



All Movement Counts: What the WHI Participants Have Taught the World about Physical Activity and Staying Healthy

The OPACH Study

Presentation for the:
WHI Participant Webinar
July 21, 2021

Background

- Heart disease is the most common cause of death in older women.
- Rates of heart attack are high in older women.
- Doctors and US guidelines recommend that we exercise to prevent heart disease.

BUT....

How much do we really need to move to stay healthy?



What does the heart want?



?



Mysteries of Light Physical Activity

Light physical activity is:

- “Easy” movement – walking slow, window shopping, watering flowers, cooking, housework
- Responsible for half of the calories we burn as older adults
- Very difficult to remember how much light activity we do
- How light activity affects our hearts and health not known



Question #1

Is light physical activity good for your heart?

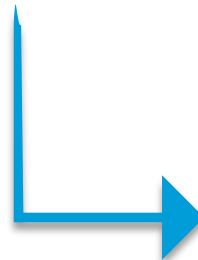


Here's what we did

6489 with
device data



6379



Baseline

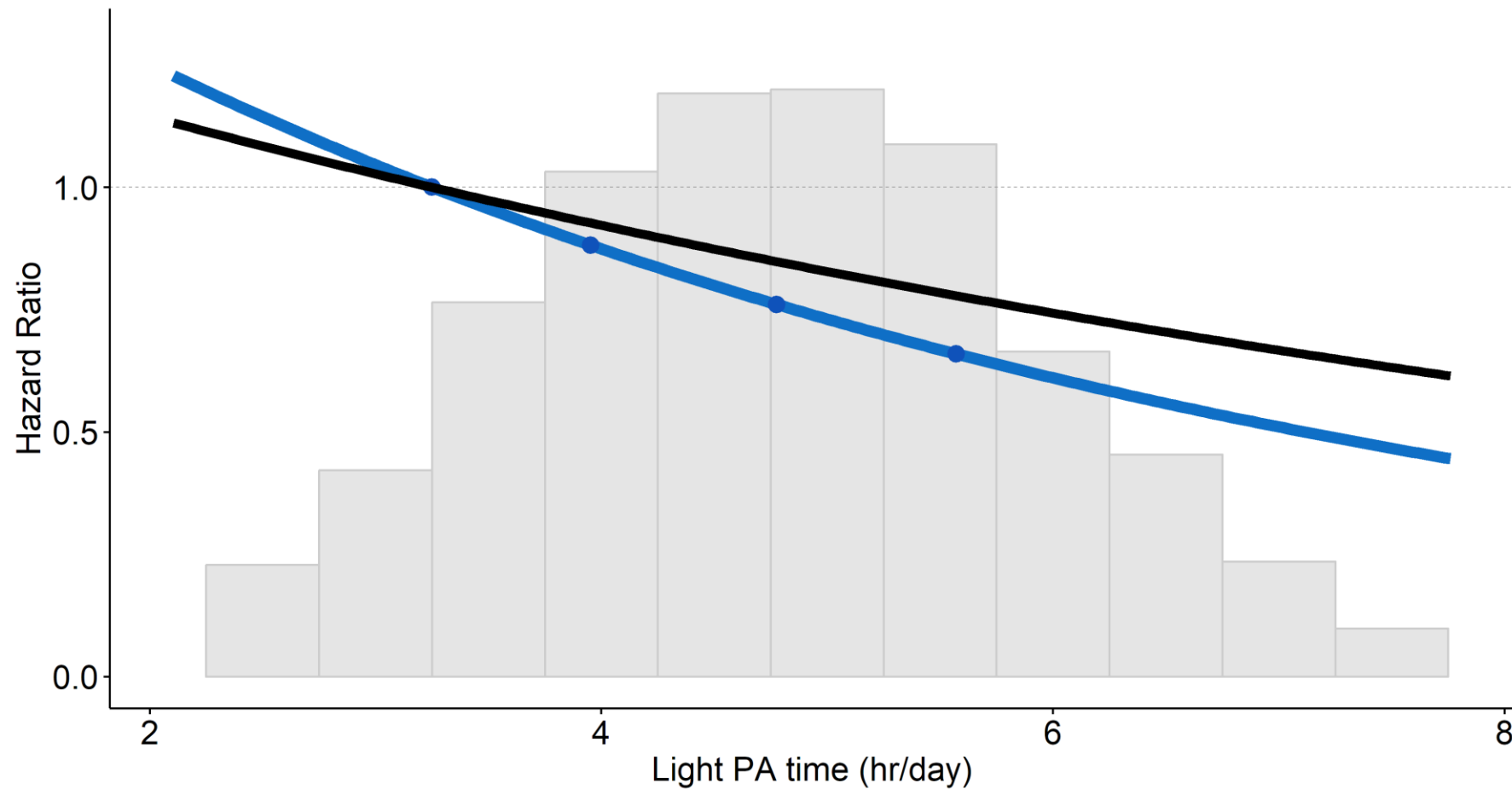
2012-14

Follow-up period

Present



Light Physical Activity and Heart Disease



*Adjusted for age, race/ethnicity, education, self-reported health, multimorbidity, physical functioning, alcohol consumption, and smoking status.

Summary of Results



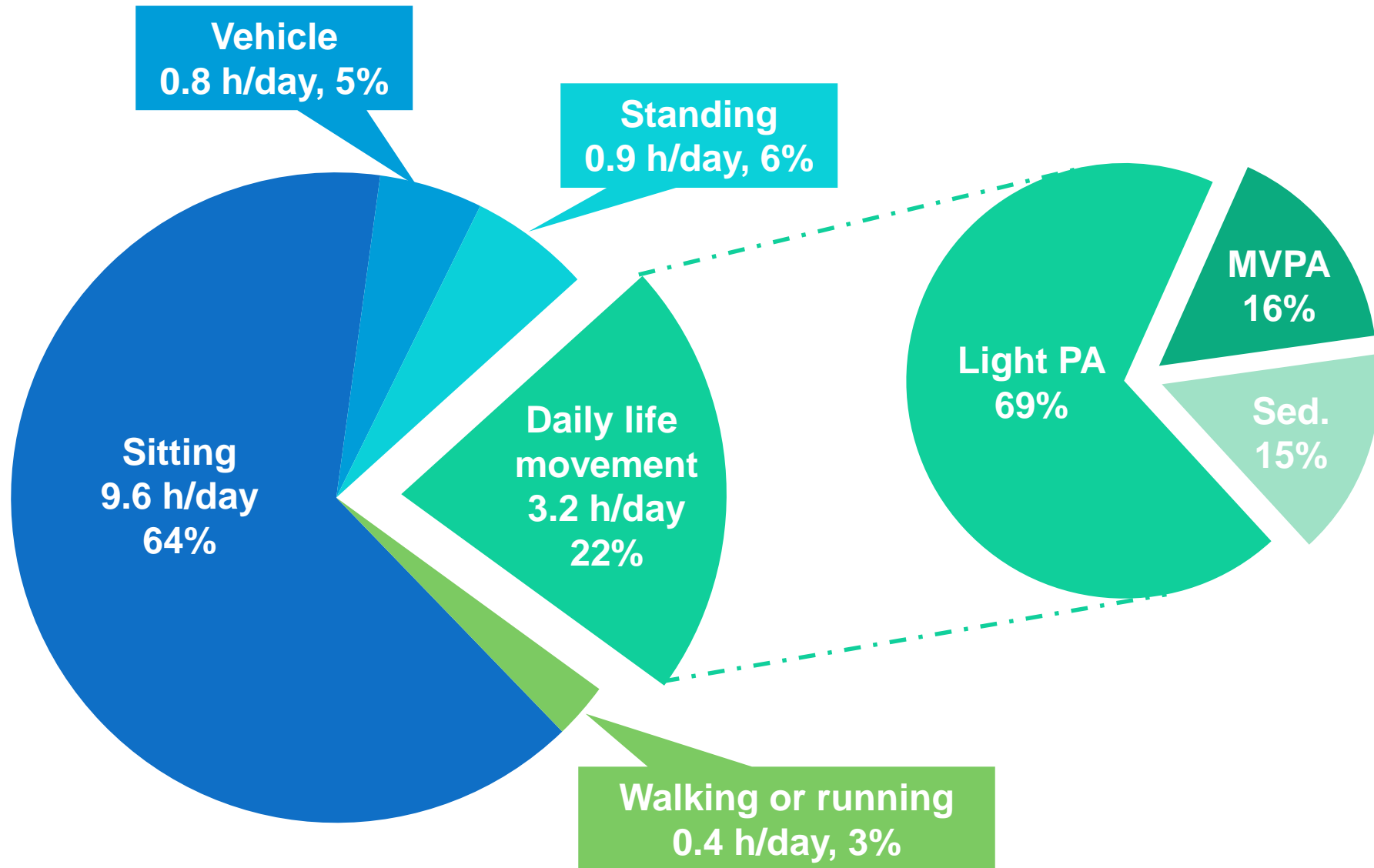
Light physical activity associated with:

- 42% reduced risk of heart attack or coronary death

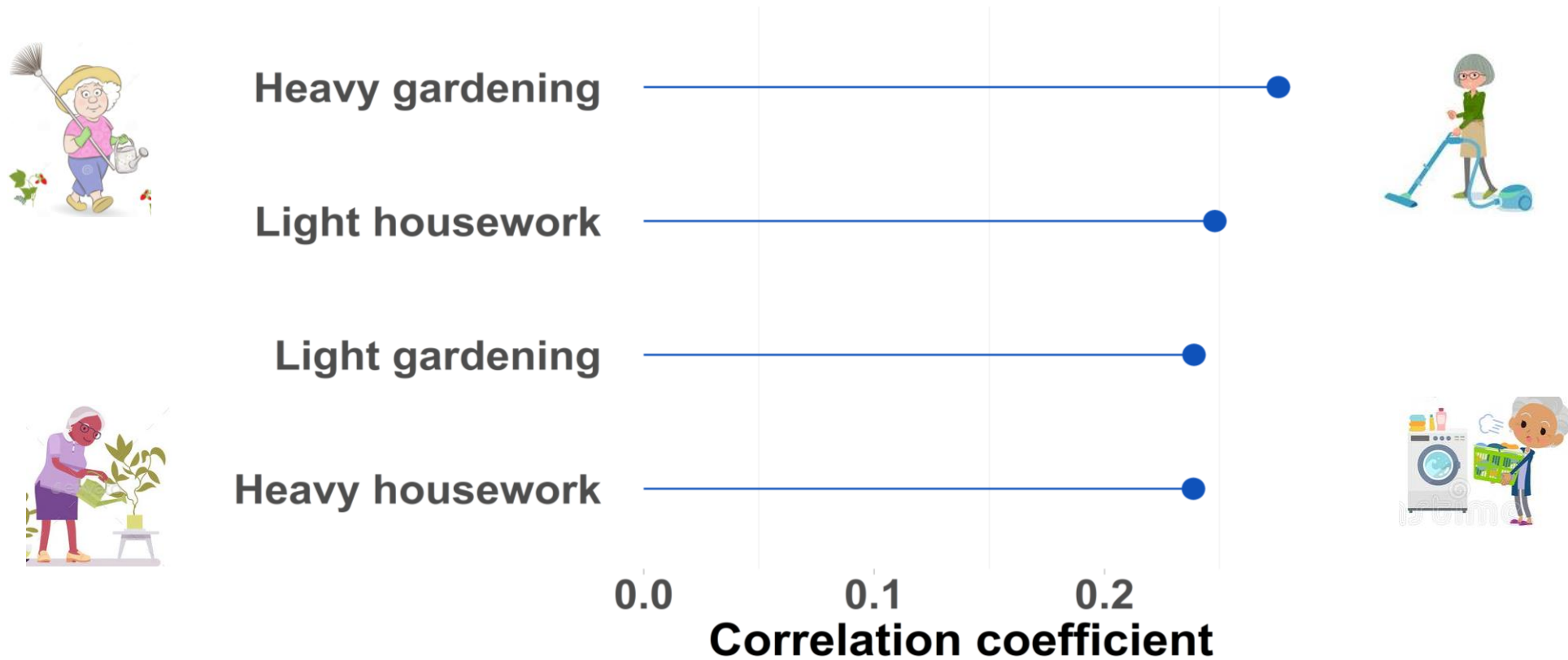
Question #2

Is daily life movement good for your heart?

Daily Life Movement – standing and moving



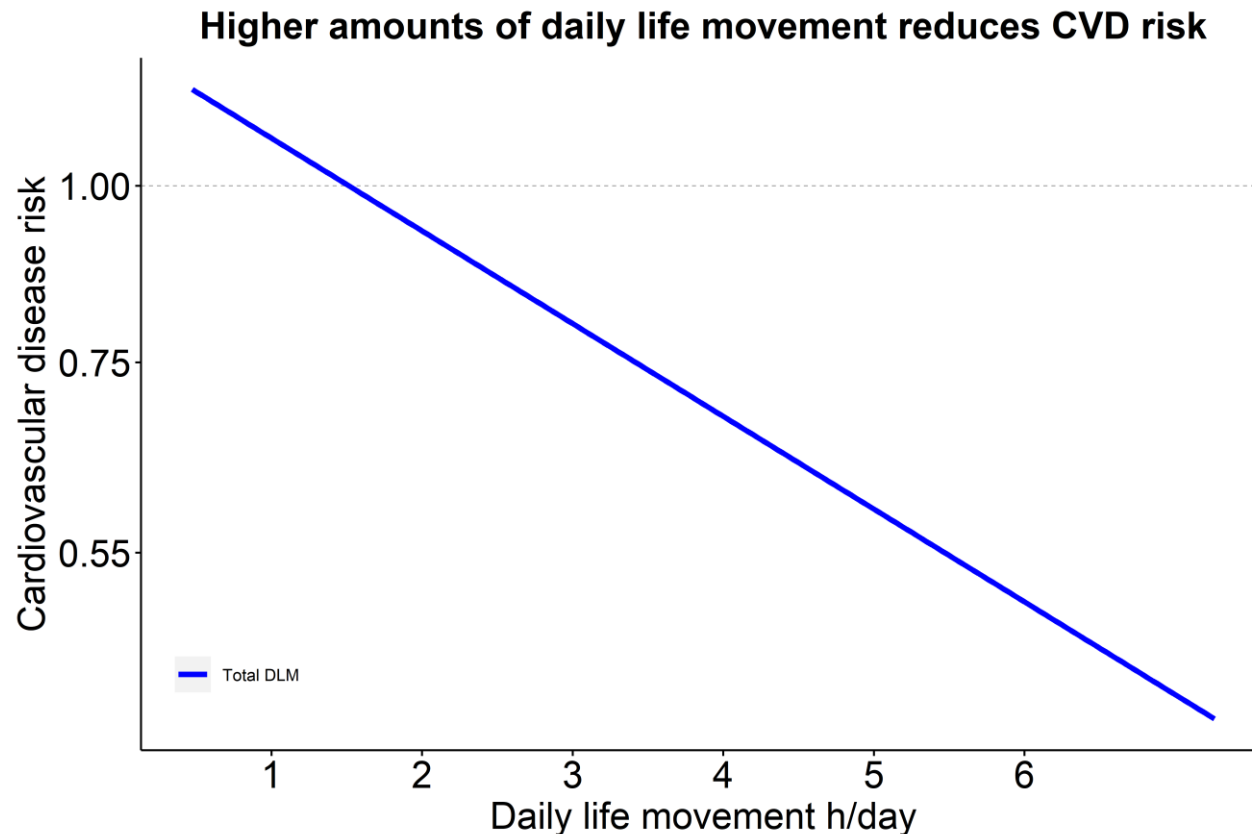
Gardening and Housework are Common Forms of Daily Life Movement



Daily Life Movement and Heart Disease in Older Women



4 h/day = 43% lower risk of cardiovascular disease



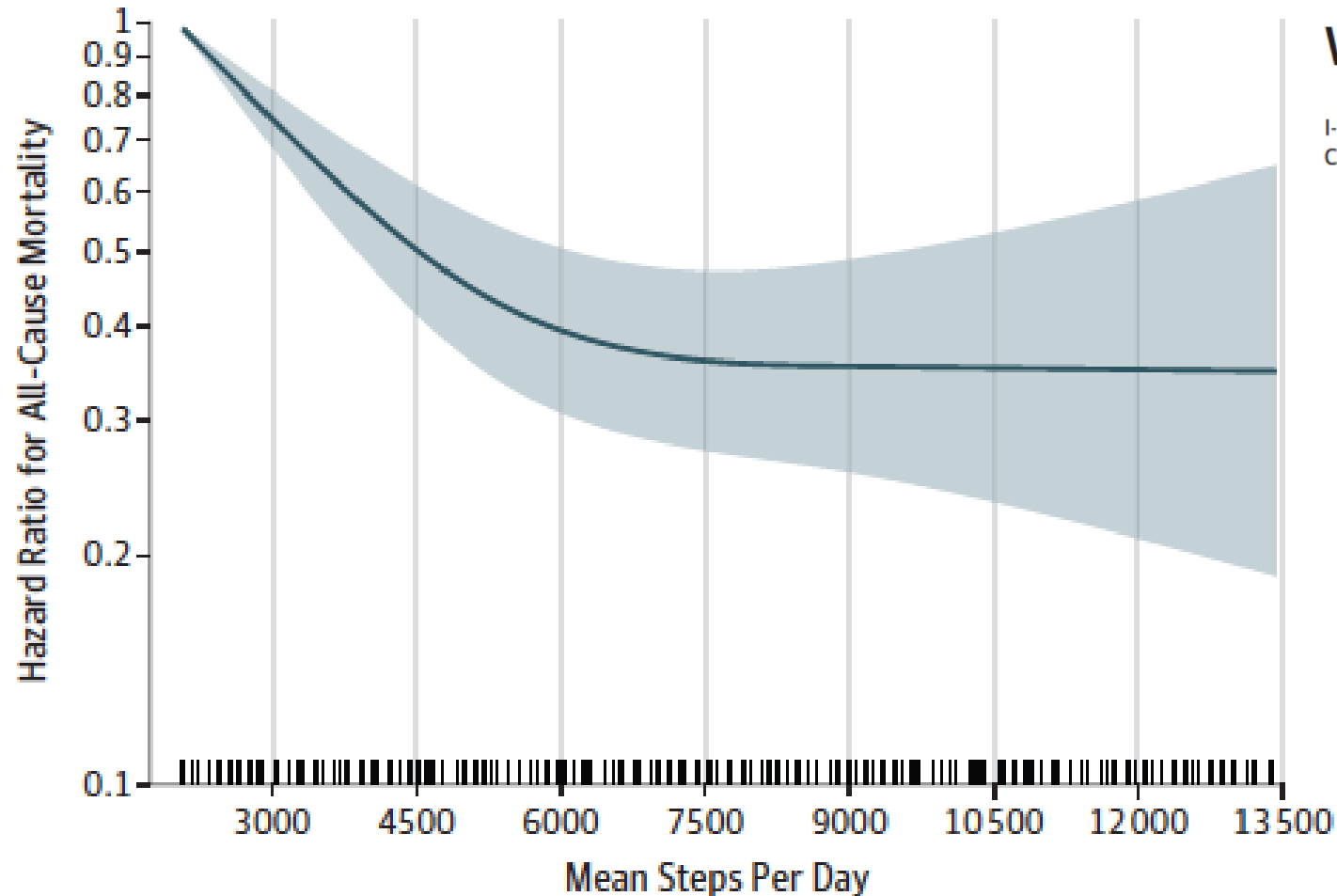
Conclusion:
All movement matters
for heart health

Question #3

How many steps are needed for good heart health?

7500 Steps per Day Associated with Lower Risk of Death in Harvard Study

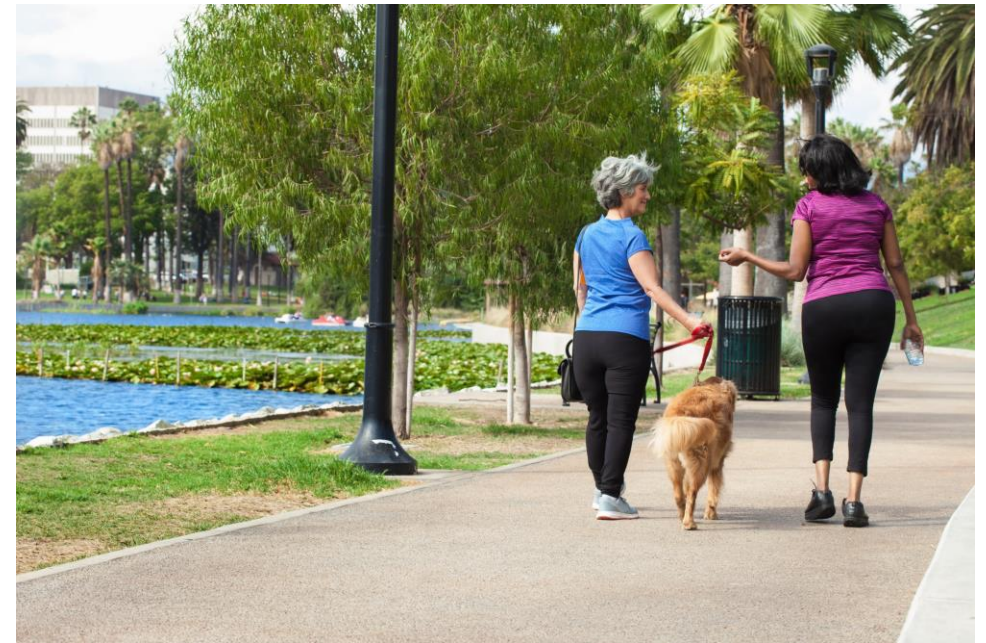
B Mean steps per day as a continuous variable



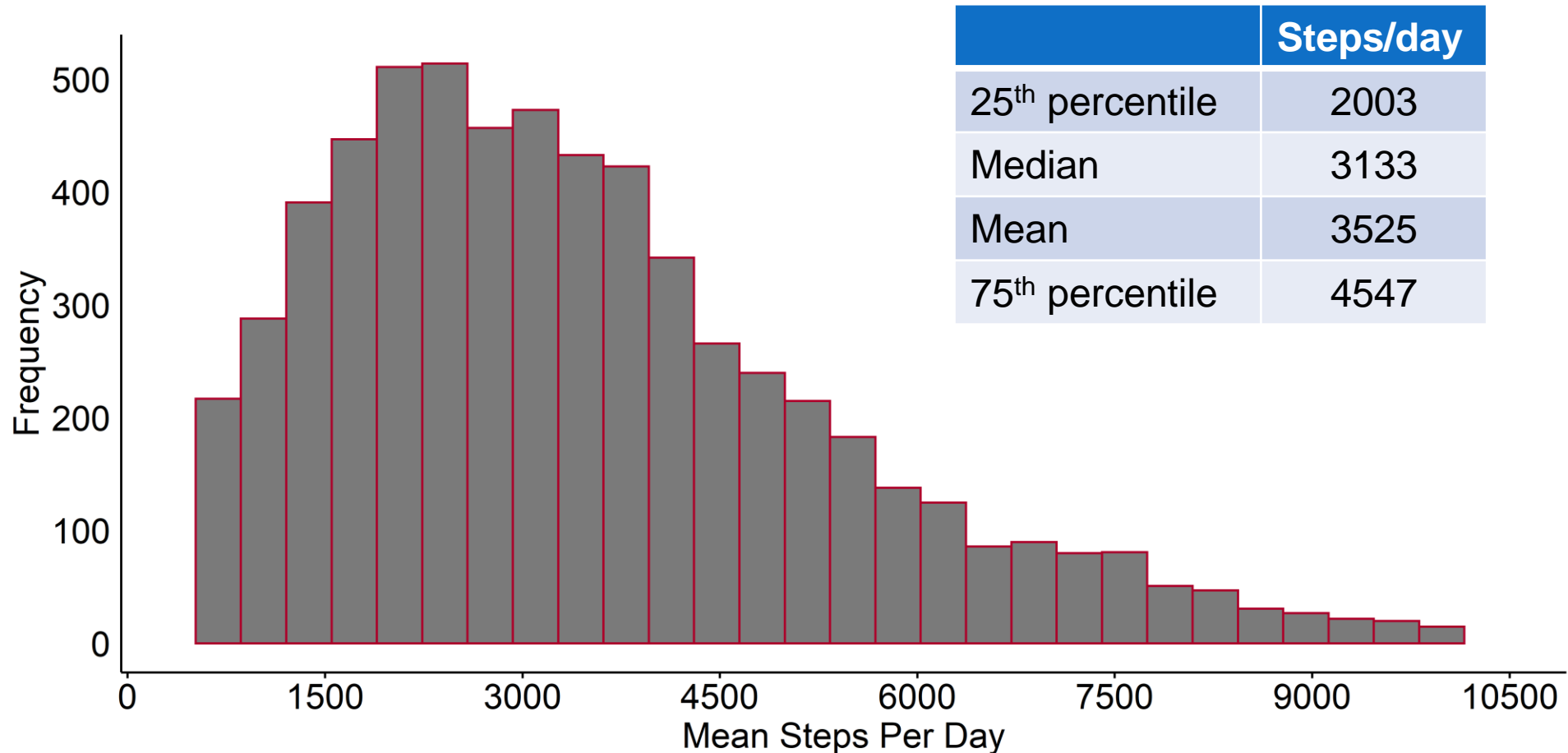
JAMA Internal Medicine | [Original Investigation](#)

Association of Step Volume and Intensity With All-Cause Mortality in Older Women

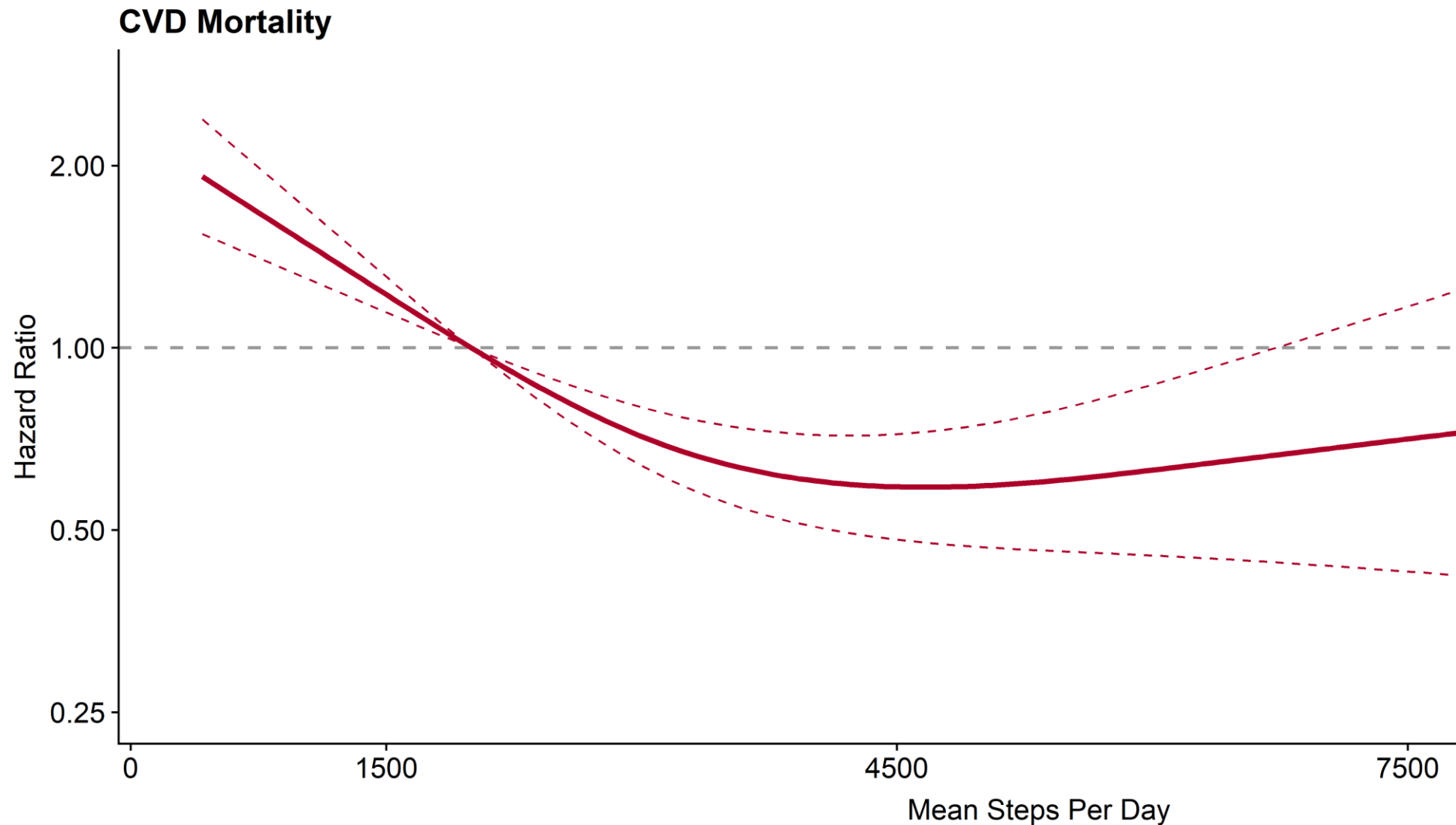
I-Min Lee, MBBS, ScD; Eric J. Shiroma, ScD; Masamitsu Kamada, PhD; David R. Bassett, PhD;
Charles E. Matthews, PhD; Julie E. Buring, ScD



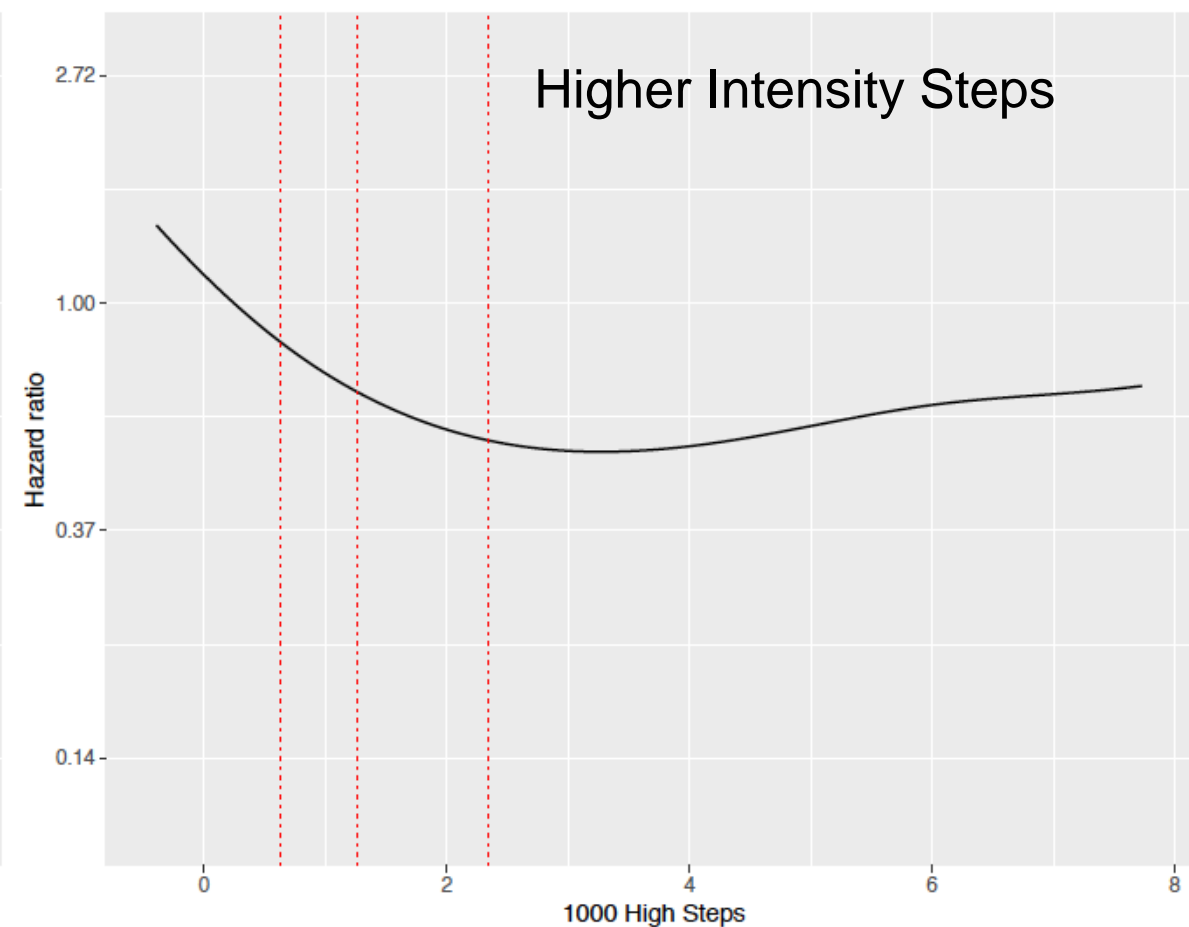
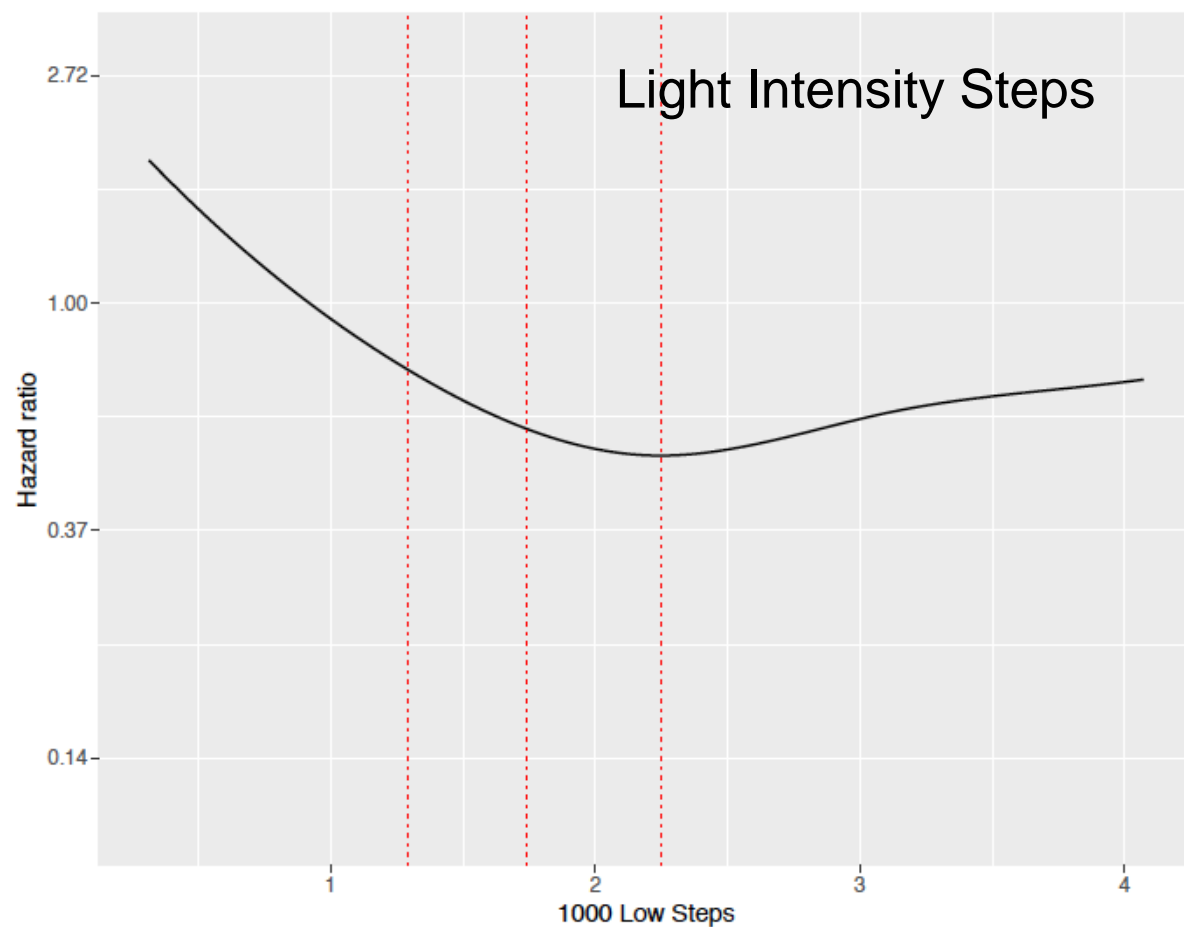
Distribution of steps per day



18% Reduced Risk for every 1000 steps



Light Steps vs. Harder Steps and Cardiovascular Disease



Question #4



If your genes are good for longevity do you still need to do physical activity to live long?

If your genes are not so good for living long, does physical activity help you to live longer?

Benefits of Light Physical Activity According to Longevity Genes



38% ↓ Risk of death

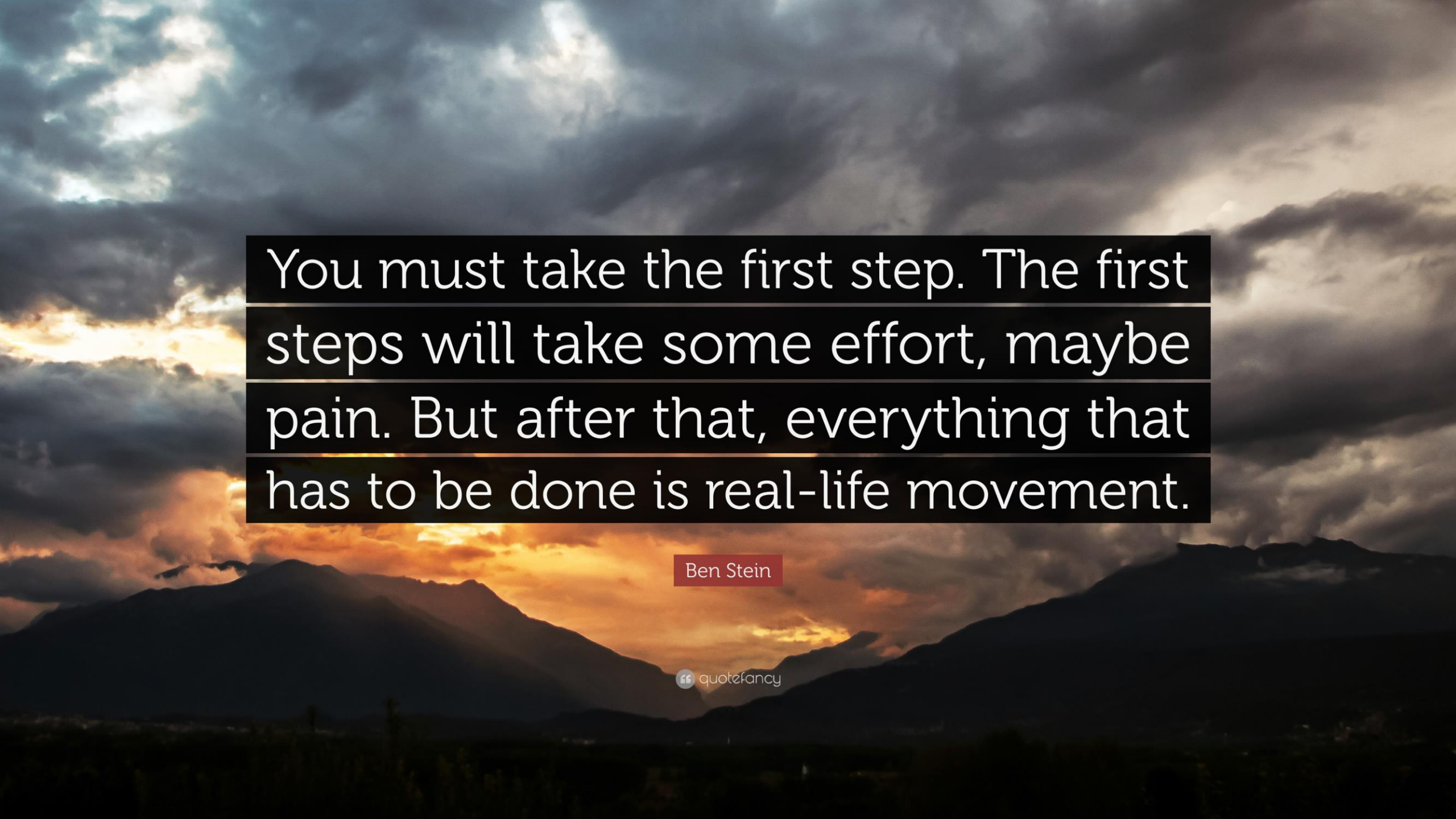


37% ↓ Risk of death

Conclusion



These findings showed the world that all movement counts when it comes to heart disease prevention in older women.

The background of the image is a landscape featuring dark, silhouetted mountains in the foreground and middle ground. The sky is filled with large, textured clouds, some of which are illuminated from below by a warm, golden light, suggesting a sunset or sunrise. The overall mood is contemplative and inspiring.

You must take the first step. The first steps will take some effort, maybe pain. But after that, everything that has to be done is real-life movement.

Ben Stein

“ quote fancy



Best loved physical activities of WHI women



#1 -Walking (includes walking on own, walking dog, walking with friends)



walking on own



walking the dog



walking with friends



hiking



walking in halls, mall,
laps around house

Best loved physical activities of WHI women

#2 - Outings With Friends or Family

#3 -Gardening, Yardwork

#4 -Shopping (grocery shopping, general shopping)

#5 – Cooking, Daily Chores

Best loved physical activities of WHI women

#6 –‘Exercise’ & Other specific comments

Exercise classes

Gym, treadmill

Physical therapy

Swimming, water
exercise

Yoga, Tai Chi,
Pilates

Church

Volunteer work

Biking (stationary
and outdoor)

“Anything
outside’

Caregiving for a
family member

Playing with
grandkids

Caring for pets

Active sitting,
marching in
place

Tennis, golf,
kayaking,
horseback riding,
camping

Still working!



"The least
movement
is of importance
to all nature. The
entire ocean is
affected by a
pebble."
—Blaise Pascal

The [awesome] OPACH Team!

WHI-CCC

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