

# Exercise Right: Tips about Exercise, Aging and Your Health



“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”

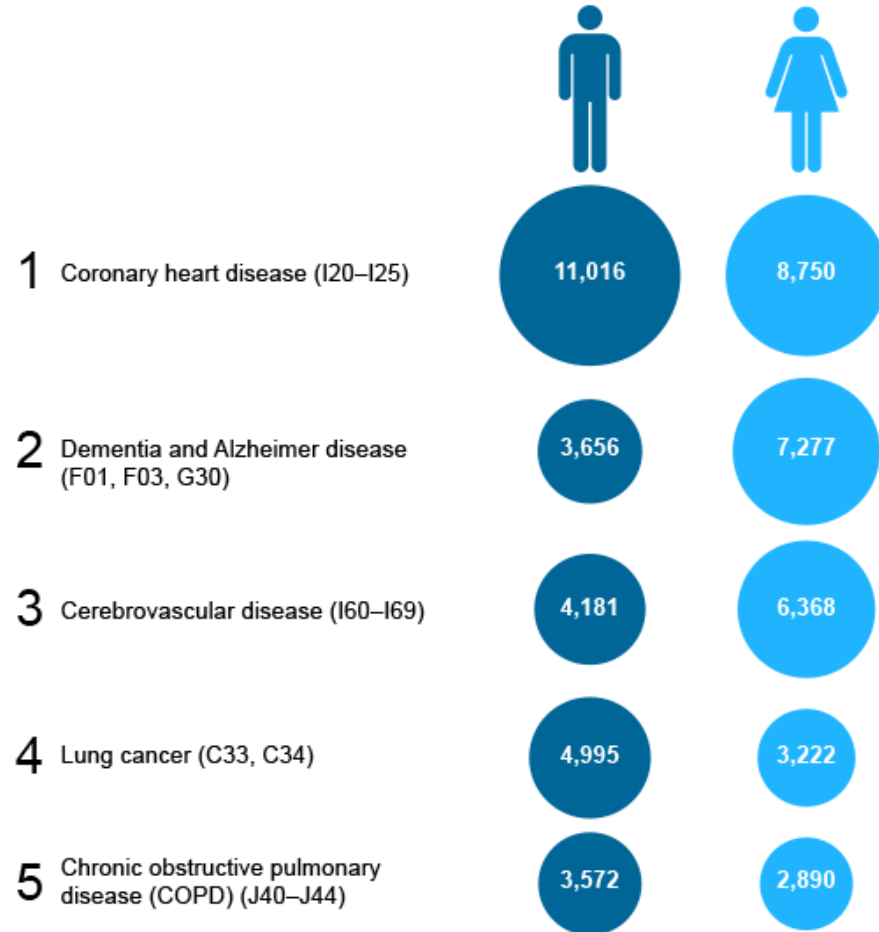


**Robert Robergs**, PhD, ESSAM, AEP, EPC, FASEP

Associate Professor: Exercise Science  
School of Exercise & Nutrition Sciences  
Faculty of Health  
QUT

# Current Killers. What do we know?

Figure 1: Leading underlying causes of death by sex, 2013



**“Eat less, exercise more and alter your genetic code with the DNA of thin parents.”**

<http://www.aihw.gov.au/deaths/leading-causes-of-death/#leading-age>

# Bigger Picture

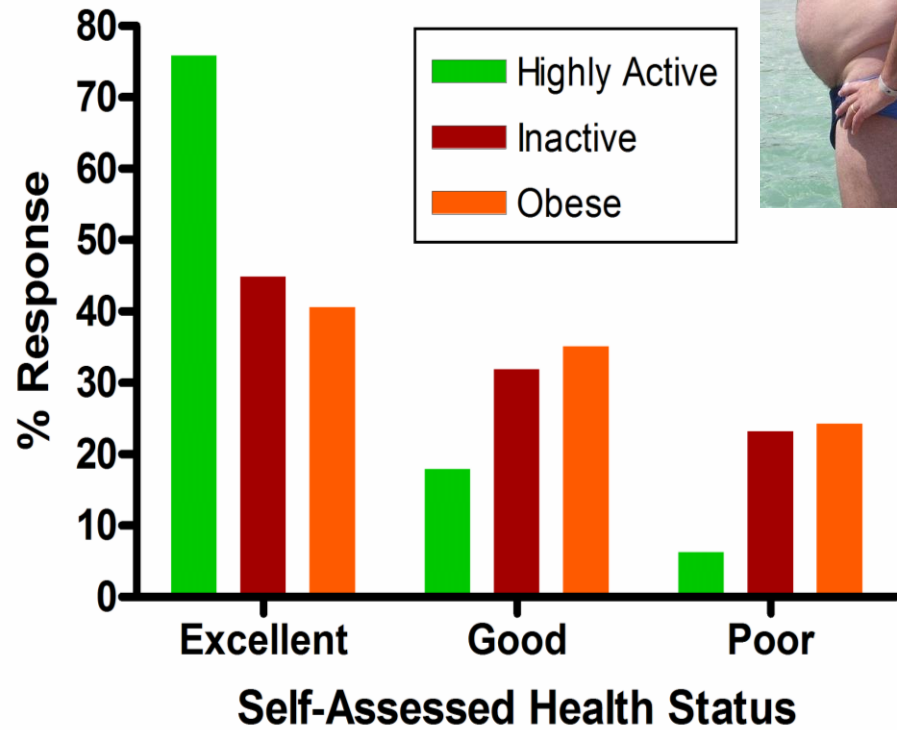


Figure 2: Leading underlying causes of death in Australia by age group, 2011–2013

	1st	2nd	3rd	4th	5th
Age < 1	Other Perinatal & congenital	Other SIDS	Other Ill-defined causes	External Accidental threats to breathing	Other Selected metabolic disorders
Age 1–14	External Land transport accidents	Other Perinatal & congenital	Cancer Brain cancer	External Accidental poisoning	Other Cerebral palsy & related
Age 15–24	External Suicide	External Land transport accidents	External Accidental poisoning	External Assault	External Event of undetermined intent
Age 25–44	External Suicide	External Accidental poisoning	External Land transport accidents	Circulatory Coronary heart disease	Cancer Breast cancer
Age 45–64	Circulatory Coronary heart disease	Cancer Lung cancer	Cancer Breast cancer	Cancer Colorectal cancer	External Suicide
Age 65–74	Circulatory Coronary heart disease	Cancer Lung cancer	Respiratory COPD	Circulatory Cerebrovascular disease	Cancer Colorectal cancer
Age 75–84	Circulatory Coronary heart disease	Circulatory Cerebrovascular disease	Other Dementia & Alzheimer disease	Cancer Lung cancer	Respiratory COPD
Age 85–94	Circulatory Coronary heart disease	Other Dementia & Alzheimer disease	Circulatory Cerebrovascular disease	Respiratory COPD	Circulatory Heart failure
Age 95+	Circulatory Coronary heart disease	Other Dementia & Alzheimer disease	Circulatory Cerebrovascular disease	Circulatory Heart failure	Respiratory Influenza & pneumonia

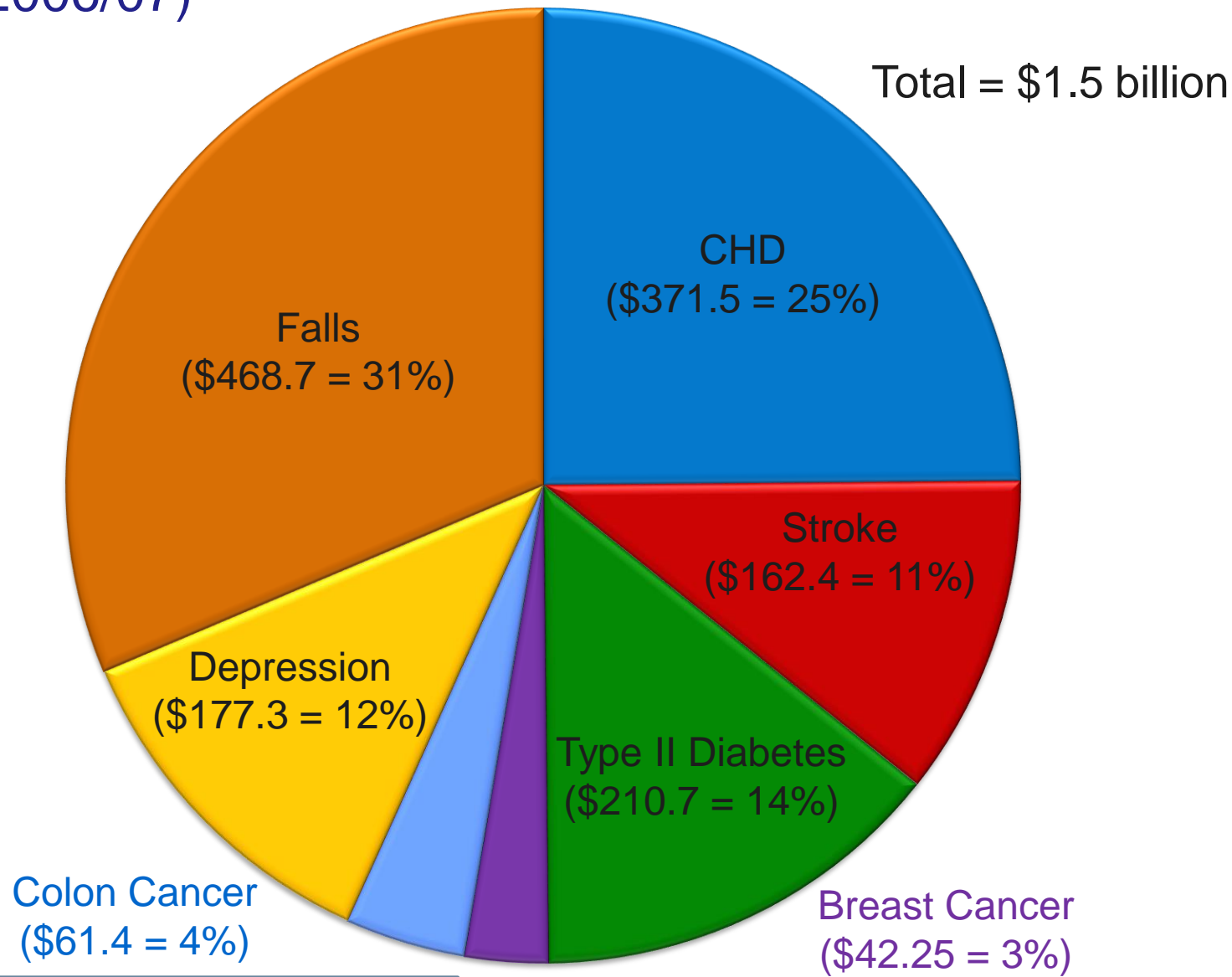


**Table 1: Risk factors for developing CVD, type 2 diabetes or CKD**

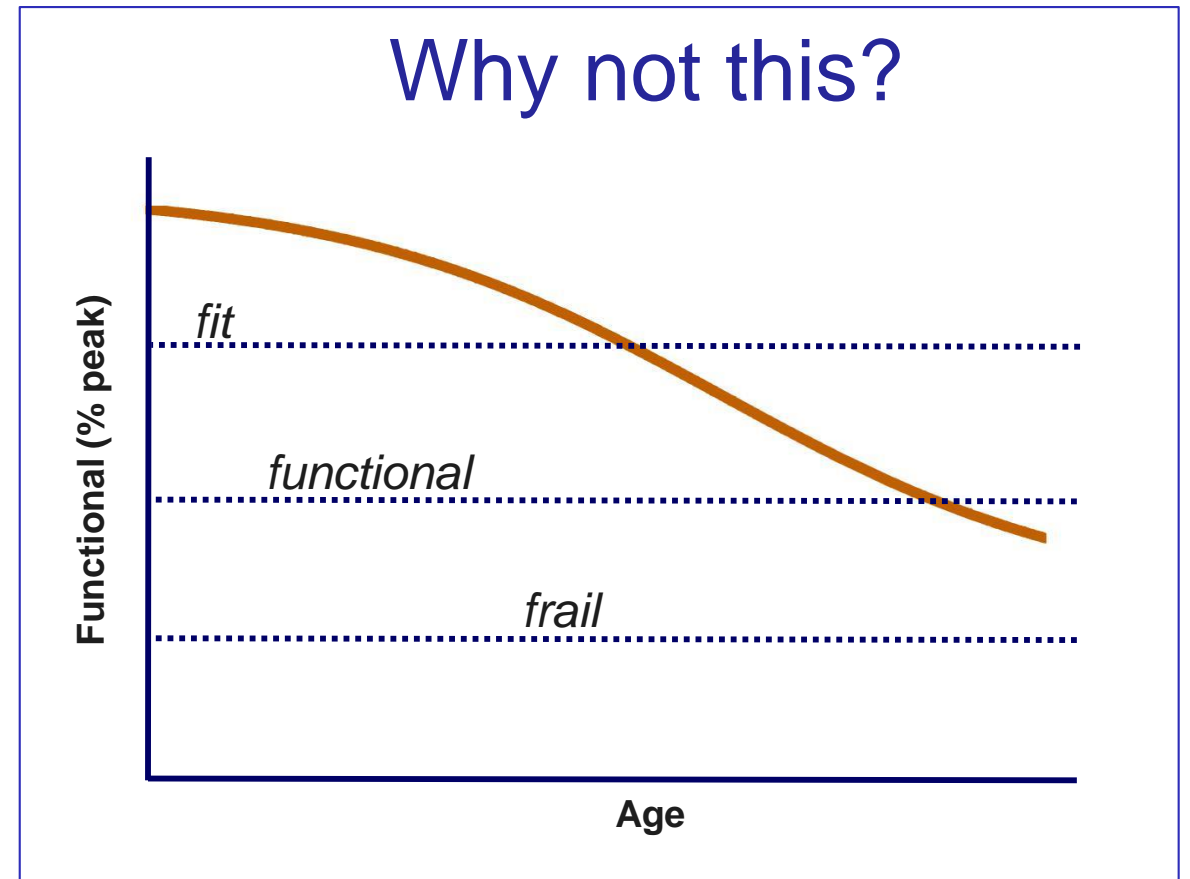
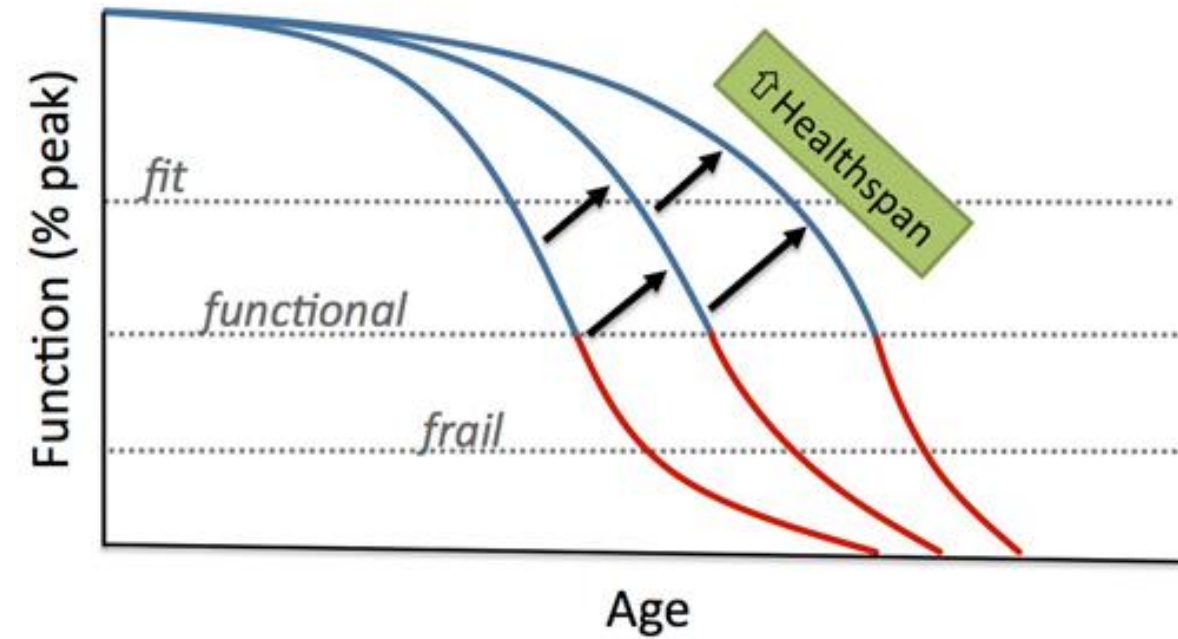
	CVD	Type 2 diabetes	CKD
<b>Behavioural risk factors</b>			
Tobacco smoking	✓	✓	✓
Insufficient physical activity	✓	✓	✓
Excessive alcohol consumption	✓		?
Inadequate fruit and vegetable consumption	✓	✓	✓
<b>Biomedical risk factors</b>			
→ Overweight and obesity	✓	✓	✓
→ High blood pressure	✓	✓	✓
→ Dyslipidaemia	✓	✓	
→ Impaired glucose regulation	✓	✓	✓

# Impact of Physical Inactivity to Gross Costs Across Common Medical Conditions (2006/07)

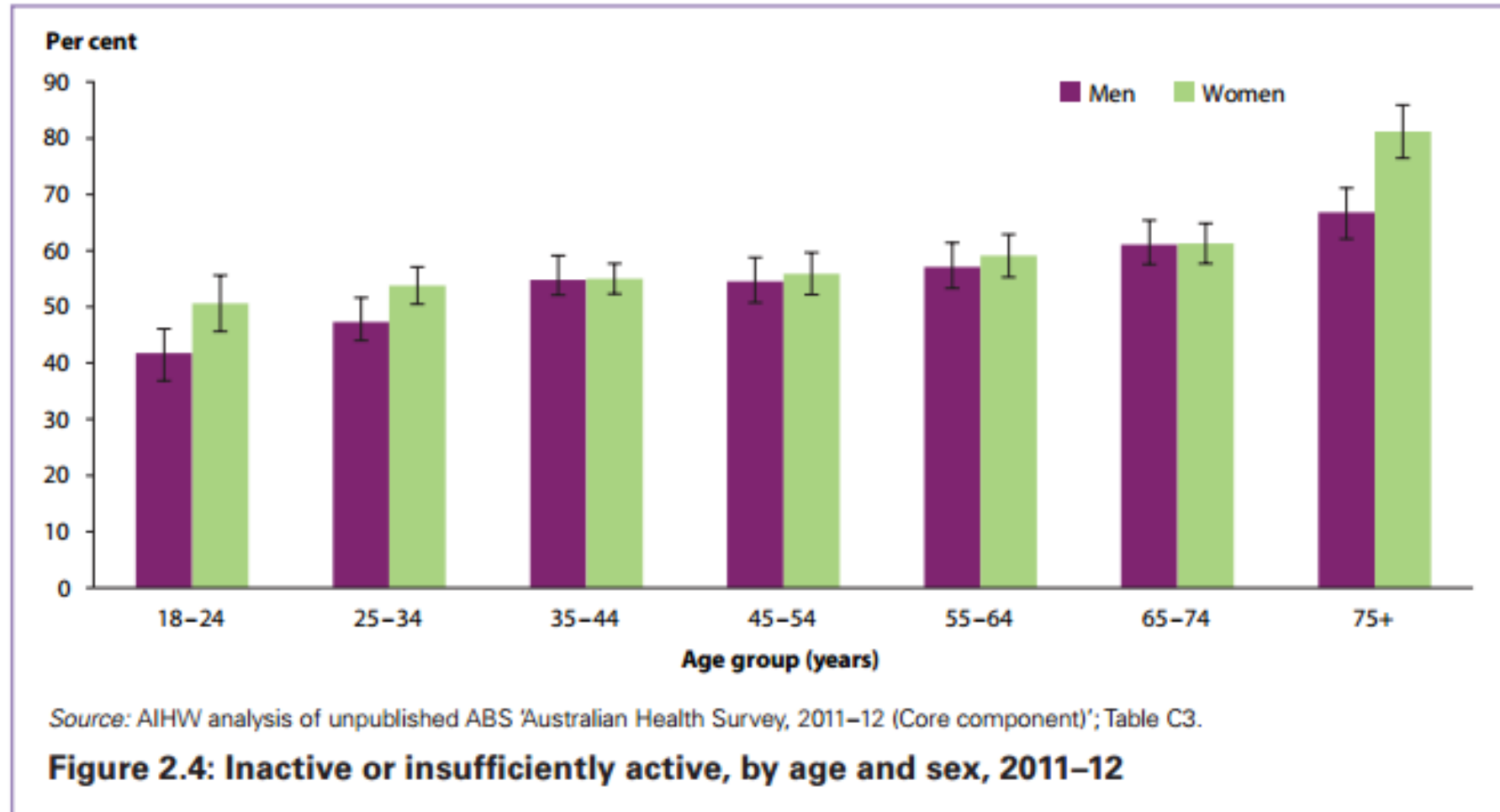
(\$millions)



# What is the rate of our demise?



# Why does aging coincide with sedentary living?



# Exercise Training

<http://www.health.gov.au/internet/main/publishing.nsf/content/health-publth-strateg-phys-act-guidelines#apaadult>

## What do we know?

Australia's Physical Activity and Sedentary Behaviour Guidelines

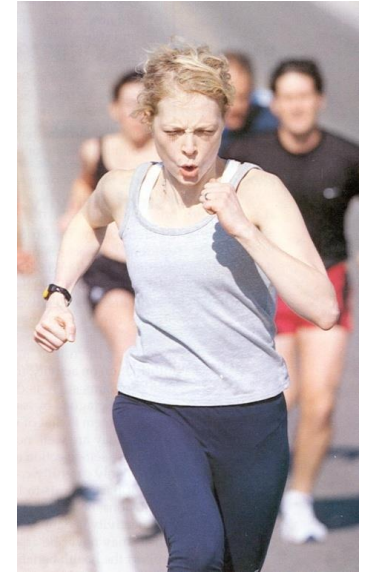
### 18-64 years

- Doing any physical activity is better than doing none. If you currently do no physical activity, start by doing some, and gradually build up to the recommended amount.
- Be active on most, preferably all, days every week.
- Accumulate 150 to 300 minutes (2 ½ to 5 hours) of moderate intensity physical activity

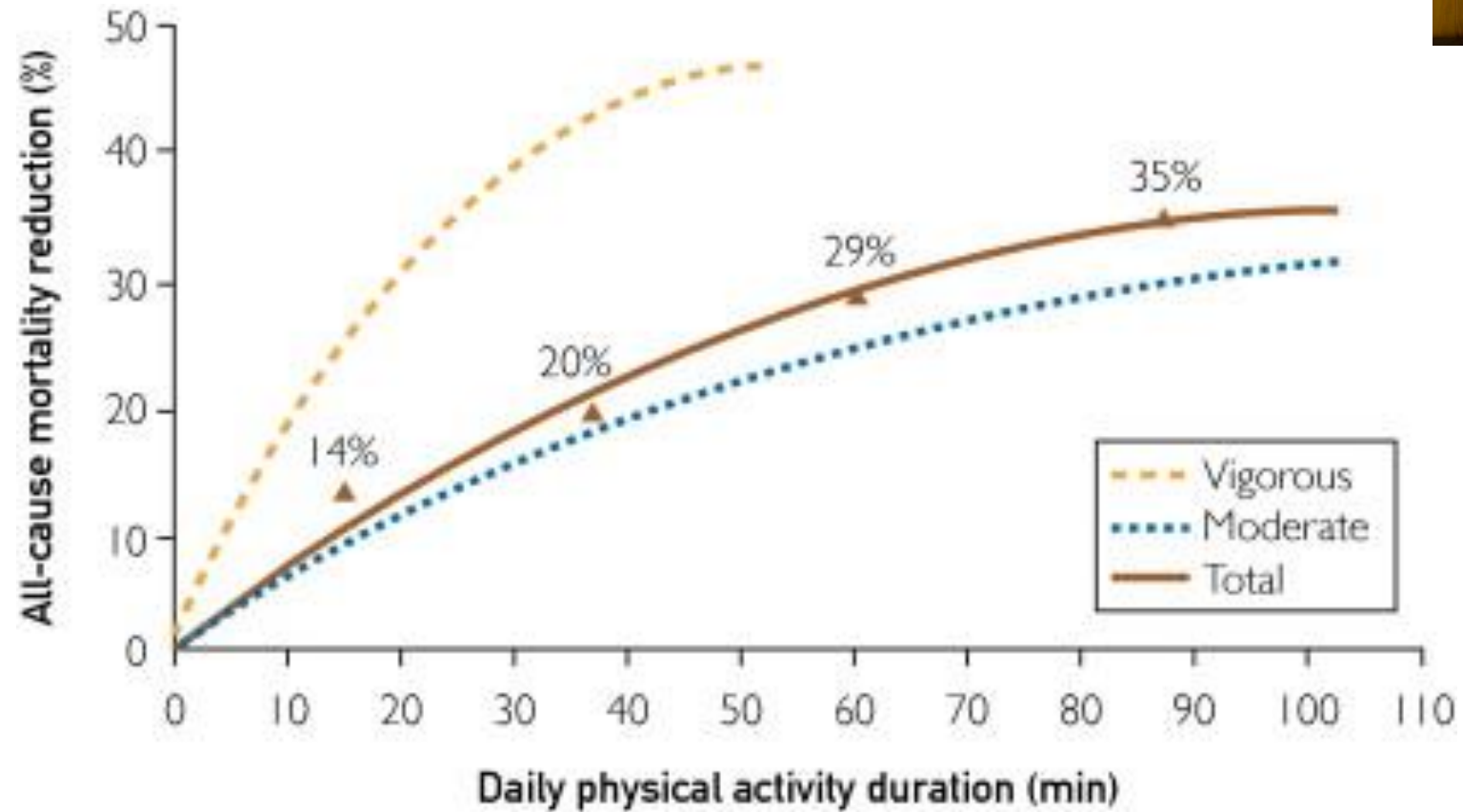
Or

75 to 150 minutes (1 ¼ to 2 ½ hours) of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities, each week.

- Do muscle strengthening activities on at least 2 days each week.
- Minimise the amount of time spent in prolonged sitting.
- Break up long periods of sitting as often as possible.

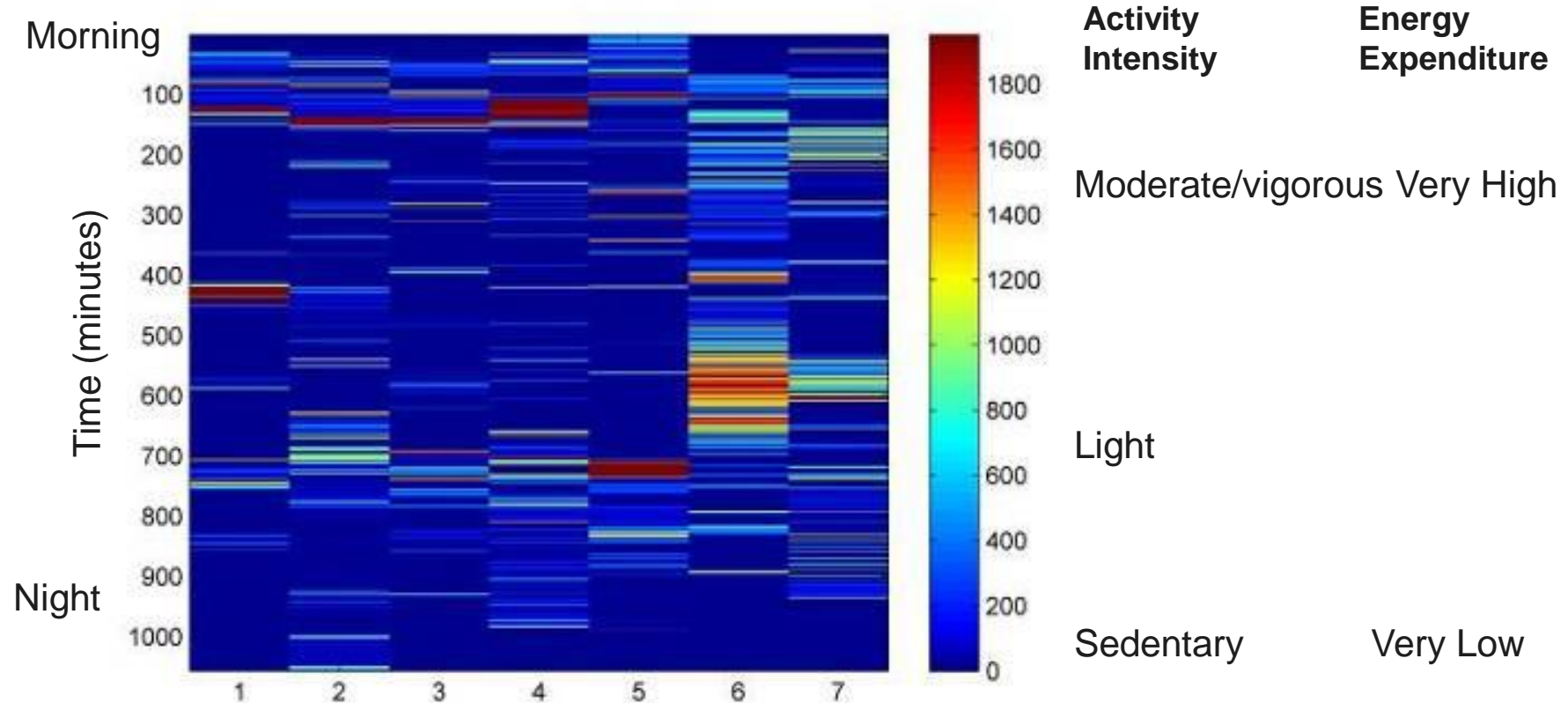






# You can be 'active', but also highly sedentary!

## The 'Active' Couch Potato



Mean mod-to-vigorous time = 31 mins/day  
% Waking hours spent in Sedentary = 71%

# Exercise Training

<http://www.health.gov.au/internet/main/publishing.nsf/content/health-publth-strateg-phys-act-guidelines#apaadult>

## What do we know?

Australia's Physical Activity and Sedentary Behaviour Guidelines

### >64 years

- Older people should do some form of physical activity, no matter what their age, weight, health problems or abilities.
- Older people should be active every day in as many ways as possible, doing a range of physical activities that incorporate fitness, strength, balance and flexibility.
- Older people should accumulate at least 30 minutes of moderate intensity physical activity on most, preferably all, days.
- Older people who have stopped physical activity, or who are starting a new physical activity, should start at a level that is easily manageable and gradually build up the recommended amount, type and frequency of activity.
- Older people who continue to enjoy a lifetime of vigorous physical activity should carry on doing so in a manner suited to their capability into later life, provided recommended safety procedures and guidelines are adhered to.

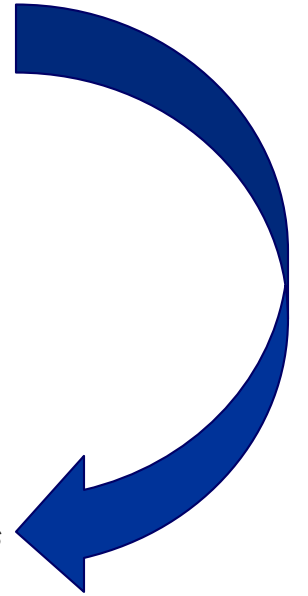
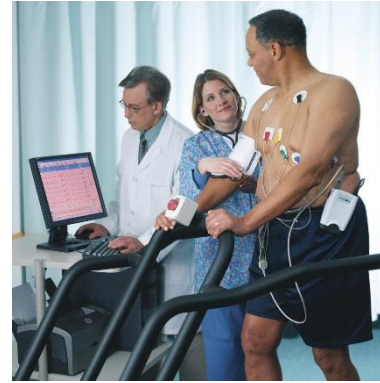


# What You Need To Do

*See your doctor*



*Request medical tests*



*Set realistic goals*



**Dietician**



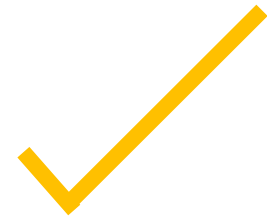
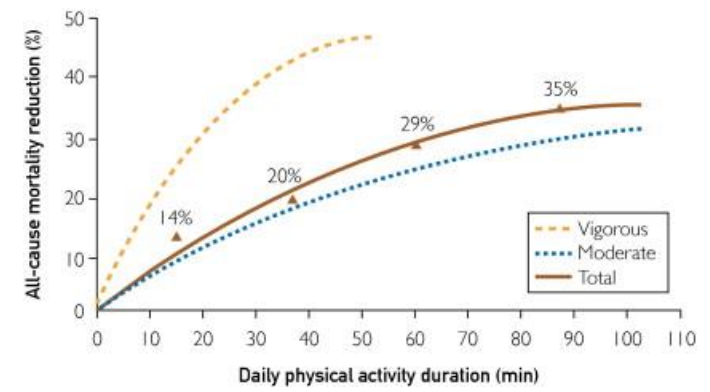
**Podiatrist ?  
Physiotherapist ?**



*Request allied health referrals*



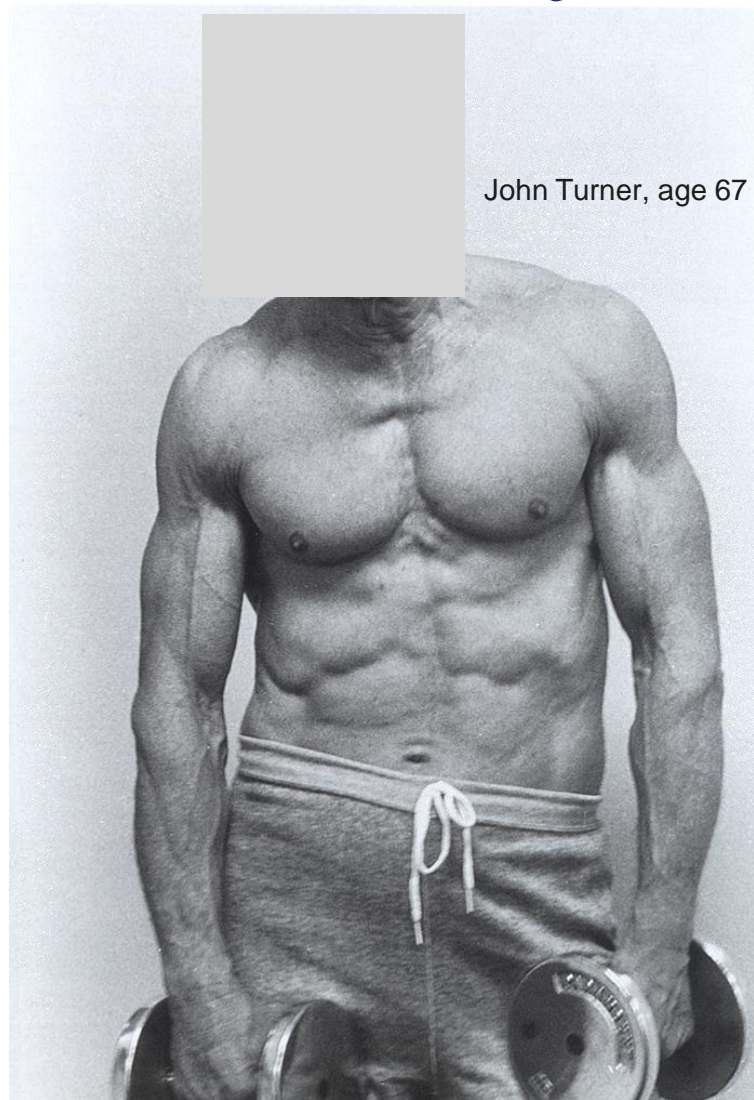
**Accredited Exercise Physiologist (AEP)**



# Aging Can Be Active & Healthy!



*What is your decision?*



John Turner, age 67