit Nation

Table of Contents

INTRODUCTION, incl. “Recapturing Recess”

CHAPTER ONE The High Price of a Sedentary America & Challenge of Getting Us Moving, incl. “Blue Grease” & “We, Too, Are Ballas”

CHAPTER TWO The Benefits of Widespread Physical Activity & Opportunities to Move the Needle, incl. & “Ain’ Like There’s Hunger”

CHAPTER THREE The Evolution of an Idea, incl. “Did You Ever Have a Mentor,” “Ain’ Like There’s Hunger” & “She Went Away”

CHAPTER FOUR The Marketing and Social Marketing of Physical Activity and Fitness

CHAPTER FIVE The Case for the Recess Model

CHAPTER SIX Instant Recess—What’s Good for the Waistline Is Good for the Bottom Line!

Ain’ Like There’s Hunger

Antronette “Toni” Yancey, MD, MPH

Sweet tooth
Salt tooth
Chocolate tooth
Jonesin’ for fries,
Triple deck Mac,
Coke and pork rinds
But no walkin’ tooth
Swimmin’ tooth
Stretchin’ tooth
Dancin’ tooth
Weight liftin’ tooth
After all,
Ain’ like there’s hunger
Mind numbin’ early gig
Second gig even worse
Kids in between
Gotta be fed

Hearin’ me, my kinda folks
Golden arches
Right ‘round the corner
Open late
Open early
Open twenty–fo/seven!
And then there’s hunger...

CEOs
Makin’ all this money
Makin’ us fat and old
And sick and dead
Fat bankrolls
Pizzat money
“Blood” money
’S what it really is
Expanding bottom lines
Expanding our be–kins
Get Involved—be a Sparkplug!

www.toniyancey.com