## Just Keep Moving Forward -Staying Active in Challenging Times

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## Overview

Let's talk Exercise: Physical & Mental Health Exercise, Weight Loss & QOL Weight Loss & Covid Lets Problem Solve



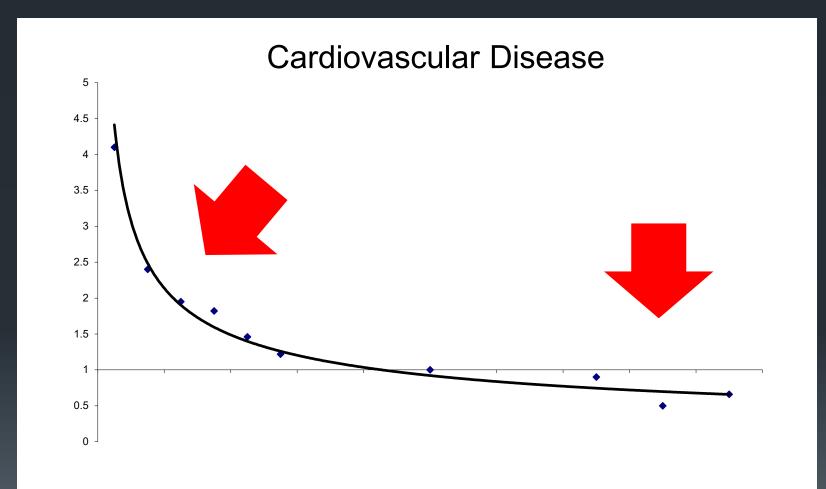
## Let's talk

Exercise: Physical & Mental Health
Exercise, Weight Loss & QOL
Exercise & Covid
Lets Problem Solve

## Overview

# Exercise: Physical & Mental Health Exercise & Covid Lets Problem Solve

## **Shape of Mortality-Fitness Curves**



#### Effects of Different Doses of Physical Activity on Cardiorespiratory Fitness Among Sedentary, Overweight or Obese Postmenopausal Women With Elevated Blood Pressure A Randomized Controlled Trial

Timothy S. Church, MD, MPH, PhD Conrad P. Earnest, PhD James S. Skinner, PhD Steven N. Blair, PED

OW LEVELS OF CARDIORESPIRAtory fitness are associated with high risk of cardiovascular disease (CVD) and all-cause mortality, and improvements in fitness are associated with reduced mortality risk.<sup>1-6</sup> Although higher levels of fitness are associated with better CVD risk factor profiles, the fitness-CVD and allcause mortality relation is only moderately attenuated when traditional **Context** Low levels of cardiorespiratory fitness are associated with high risk of mortality, and improvements in fitness are associated with reduced mortality risk. However, a poor understanding of the physical activity–fitness dose response relation remains.

**Objective** To examine the effect of 50%, 100%, and 150% of the NIH Consensus Development Panel recommended physical activity dose on fitness in women.

**Design, Setting, and Participants** Randomized controlled trial of 464 sedentary, postmenopausal overweight or obese women whose body mass index ranged from 25.0 to 43.0 and whose systolic blood pressure ranged from 120.0 to 159.9 mm Hg. Enrollment took place between April 2001 and June 2005 in the Dallas, Tex, area.

**Intervention** Participants were randomly assigned to 1 of 4 groups: 102 to the nonexercise control group and 155 to the 4-kcal/kg, 104 to the 8-kcal/kg, and 103 to the 12-kcal/kg per week energy-expenditure groups for the 6-month intervention period. Target training intensity was the heart rate associated with 50% of each woman's peak  $\dot{V}o_2$ .

**n Outcome Measure** The primary outcome was aerobic fitness assessed on a ergometer and quantified as peak absolute oxygen consumption ( $\dot{V}o_2abs$ , L/min).

**J ults** The mean (SD) baseline  $\dot{V}_{02}$ abs values were 1.30 (0.25) L/min. The mean minutes of exercising per week were 72.2 (12.3) for the 4-kcal/kg, 135.8 (19.5) he 8-kcal/kg, and 191.7 (33.7) for the 12-kcal/kg per week exercise groups. r adjustment for age, race/ethnicity, weight, and peak heart rate, the exercise groups increased their  $\dot{V}_{02}$ abs compared with the control group by 4.2% in the

4-kc l/kg, 6.0% in the 8-kcal/kg, and 8.2% in the 12-kcal/kg per week groups (P<.001 for each vs control; P for trend <.001). There was no treatment×subgroup interaction for age, body mass index, weight, baseline Vo<sub>2</sub>abs, race/ethnicity, or baseline hormone therapy use. There were no significant changes in systolic or diastolic bood pressure values from baseline to 6 months in any of the exercise groups vs the control group.

**Conclusion** In this study, previously sedentary, overweight or obese postmenopausal women experienced a graded dose-response change in fitness across levels of exercise training.

Trial Registration clinicaltrials.gov Identifier: NCT00011193

s in physical JAMA. 2007, 297: 2081-2091

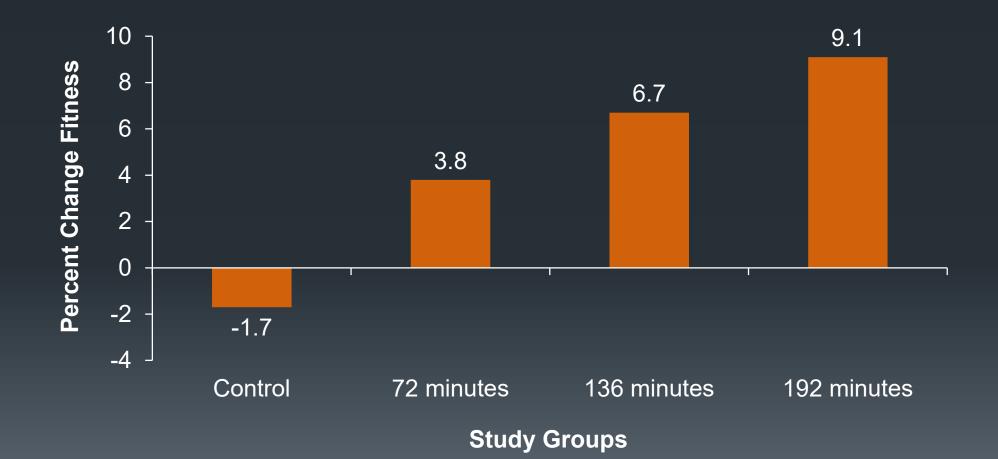
#### JAMA, 2007; 297: 2081-2091

prove fitness is of substantial public health importance.

Even though fitness has a genetic contribution, physical activity habits are the primary determinant of fitness in adults and changes in physical activity result in changes in fitness and subsequent mortality.<sup>2,7,8</sup> Previous reports have combined the findings of different studies to create dose response curves for changes in physical

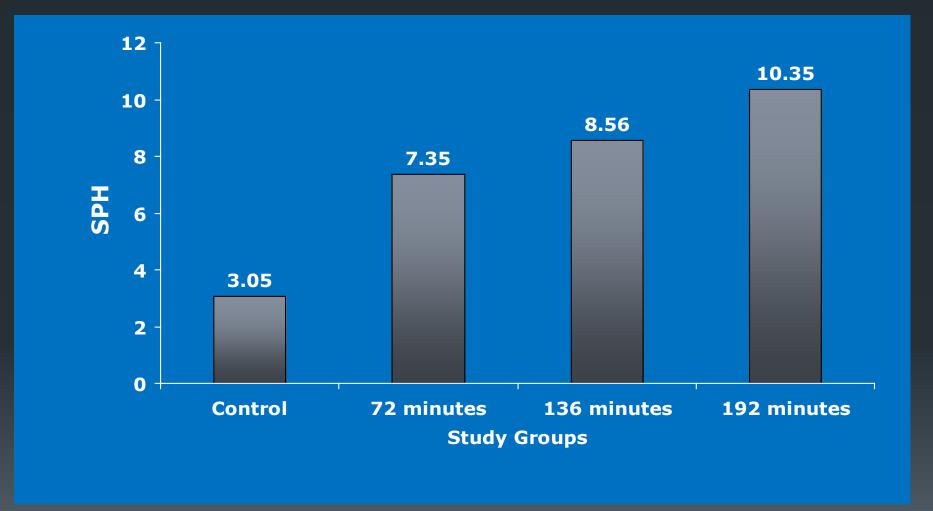
www.jama.com

## **Change in Fitness**

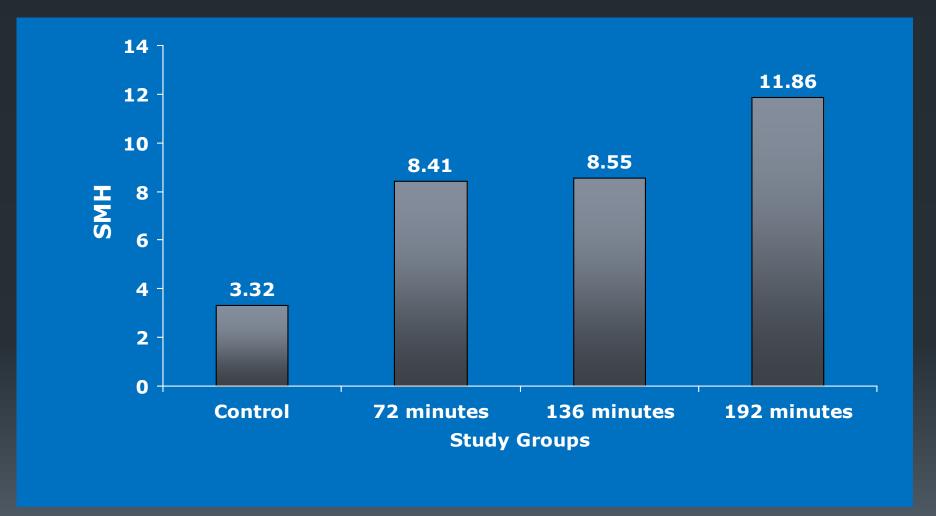


## Quality of Life Measures

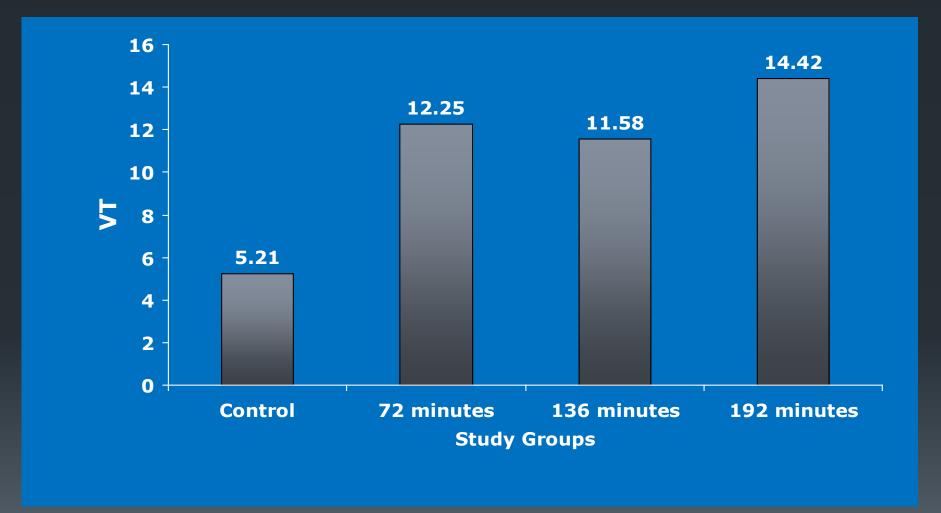
### **Change in Physical Health**



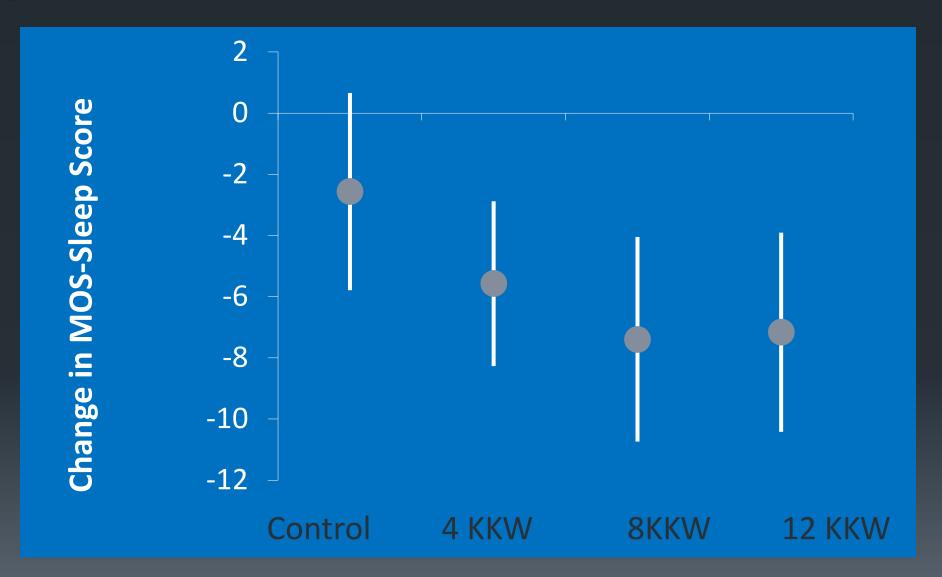
## **Change in Mental Health**



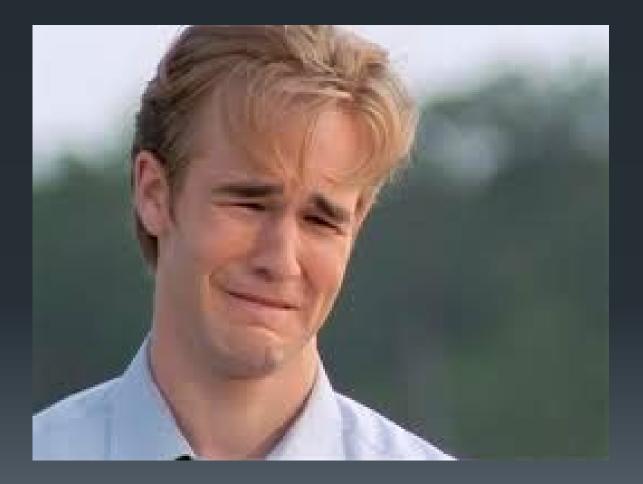
## **Change in Energy**



## **Sleep Disturbances**



## **Cheesy Story Time**



## **Regular Aerobic Exercise**

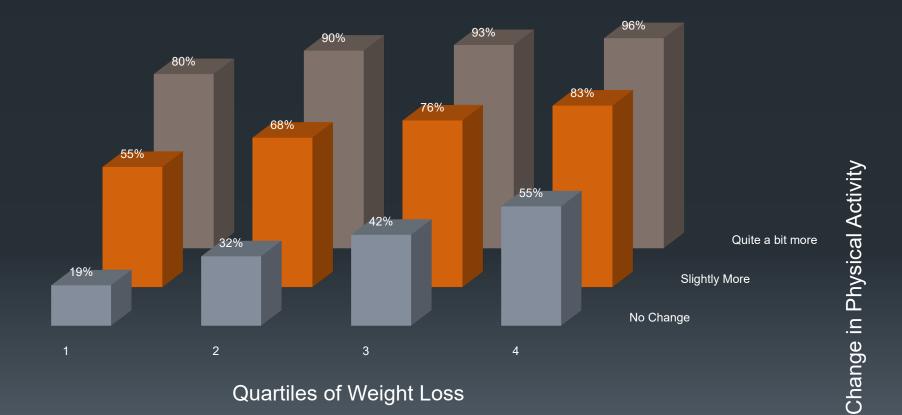
## More is better but something is much better than nothing



# Exercise, Weight Loss & QOL Exercise & Covid Lets Problem Solve

## Interaction of Weight Loss & Exercise

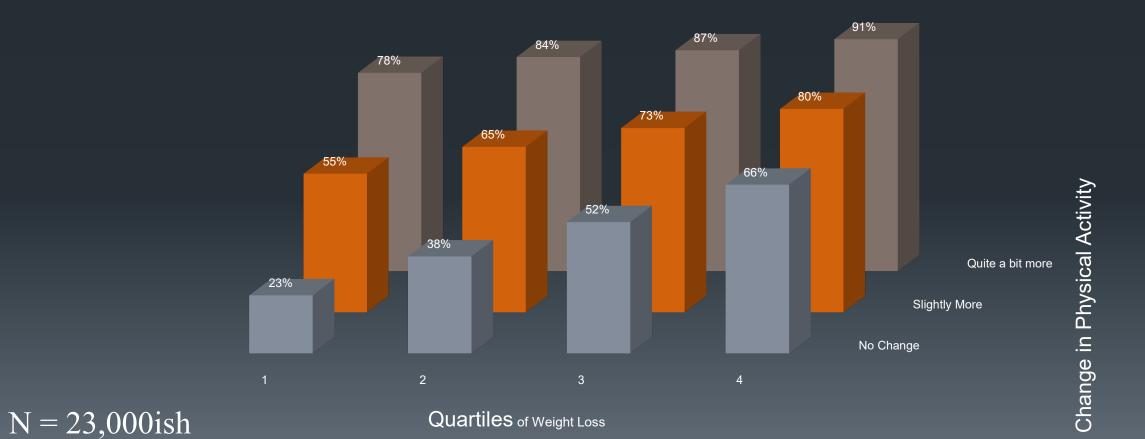
#### Change in Energy



N = 23,000ish

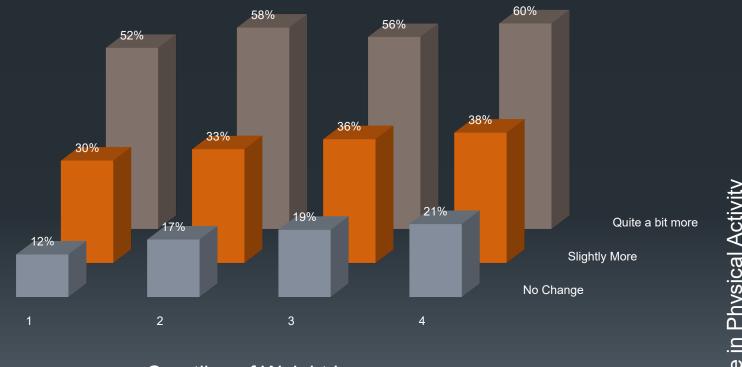
## Interaction of Weight Loss & Exercise

Change in Mood



## Interaction of Weight Loss & Exercise

#### Change in Sleep



Quartiles of Weight Loss

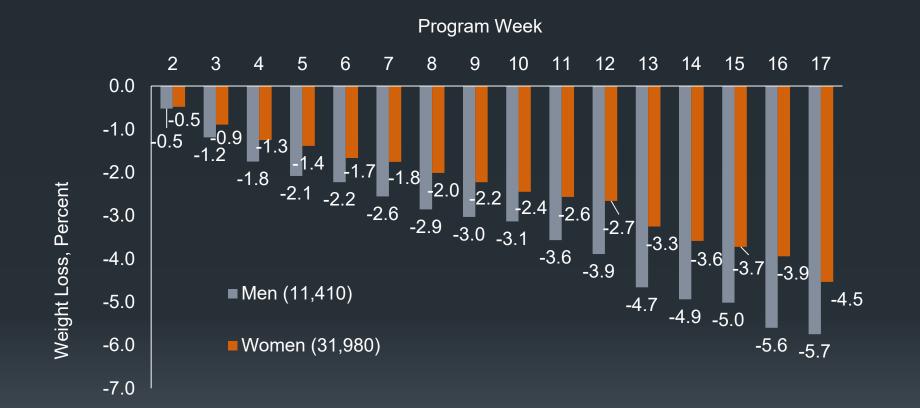
Change in Physical Activity

N = 23,000ish

## Overview

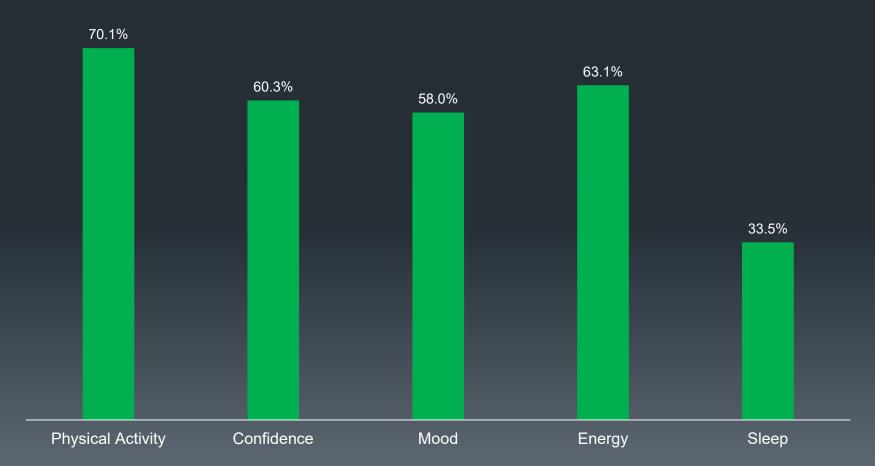
Weight Loss & Covid Lets Problem Solve

## Weight Loss During Covid



Weight Loss by Percent - For Participants that started program between Feb & May 17, 2020

Participants (1729) Reporting Improvements in .....



## Overview

Exercise & Covid Lets Problem Solve

## Physical Activity Prescription for General Health

#### Not Interested:

Get up an walk around at least once per hour

- I hear you but I am not exercising:
  - •7000 steps per day and use stairs when possible
- I am willing to try exercise:
  - •150 minutes per week of walking or 75 minutes per week of jogging or 100 of fast walking
- I am all in!!

Higher intensity aerobic plus 2 or more days per week of weight lifting

## Physical Activity Prescription for General Health

Not Inter Get up a I hear yo **7000 ste** I am willi 150 mini week of I am all i



Higher intensity aerobic plus 2 or more days per week of weight lifting

## **To-Do List**

## Want To-Do List

Evaluations	A/C filters	Anything Outdoors	
Pay taxes	Tuition	Family time	Dinner with Friends
Groceries	Mammogram		
Pay bills	Exercise –	> Exercise	
Dentist	Mow the lawn	SEC football	Poker night
Change Oil		Vacation	



## What do you love doing ?



























## What things matters to you....

Connectiveness (community) **Promotes Resilience** Productive (sharp mind) Raises Energy Level Mood, not just depression & anxiety Builds Self Esteem

## My Plan for you

Do what you love to do !

Identify what you need out of your program

Make your plan fit the physical activity requirements
Not vis-versa

## My Plan for Covid

Just do anything

Preferably outside

Do it regularly

Get creative
Yoga in the park, walking business calls, walk your neighbors' dog, etc

