

# Optimal Aging Lightning Rounds

*Presented by:*

School of Medicine SMART's Wellness Task Force  
&  
The Institute for Sustainable Health & Optimal Aging



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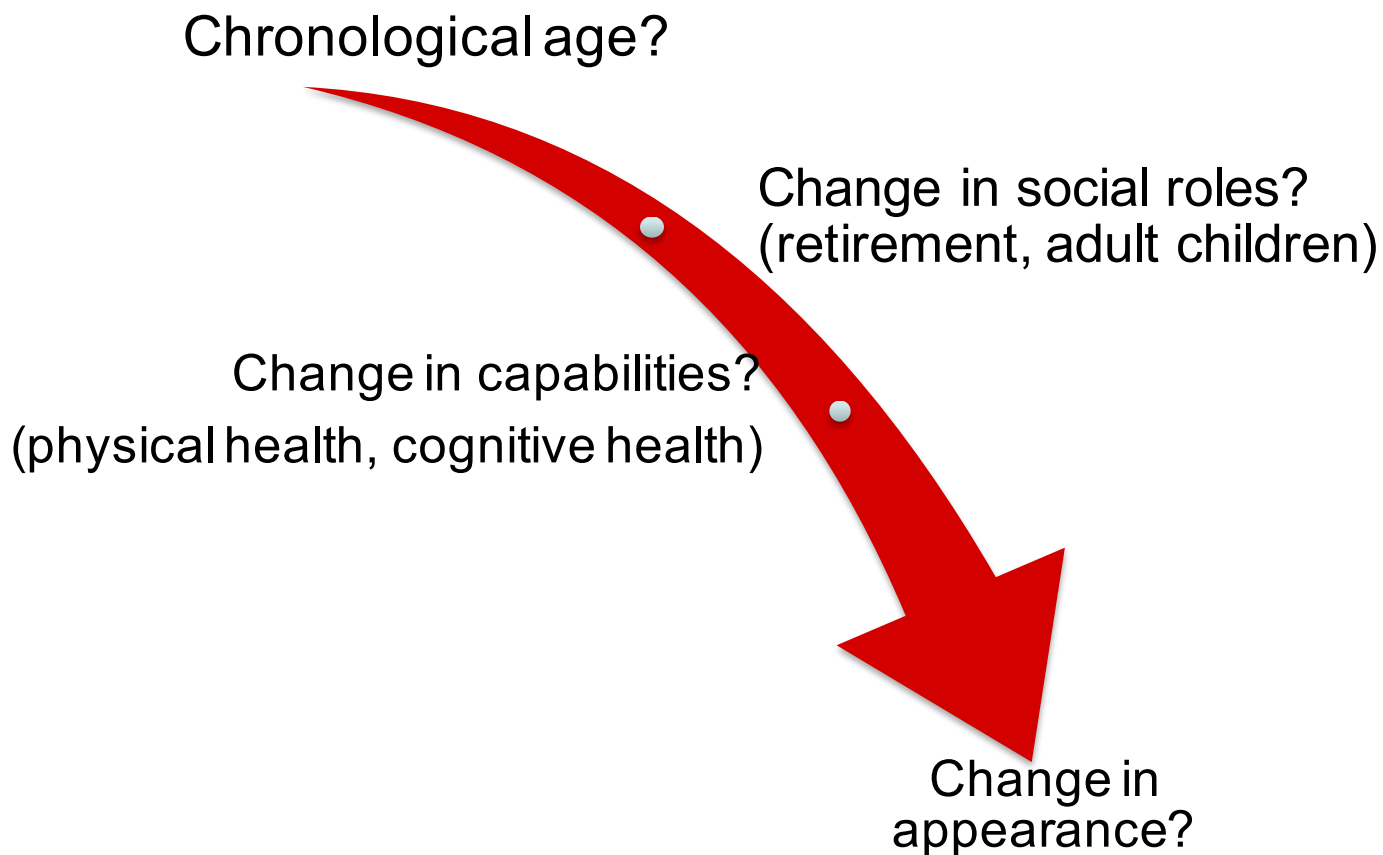


**Anna Faul, PhD, Executive Director of the Institute  
for Sustainable Health & Optimal Aging  
(Aging in General & Aging/Mental Health)**

- What does optimal aging and sustainable health mean to us?
- What is the role that mental health/behavioral health plays in our optimal aging journey
- The “Blue Zones”



# But what does aging really mean to you?



OR?

## When am I aging?



Doing old age is largely about what one has done all along (Loe, 2011)

## Operationalized Definition:

To age “optimally”, or “the capacity to function across many domains—physical, functional, cognitive, emotional, social, and spiritual—to one’s satisfaction and in spite of one’s medical conditions,” (Brummel-Smith, 2007).

# Optimal Aging



Physical wellness



Social wellness



Emotional wellness



Purposeful wellness



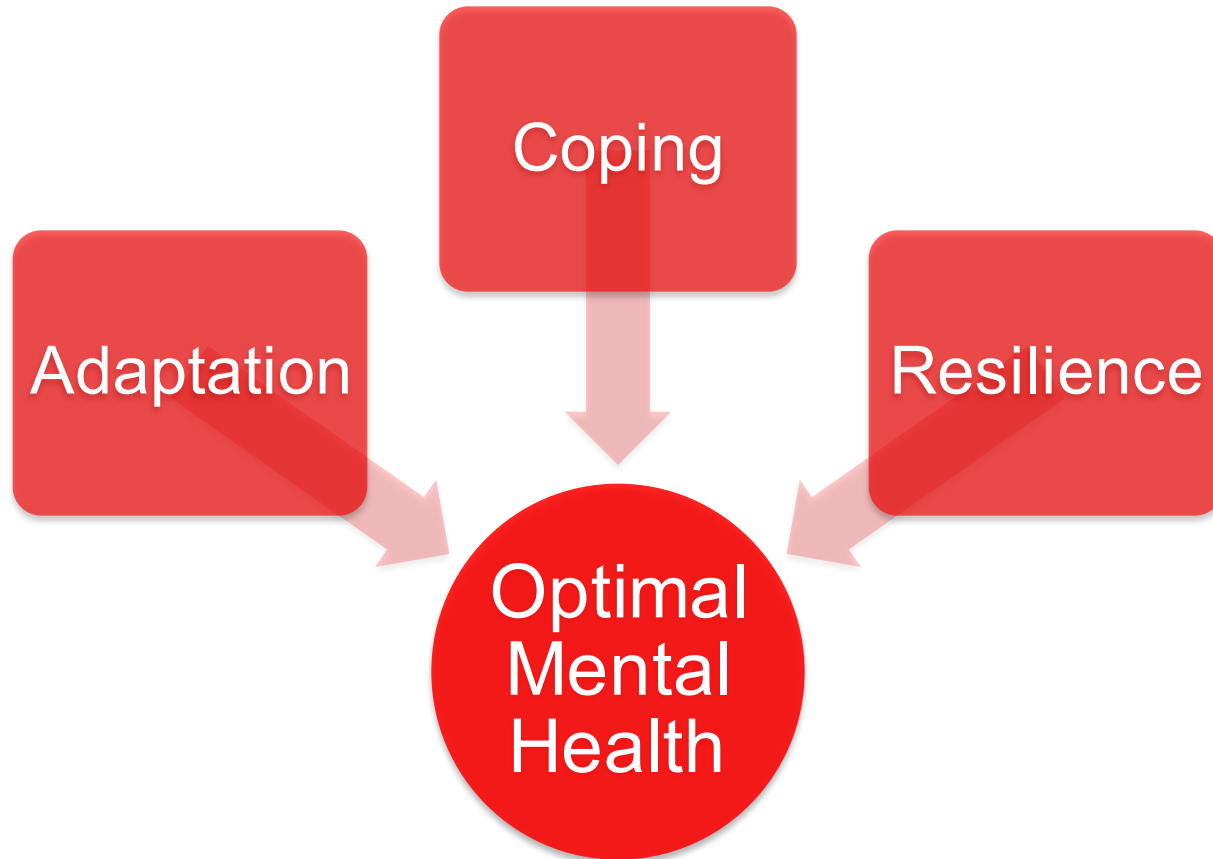
Spiritual wellness



Intellectual wellness



"IN THE ANTI-AGING CATEGORY, YOUR BODY  
HOLDS UP WELL BUT YOUR MENTAL OUTLOOK  
HAS YOU ACTING TOO OLD BEFORE YOUR TIME."







Friends even more important

Family important



Quality support plays an important role in good mental health

## Blue Zones



Ikaria, Greece



Sardinia, Italy

- Move naturally
- Know your purpose
- Kick back
- Eat healthy
- Drink in moderation
- Have faith
- Power of love
- Stay social



Okinawa, Japan



Louisville, KY





# Christian Furman, MD

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SCHOOL OF MEDICINE

## Optimal Aging

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# Leading Causes of Death – 65 y/o and older

- Heart Disease
- Cancer (Lung, Breast, Colon and Prostate)
- Stroke
- Chronic Lung Disease
- Pneumonia, Influenza
- Accidents

# Greatest Morbidity

- Arthritis
- Vision Problems
- Hearing Deficits
- Diabetes
- Alzheimer's Disease
- Osteoporosis
- Incontinence
- Falls

NCHS -- 1990

# Screening for Older Adults

- Mobility/Fall Risk Assessment – Get up and Go test
- Cognitive Screen – Mini-cog or MMSE
- Incontinence Screen
- Depression Screen – Geriatric Depression Scale (GDS)
- Nutrition Evaluation
- Osteoporosis Screen – DEXA
- ADL/IADL – Activities of Daily Living /Instrumental Activities of Daily Living
- Advance Care Planning Documents in Place – MOST form
- Polypharmacy – medication screen

# Vaccinations for Older Adults

- Shingles
- Pneumonia
- Influenza
- Tetanus



# Karen Newton, MPH, RD

Director, Health Promotion Office  
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# HEALTH PROMOTION

*Learn More. Live Well.*

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# Nutrition for Wellbeing & Optimal Aging

1. Five simple key concepts will get you above the chaos of confusing and conflicting nutrition information.
2. Decreasing inflammation is strategy for both optimal aging and reversing the effects of non-sustainable living.
3. To be fully charged: eat real food....plus move, sleep and connect.



□ **Five simple key concepts will get you above the chaos of confusing and conflicting nutrition information.**

1. Nutrient Density
2. Caloric Density
3. Portions match individual goals
4. Eat locally and sustainably grown
5. 80/20 decision guide

❑ **Decreasing inflammation is strategy for both optimal aging and reversing the effects of non-sustainable living. HOW?**

- Eat whole foods, mostly plants
- Minimize added fats and animal foods
- Minimize refined sugars and artificial sweeteners. Avoid sodas, “sports drinks,” and juices
- Chew!
- UofL *Smart Plate*

# UofL SMART PLATE™

*Eat Real Food\**



Drink water, tea, or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.

*The circles below represent foods that can be incorporated throughout the day but may not show up in every meal. The bigger the circle, the more you should consume!*



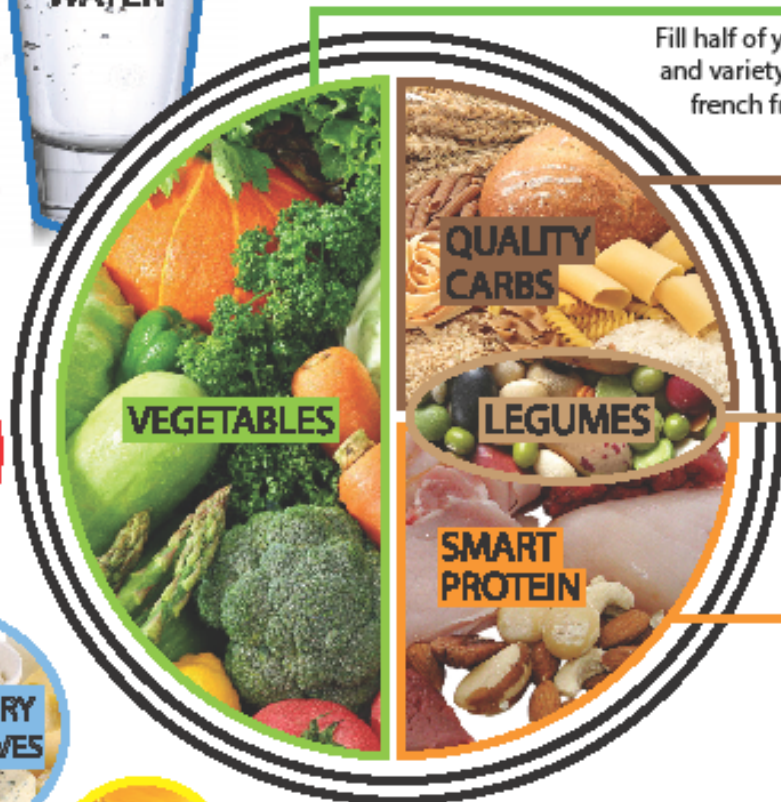
Eat a variety of whole fruits. Colors indicate nutrient density. "Juice" counts as a sugary drink.



Use as condiments, toppings and recipe ingredients. Add to cereal, smoothies, and coffee/tea.



Use oils sparingly for cooking and dressings. Substitute with broths and flavorful vinegars. Limit butter. Avoid trans fats.



Fill half of your plate with vegetables. The more color and variety, the better; minimize white potatoes and french fries. Raw, lightly cooked, fresh, frozen, and canned all provide vital nutrients.

Eat a variety of whole grains: rice, quinoa, freekeh, oatmeal, polenta, and whole-wheat bread and pasta. Limit refined grains (like white rice and white bread).

Legumes, such as lentils and beans, provide both quality carbohydrates and protein.

Choose fish, poultry, nuts, and legumes; limit red meat; avoid bacon, cold cuts, and other processed meats.

\* See back side to explore how to make the smart plate work for you

\*\*UofL Smart Plate adapted from the designs by the Harvard School of Public Health [www.hsph.harvard.edu/nutritionsource](http://www.hsph.harvard.edu/nutritionsource)

## ☐ Eat real food...plus move, sleep and connect

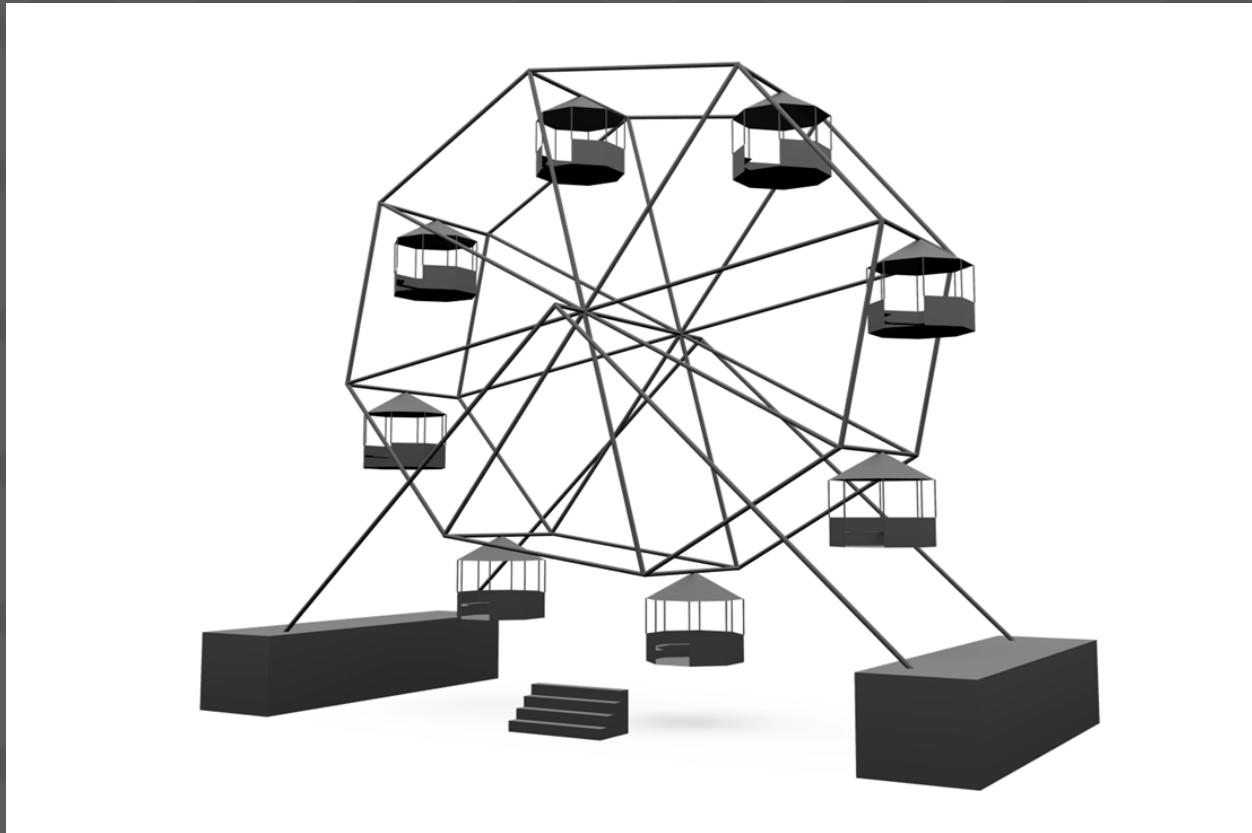
### Inspiration!

- ✓ Tom Rath's books: *Eat, Move, Sleep* and *Are You Fully Charged?*
- ✓ *CSPI Nutrition Action Healthletter*
- ✓ *UofL Smart Plate*

### Action!

- ✓ Fill your Basic Pantry and BP Recipe Box
- ✓ Employ the 5 Key Concepts

# You Can See Clearly Now



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# Paul Salmon, PhD

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# HEALTHY AGING: PHYSICAL ACTIVITY & EXERCISE

Paul Salmon & Patricia Benson  
Get Healthy Now  
Psychological Services Center  
Department of Psychological & Brain Sciences  
University of Louisville



# HEALTHY AGING

- Freedom from major chronic disease
- No major impairment, cognitive function
- No major impairment, physical function
- Good mental health

*“Sustained physical activity in older age is associated with improved overall health. Significant health benefits were even seen among participants who became physically active relatively late in life.”*

Source: Hamer, Lavoie & Bacon (2014) English Longitudinal Study

# ACSM: EXERCISE & PHYSICAL ACTIVITY FOR OLDER ADULTS

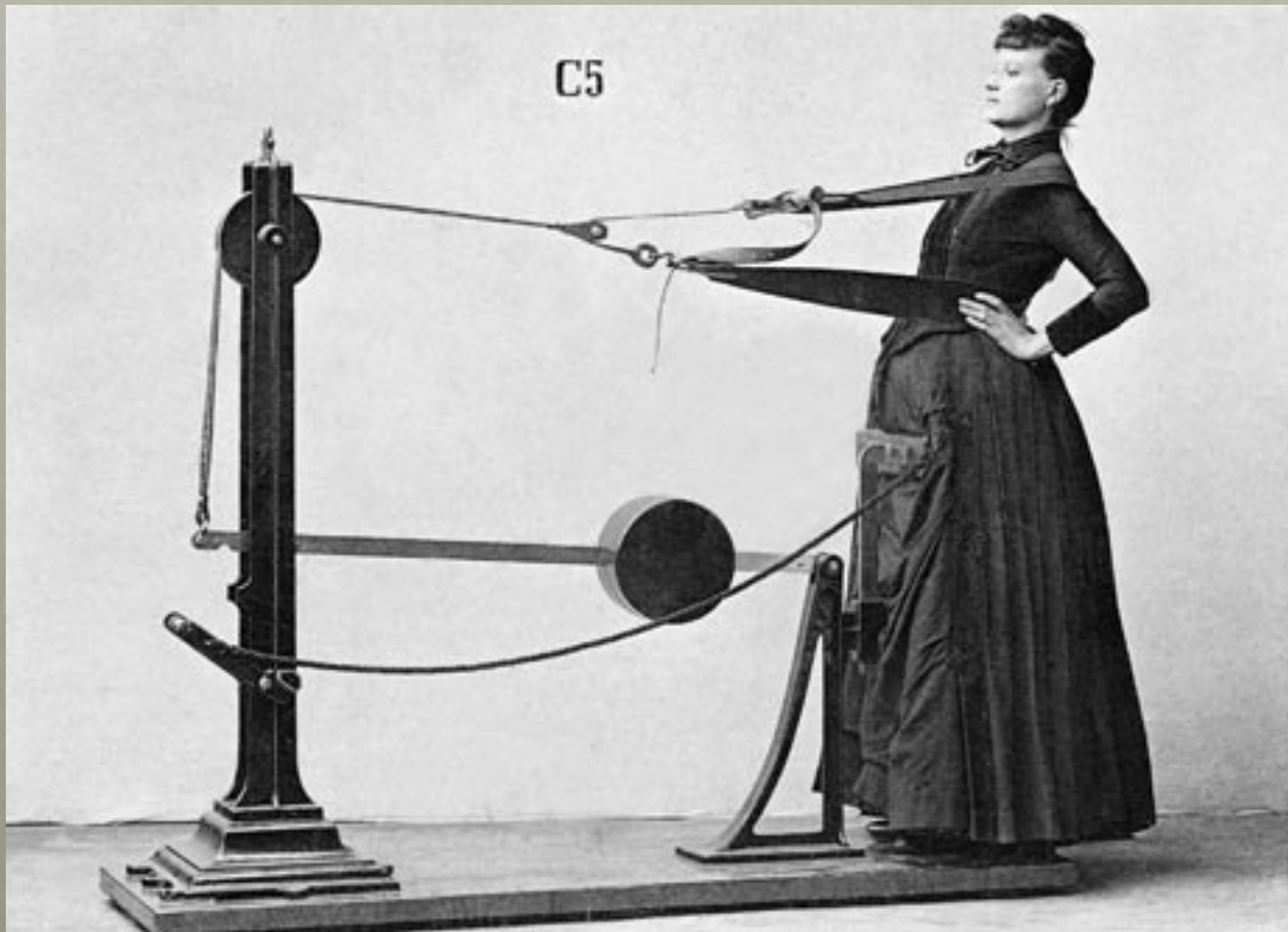
- US population  $\geq 65$  will exceed 70M by 2030
- Age  $\geq$  will be 85 fastest growing population segment
- Older persons show (80's, 90's) show positive adaptation to:
  - Endurance training (VO<sub>2</sub> max, cardiac output, AVO<sub>2</sub> diff)
  - Strength training: offset muscle mass loss & strength
- Added benefits:
  - Improved bone health/reduced risk, osteoporosis
  - Postural stability, increased flexibility, range of motion
  - Cognitive & affective factors
  - Increased longevity

# ACSM / AHA PHYSICAL ACTIVITY GUIDELINES: ADULTS

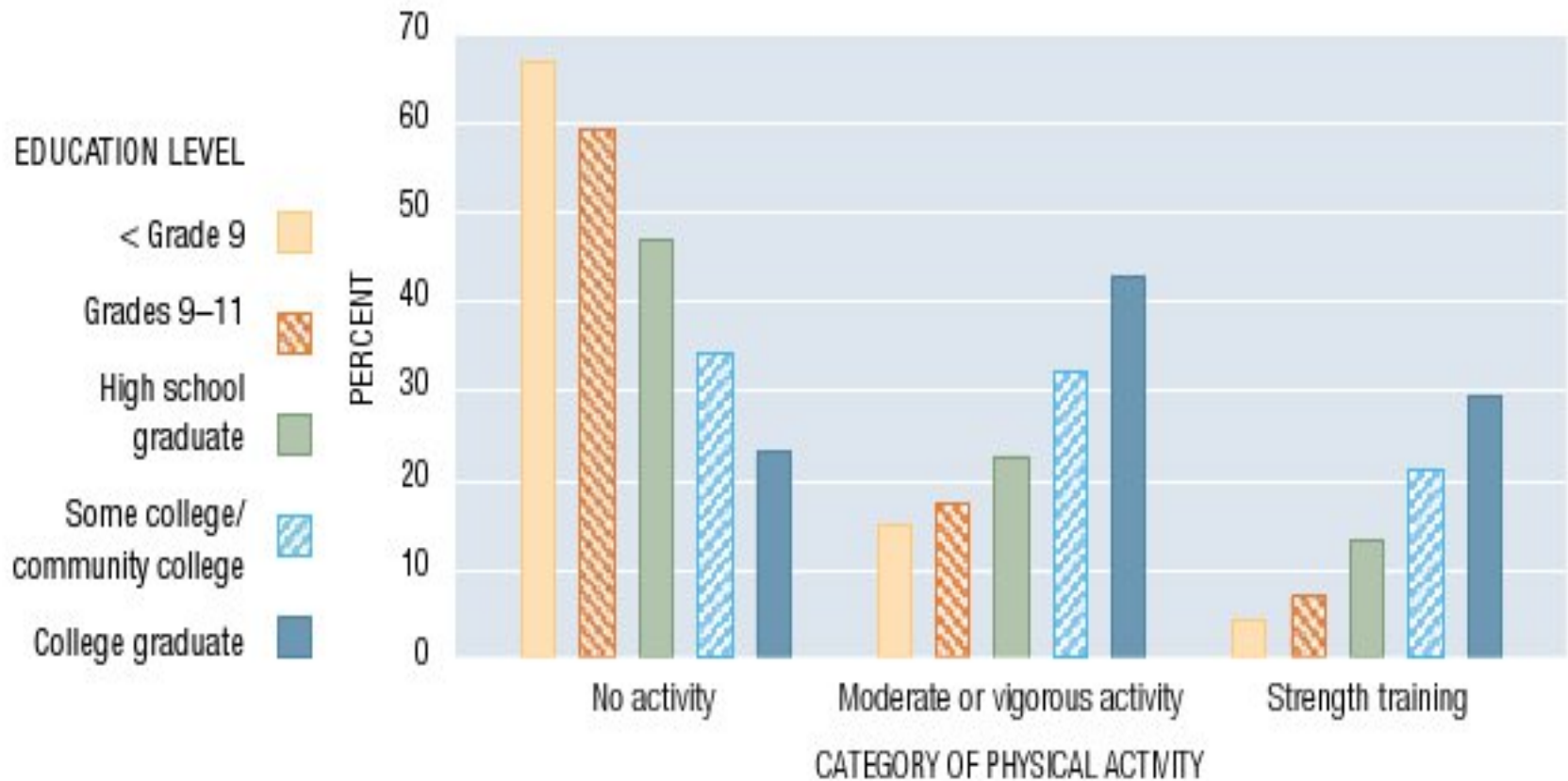
- **Cardiorespiratory activity: 150 minutes / week (30min/day)**
  - 30-60 minutes moderate intensity activity x 5 days/week
  - 20-60 minutes vigorous intensity activity x 3/week
  - Single or 10-minute sessions
  - Some activity is better than none!
- **Resistance training:**
  - 2-3 days/week, major muscle groups, 2-4 sets per exercise
- **Flexibility:**
  - 2-3 days/week to improve ROM; 10-30 second stretches x 2-4
- **Neuromotor:**
  - (functional fitness), x 2-3 times/week



# (1) ACKNOWLEDGE AND RESPOND TO AGE-RELATED CHANGES WITH GRACE & SKILL



# EDUCATION & PHYSICAL ACTIVITY



# HEALTHY AGING & PHYSICAL ACTIVITY: EPIDEMIOLOGY

- **San Francisco Longshoremenn Study**
  - Paffenbarger et al (1986)
- **Harvard Alumni Study**
  - Paffenbarger et al (1986)
- **Nurses Health Study**
  - Weuve et al (2004), Physical activity (walking) and cognitive function
  - Sun et al (2010) midlife activity & successful survival
- **English Longitudinal Study**
  - Hamer et al (2013)

# PHYSICAL ACTIVITY & HEALTH: OLDER ADULTS (CDC)

- Loss of strength/stamina attributed to aging in part caused by reduced physical activity
- Inactivity increases with age. By age 75, about 1 in 3 men and 1 in 2 women engage in no physical activity
- Among adults  $\geq 65$ , walking and gardening or yard work are, by far, the most popular physical activities
- Social support from family & friends consistent and positively related to regular physical activity



## (2) FOCUS ATTENTION IN THE PRESENT MOMENT WITH GRATITUDE & AWE





# BENEFITS OF STAYING ACTIVE THROUGHOUT ADULTHOOD

## REDUCE:

- mortality & morbidity rates
- risk of diabetes, hypertension, colon cancer, heart disease
- Blood pressure in hypertension
- depression, anxiety, negative mood

## ENHANCE:

- strength, endurance, flexibility,
- positive affect
- body image, self-efficacy
- cognitive function
- bone, muscle, joint health
- activities of daily living

# PHYSICAL ACTIVITY PROTECTS AGAINST COGNITIVE DECLINE

- **Acute (single session) physical activity** raises cardiac output, increases cerebral blood flow
- **Chronic (repeated) activity:**
  - Facilitates cerebral tissue synthesis via increased angiogenesis, neurogenesis, synaptogenesis, & NT synthesis
  - Increases production, anti-oxidants
  - Increases volume, gray and white matter in prefrontal cortex, temporal cortex, and hippocampus
- Coordination activity stimulates cognitive function

Paillard, T. (2015) Preventive effects of regular physical exercise against cognitive decline

# (3) BE CARE-FUL (FULL OF CARE) IN HOW YOU TREAT YOURSELF AND OTHERS





# EXERCISE WITH ACCEPTANCE

- Describe what you do without judgment or elaboration
- Free yourself from comparisons with others
- Be grateful and appreciate what you can do and have done
- Accept and learn from being injured or inactive

Source: Urban Mindfulness, Jonathan Kaplan

# THANK YOU FOR YOUR TIME AND ATTENTION!

*“Start where you are. Use  
what you've got. Do what  
you can.”*

- Arthur Ashe

