
Physical Activity Knowledge

By: Nolan Gall

Exercise vs Physical Activity

Physical Activity: any bodily movement produced by skeletal muscles that results in energy expenditure.

Exercise: a subset of physical activity that is planned, structured, and repetitive and has as a final or an intermediate objective the improvement or maintenance of physical fitness.

Confusion

Organizations:

1995:

- Centers for Disease Control (CDC)
- American College of Sports Medicine (ACSM)

1996:

-Physical Activity and Health: A Report of the Surgeon General

2000:

-Surgeon General for Healthy People 2010

2008 Physical Activity Guidelines for Americans

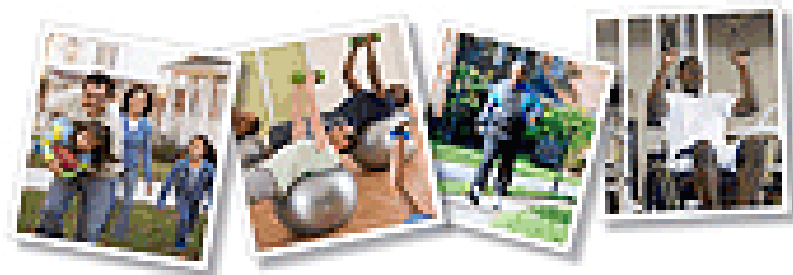
Issued by: US Department of Health and Human Services

Purpose:

“The Federal Government has never before issued comprehensive physical activity guidelines for the Nation. HHS is publishing Physical Activity Guidelines for the first time with the *2008 Physical Activity Guidelines for Americans*. **The Guidelines represent the first major review of the science on benefits of physical activity in more than a decade.**”

(hhs.gov)

2008 Physical Activity Guidelines for Americans



Be Active, Healthy, and Happy!

www.health.gov/pa/guidelines



Are We Active?

Only **3.5%** of Americans 20-59 years of age participate in physical activity for at least 30 min/day on at least 5 days/week

-(Troiano et al.)

Why should we be active?

Benefits

HIGHER QUALITY OF LIFE

Weight Control

Cardiovascular Disease Risk Reduction

Type II Diabetes Risk Reduction

Strengthen Bones and Muscles

Mental Health Improvements

Effect on Depression

"The small but significant treatment effect suggests that PA may play a role in the prevention and treatment of depression in young people."

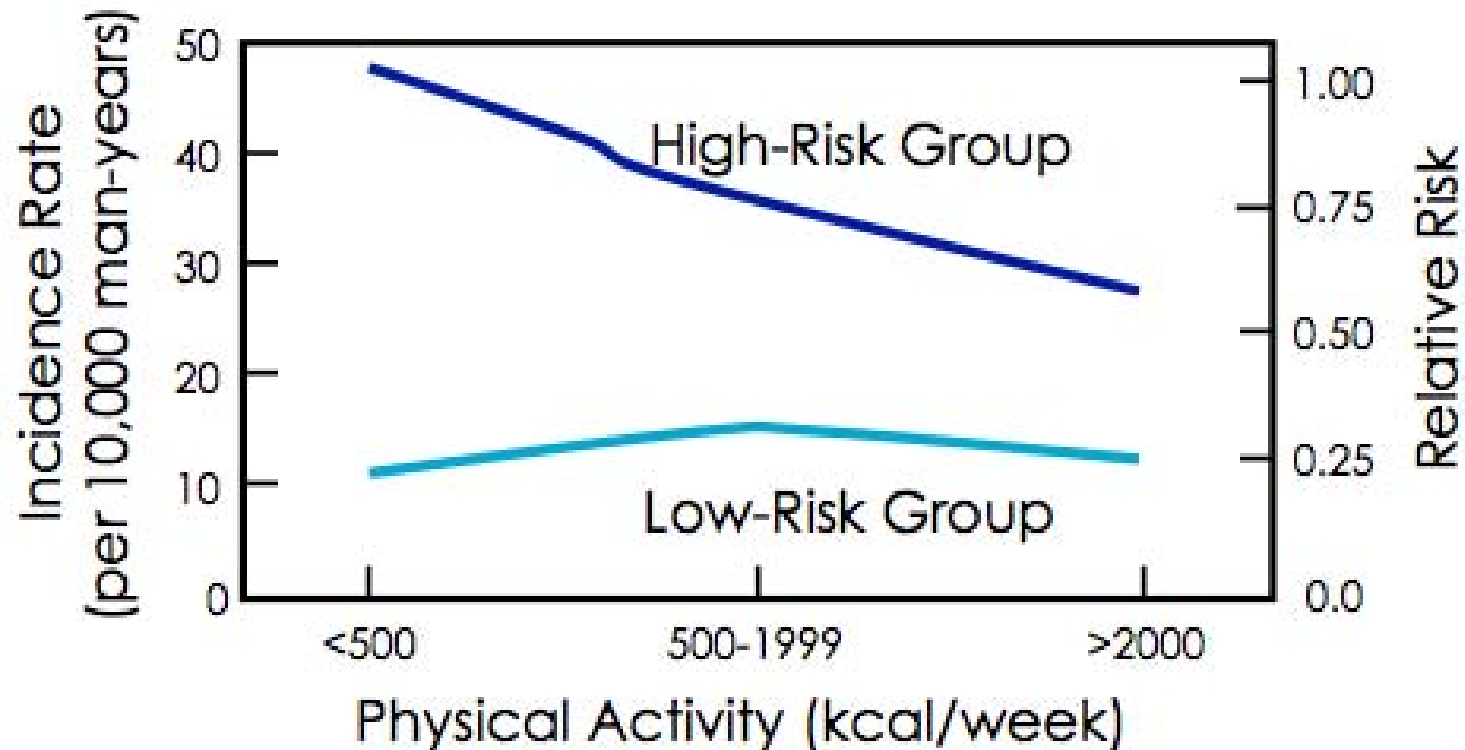
-Brown et al.

Effect on Hypertension

“Exercise generally decreases both systolic and diastolic values by five to seven points occurring as early as three to four weeks after increasing physical activity levels.”

–American College of Sports Medicine

Decreasing the Risk of Type Diabetes Through Physical Activity



- The high-risk group consisted of 2,634 men who had at least one of the following risk factors: a body mass index ≥ 25 , a history of hypertension, or a family history of diabetes. Type 2 developed in 135 of these men.
- The low-risk group consisted of 3,356 men not in the high-risk group; Type 2 developed in 67 of these men.

Helmich et al, N-Eng J Med, 325(3):147-152, 1991

My Purpose

-Assess the a baseline public knowledge of the government issued physical activity guidelines

Study Details

587 Respondents

11-item online questionnaire

61% Female 39% Male

Mean Age:29

Median Age:24

Mode Age: 22

Distribution Details

- Social Media
- Local Establishments
- Football Weekends
- 20\$ Gift Card Drawing



World Bar Codes

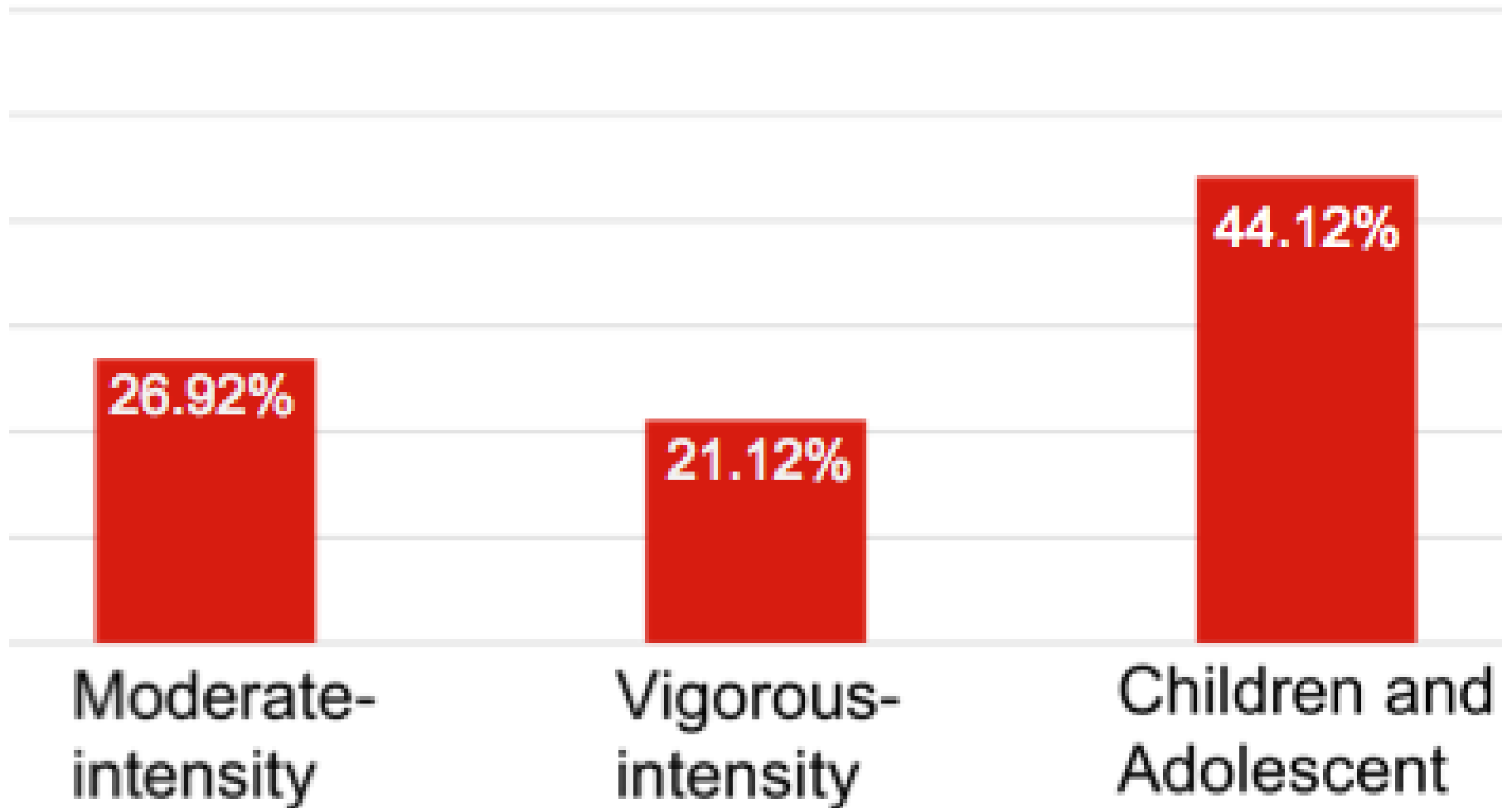
Results

Key Statistics

99.83% of participants believe physical activity is at least beneficial to ones health

37.65% of participants have not heard of government issued physical activity guidelines

Percentage of respondents who knew the recommendations



Children Guideline Marketing

CDC



Fuel Up to Play 60

What are the guidelines?

How can I meet the guidelines?

For Health Benefits

150 minutes of moderate intensity aerobic activity per week

75 minutes of vigorous intensity aerobic activity per week

Or an equivalent combination of both moderate and vigorous intensity physical activity

Muscle strength training on 2 or more days a week (working major muscle groups)

(CDC)

MET=Metabolic Equivalent

MET: the ratio of the rate of energy expended during an activity to the rate of energy expended at rest, given as a unit.

Resting metabolic rate for healthy adult:
3.5 ml/min/kg

Defining Intensity Levels

Moderate Intensity:

-3-5.9 METS

-5 or 6 on a 10 point scale

“It will make you breathe harder and your heart beat faster. You'll also notice that you'll be able to talk, but not sing the words to your favorite song.”

(CDC)

Moderate Intensity Activities

Walking Briskly

Bicycling slower
than 10 mph

Ballroom Dancing

General Gardening



Defining Intensity Levels

Vigorous Intensity:

- 6 or more METS

- 7 or 8 on a ten point scale

“Your heart rate will increase quite a bit and you'll be breathing hard enough so that you won't be able to say more than a few words without stopping to catch your breath.”

Vigorous Intensity Activities

Jogging/Running

Bicycling greater than 10 mph

Hiking uphill with a heavy backpack

Heavy Gardening
(continuous hoeing)



Muscle Strengthening

Examples:

- Lifting weights
- Working with Resistance bands
- Body weight exercises
- Heavy Gardening
- Yoga



Exercise is **NOT** Physical Activity

Live a MORE active life!

- Take the stairs
- Distant bathroom breaks



The Fun Theory