



## Active Ageing

### Lesson 1

#### Physiological and Health Changes








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### Learning Outcomes

At the end of this lesson, you will be able to:

- Describe the effects of ageing on selected physiological and health related variables.
- Identify the benefits of Physical Activity with regard to the older adult
- Demonstrate an understanding of common biomechanical and physiological changes associated with ageing
- Implement appropriate screening procedures with an older client








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### What is an “older adult?”

- ACSM Guidelines – “The term “older adult” refers to an individual  $\geq 65$  yrs

OR

- An individual 50 – 64 yrs with clinical significant conditions or physical limitations that affect movement.








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**Important Considerations**

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- Physiological Ageing does not occur uniformly across the population.
  
- Individuals of similar chronological age may differ dramatically in their response to exercise.




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**Important Considerations**

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Therefore:

- Health and functional status are better indicators of the ability to engage in Physical Activity than chronological age.
  
- Never has the principle of training "Individual Differences" been more important when dealing with Physical Activity or Exercise and the older adult!!




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**Benefits of Physical Activity for the older adult**

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- Improved healing and function – Regular exercise may decrease the time it takes for a wound to heal by 25% - a healthy strong body can fight infection and aid recovery from illness or injury.
  
- According to the National Institute of Ageing, exercise may delay or prevent diseases like diabetes, cancer, stroke, heart disease and osteoporosis.




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**Benefits of Physical Activity for the older adult**

- Increased balance and stability – Exercise is a key component to improve functional reach and balance.
- Improved quality of life and increased life expectancy – increased mobility means maintaining independence.




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**Benefits of Physical Activity (contd.)**

- Reduce the risk of developing dementia- A study in the Journal of Alzheimers' Disease found that dementia was more prevalent in those who did no exercise in comparison to those who did.
- Improved bone density – weight-bearing exercise increase the strength of bones and reduce the risk of developing osteoporosis.
- Reduce the risk of stroke or heart attack – regular cardiovascular exercise will increase blood flow to the heart and boost overall health




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**General Guidelines**

- Most older adults do not require an exercise test prior to initiating a moderate intensity PA program.
- Physical performance testing has largely replaced stress testing for the assessment of functional status of older adults.
- This type of testing is useful because:
  - Little space required
  - Minimal equipment
  - Minimal cost
  - Can be administered by lay or health/fitness personnel with minimum training.




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**Screening Procedures**



- The benefits of exercise outweigh the risks for most older people.
- However a thorough screening is advised before beginning an exercise programme in order to:
  - Determine weaknesses
  - Assess prior activity levels
  - Establish the existence of any medical issues
  - Check for previous injury, surgery etc
  - Check for medication which may affect client's response to exercise




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**Par Q questionnaire**



- Simple to use and if one or more questions are answered yes, then with client's permission advice from their GP or other medical professional may be sought as to the suitability of the client for starting and exercise programme
- A printable version of the Par Q questionnaire is available at the link below:
- <http://eparmedx.com/wp-content/uploads/2013/03/January2020PARQPlusFillable.pdf>




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**Revision Quiz and Next Session**



- In the next session-
- Common medical conditions associated with ageing
- Next up.....
- Revision Quiz




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Quiz

Click the Quiz button to edit this object

**Quiz Instructions**

- Before attempting, carefully read the question text.
- Then choose the correct answer.
- Click on **"Submit"** to confirm your answer.
- Use the **Question List** in the upper left corner to jump to a certain question.

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