Meeting 3

Determining Physical Activity Guidelines Targets: Views from Chairing the 2008 PAGAC
Bill Haskell, PhD
Consultant to Exposure Subcommittee
2008 Physical Activity Guidelines Advisory Committee Chair
Figure 1
654,827 Men & Women, 82,465 deaths
age 21-90 10 years follow-up

No lower threshold for benefit
Steep early slope
About 70% of benefit reached by 8.25 MET-hr/wk
No apparent upper threshold
No obvious best amount
No evidence of increased risk at high end

150-300 Min MPA @ 3.3 METs

Moore, et al. PLOS Medicine, November 2012
Leisure Time Physical Activity of Moderate to Vigorous Intensity and Mortality: A Large Pooled Cohort Analysis

N = 654,827
Deaths 82,000
Women = 56%
Median Age = 61 years
Follow-up median yrs = 10
Median MET-hrs/wk = 8
Ref. Group (0 METs) = 7.7%

Figure 2
Moore, et al. PLOS Medicine, November 6, 2012

Figure available in supplemental material to article

Natural Cubic Spline

Multivariate Adjusted

95% CIs

150-300 min/wk MPA @ 4 METs
Figure 3
Risk of selected health events by hours/week of moderate to vigorous physical activity

- All-cause mortality
- Depression, dementia
- Breast cancer
- Colon cancer
- Diabetes
- Hip fracture
- CVD, CHD, stroke

Relative Risk vs. Hours per week
How best to describe the amount of PA recommended by this guideline?

A. Is it the minimal amount of activity to obtain health benefit?
B. Is it the amount of activity that provides maximal benefit?
C. Is it the amount of activity that provides optimal benefit?
D. A “public health target” where many adults achieve substantial benefit

150 min/week of MPA (e.g., 3 mph walking @ 3.3 METs)

Moore, et al. PLOS Medicine, November 2012