# Rethinking 'exercise' to overcome barriers to physical activity

#### **Professor David Dunstan**

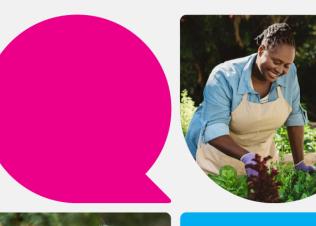
Baker-Deakin Department of Lifestyle and Diabetes

Deakin University & Baker Heart and Diabetes Institute

Tuesday 5<sup>th</sup> September 2023



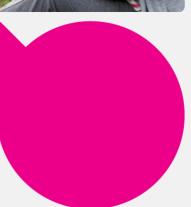
















- Importance of having a 'whole of day' approach to physical activity promotion
- Excessive sitting a newly recognised health risk factor
- Physical activity and sitting time striking the right balance
- Re-thinking approaches to physical activity promotion
- Tips and strategies for promoting more movement, more often

# Regular exercise is good for us – in many ways



- Improved cardiorespiratory and muscular fitness
- Lower risk of type 2 diabetes
  - Lower risk of metabolic syndrome
- Lower risk of early death

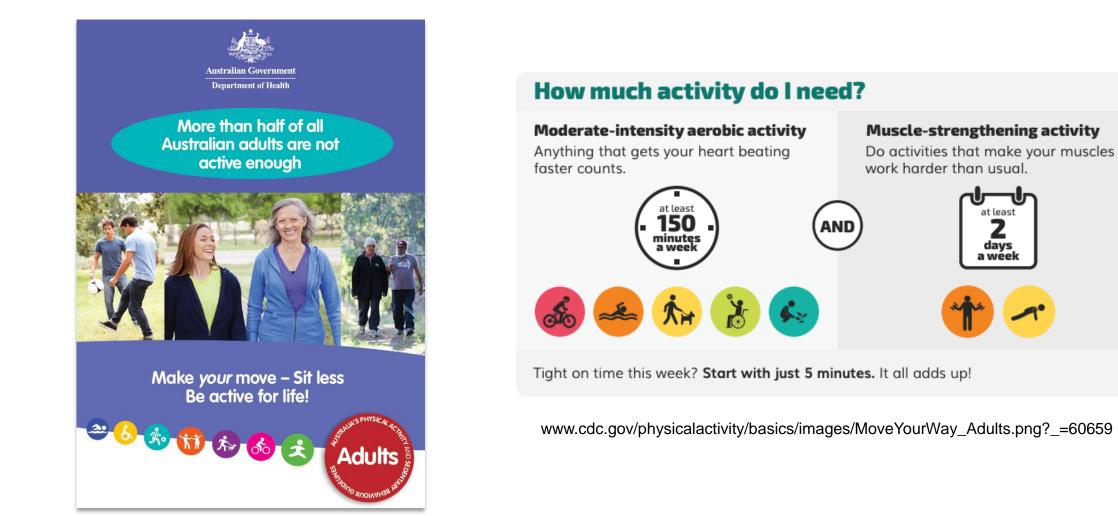
>= 150 min/week moderate/vigorous PA = **ACTIVE** 

< 150 min/week moderate/vigorous PA = **INSUFFICIENTLY ACTIVE** 

# **Physical Activity Guidelines**

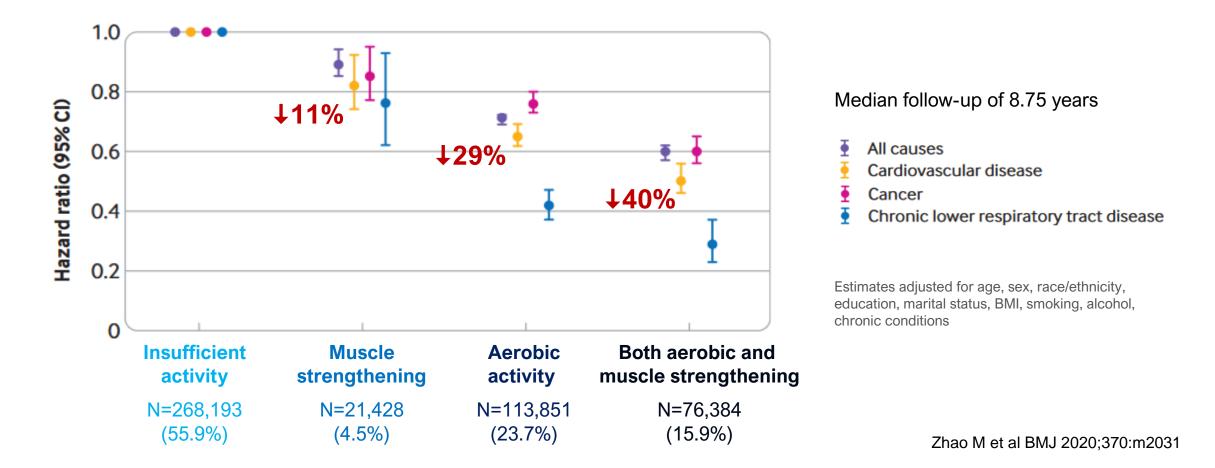






### Benefits of meeting the PA Guidelines

US National Health Interview Survey (1997-2014); linkage to Death (31 Dec 2015); (479,856 adults)



### Australia's Physical Activity Report Card

55% of adults in Australia did <u>not</u> meet the physical activity guidelines in 2017-18

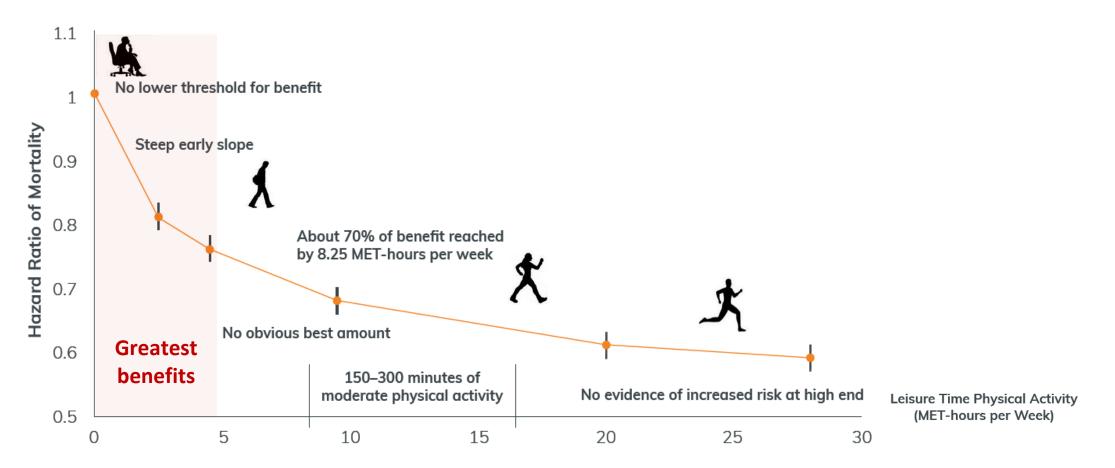
27% of 65 + year olds do <u>not</u> participate in any physical activity each week

Physical inactivity costs Australia more than \$13 billion each year in health care costs

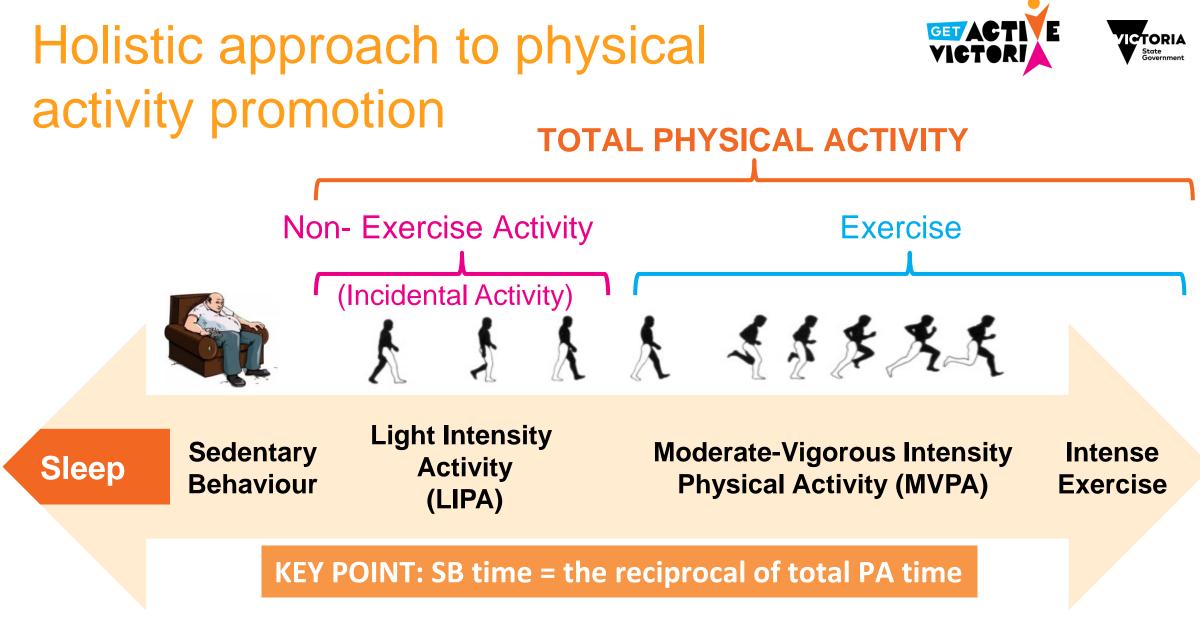
Women, older adults and people living with chronic health conditions or disability are the <u>least active</u>

# Something is better than nothing

Every single minute counts!

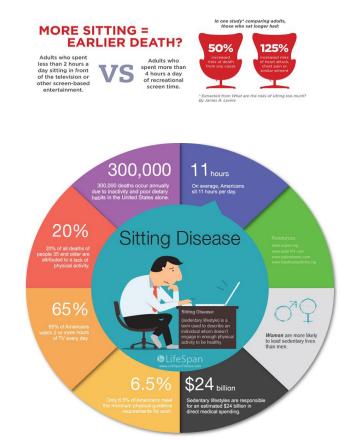


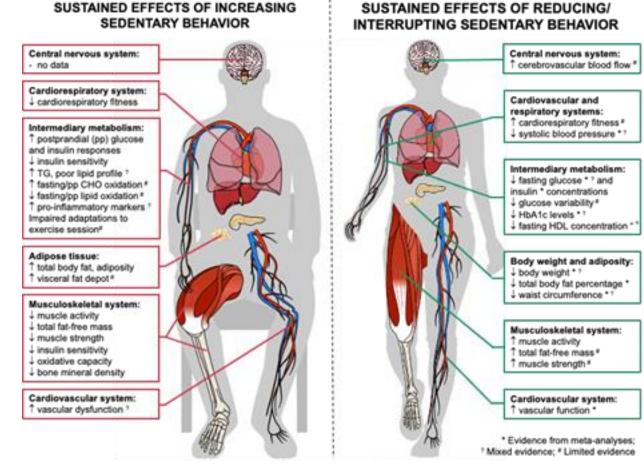
U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans, 2nd edition. Washington, DC: U.S. Department of Health and Human Services; 2018



Adapted from: Tremblay MS et al. Appl. Physiol. Nutr. Metab. 2010; 35: 725-740

### Excessive Sitting A newly recognised health risk factor

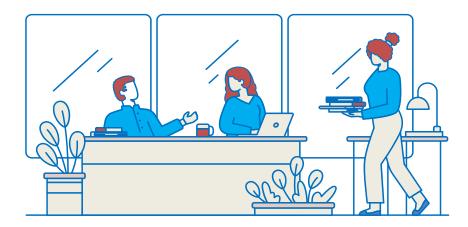




Pinto A. et al. (2023) Physiology Reviews 103(4): 2561-2622

### Sitting = High Volume Behaviour



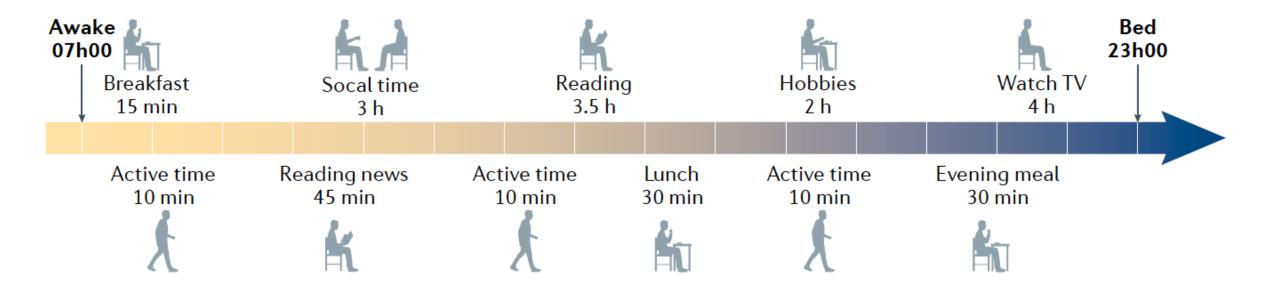




### **15 <sup>1</sup>/<sub>2</sub> Hours!** The 'Active Couch Potato'

CTORIA

State

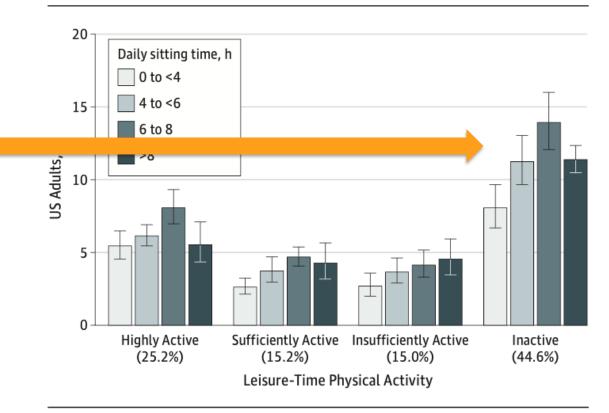




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### Inactive & High Sitting Time A high priority group for intervention

Figure. Joint Distribution of Self-Reported Sitting Time and Leisure-Time Physical Activity Among US Adults, NHANES, 2015-2016



Data are percentage of US adults who reported each joint category of daily sitting time and leisure-time physical activity. Error bars indicate 95% confidence intervals. NHANES indicates National Health and Nutrition Examination Survey.

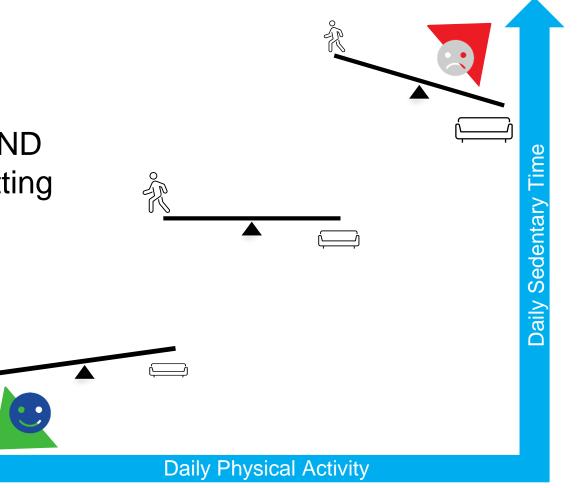


Ussery EN, Fulton JE et al. (2018) JAMA 320(19):2036--2038

A Simple Message Achieving the 'Right' Balance

> Physical activity benefits DEPEND on how much time you spent sitting

Sitting time risks DEPEND on how physically active you are

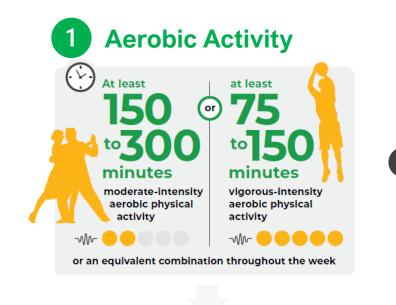






### **2020** WHO Guidelines on Physical Activity and Sedentary Behaviour for Adults | Older Adults | Chronic Disease

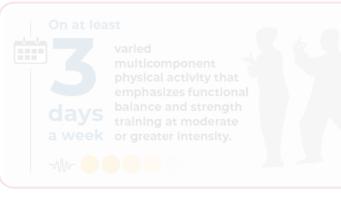






### 2 Muscle Strengthening





#### Older adults 65+ | Chronic Disease

3 Sedentary Behaviour

Minimize and break up long periods of sitting

### **EVERY MOVE COUNTS**

Being active has significant health benefits for hearts, bodies and minds, whether you're walking, wheeling or cycling, dancing, doing sport or playing with your kids.

WH**O** guidelines on physical activity and sedentary behaviour (2020). For more information, visit: **www.who.int/health-topics/physical-activity** 

Improving Health Behaviour Risk				During a usual 24-hour day, approximately how many hours do you spend sitting? Hours of sitting per day				
Screening			ı 	<4	4–6	6-8	>8	
	During a usual 24-hour day, approximately how much time (minutes) do you spend doing physical activity?	activity per day	>60 30–60	Low Low	Low Low– medium	Low Low- medium	Low Low- medium	
Risk of death		cal						
LowEqivalent risk to referenceLow to medium1−15% increased riskMedium≥15 to <30% increased risk	ſ	es of physical activity	5–29	Low– medium	Medium	Medium	Medium	
Medium to high≥30 to <45% increased riskHigh≥45% increased risk		Minutes	<5	Medium	Medium– high	Medium– high	High	

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### **Meeting Guidelines** A Tall Order For Many People



At least at least 5 (or) to **50** to minutes minutes moderate-intensity vigorous-intensity aerobic physical aerobic physical activity activity -M~or an equivalent combination throughout the week

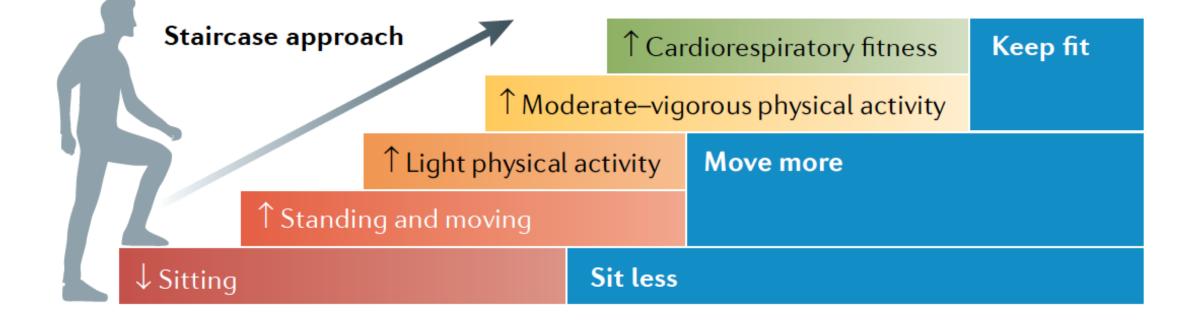




https://images.snapwi.re/d718/5d189e4c0eb800ba406468 92.w800.jpg

### A 'Staircase Approach' To Physical Activity Promotion



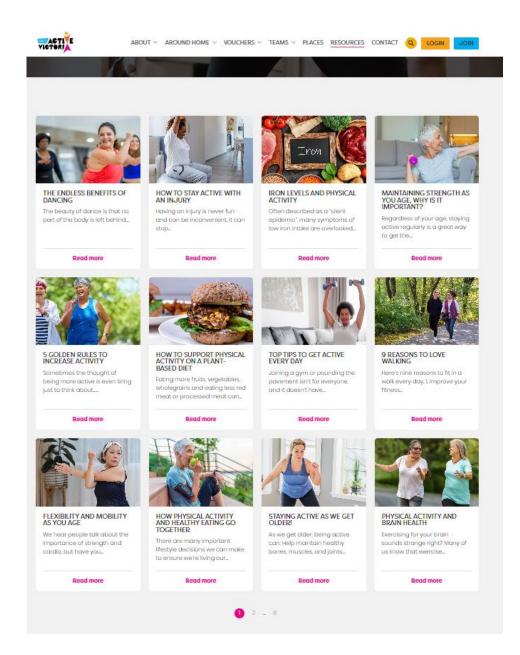


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Tips for spreading physical activity across the day







# Tips & Ideas for Adults



Think about when and where you can be physically active. Making small changes to your daily routine can make a big difference!

### Sneak activity into your day!

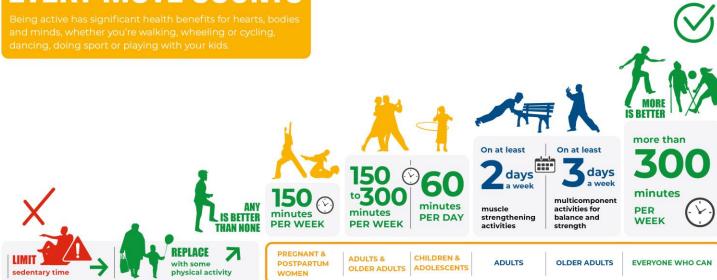
- After putting the bins out, take a walk to the end of the street and back
- Take a walk around the oval/pitch while waiting for your child to finish training
- Get off your chair and walk to speak to a colleague rather than emailing/messaging
- Working at home? Take a quick walk outside while you are waiting for the kettle to boil
- When tidying the house put things away in multiple short trips, rather than one big haul
- Walk around when talking on your mobile phone





### Take-home message – Every Move Counts!

### **EVERY MOVE COUNTS**





## Thanks!



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#### &

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### *Life is like riding a bicycle. To keep your balance, you must keep moving'* Albert Einstein