### Resistance Exercise







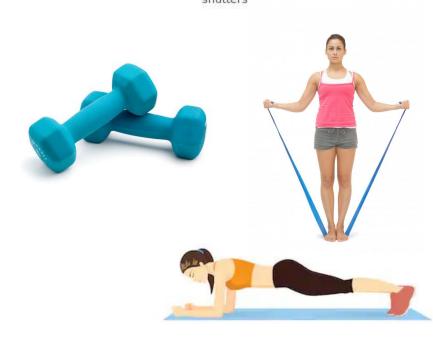
# How much Resistance Exercise should you do for your health? (The F.I.T.T. Principle)

- Frequency: At least 2 days per week
- Intensity: Moderate to vigorous
  - o 13-18 on your RPE scale
  - Yellow zone to start of red zone



- 8–10 exercises involving the major muscle groups
- 8–12 repetitions of each exercise
- Type: Circuits (e.g. your class with us), stair climbing, sit-to-stand exercise, body weight squats, lunges, press up, abdominal work etc., aqua training
  - o can progress to use resistance bands and free weights

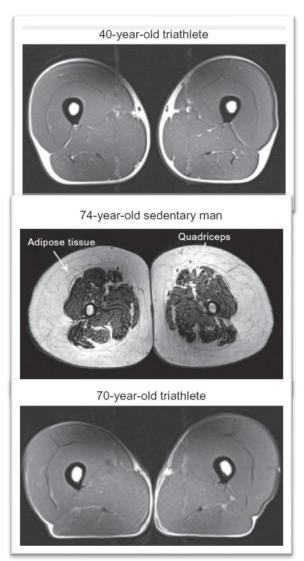




## Physiological Adaptations with Ageing Muscle

#### What happens to muscle as you age?

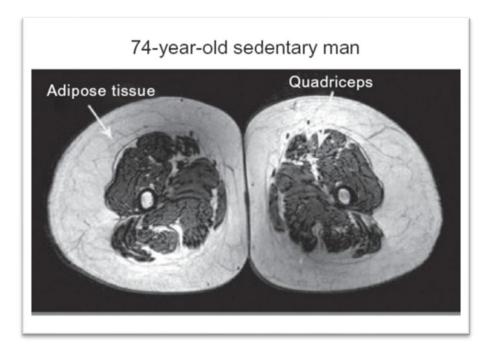
- Lose 1-2kgs of muscle per decade from 5<sup>th</sup> to 9<sup>th</sup> decade (50-90yrs).
- Physical inactivity accelerates this.
- You have ~30% muscle as younger adult vs ~15% at 75 years of age (particularly if you are inactive).



## Physiological Adaptations with Ageing Muscle

#### **Implications**

- Unfavourable body composition
- | muscle strength
- ↓ power
- \ ability to perform strenuous activities
- ↓ ability to perform Activities of Daily Living
- Jability to perform functional activities e.g. sit to stand
- Frailty
- Sarcopenia (loss of muscle mass)



Baseline levels of strength and fitness in middle age predict frailty and health in older years!









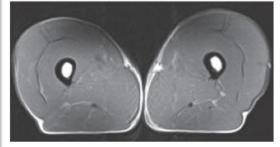
### Benefits of Resistance Exercise

- Slows the physiology of ageing / sarcopenia
- ↑ muscle size
- ↑ muscle strength and power
- † muscle function
- † bone density
- ↑ storage space for glucose
  - → help to store / lower your blood sugar
  - o help to prevent, treat and manage type 2 diabetes
- † balance
- ↓ depression and anxiety
- ↓ falls
- † quality of life
- † functional independent living as we age

Major predictor of health, quality of life in later







#### Your Health Homework

- ✓ Write down how many minutes of resistance exercise you currently do per day for one week.
  - you can count each training session with us as 20 minutes resistance exercise (the rest is aerobic, flexibility and balance).
- ✓ Do you meet the recommendations for health?
- ✓ If not, please identify opportunities in your day/week where you can increase the minutes of resistance exercise you do and make a plan!



Think of all the health benefits you will get!



- ✓ Take stairs vs lifts
- ✓ Complete our squat challenge this week
  - ✓ 20 squats on the days you are not training with us
- ✓ Practice your sit-to-stand
- ✓ Do Johns abs video on more day per week