








Active Ageing

Lesson 4

Programme Prescription









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Learning Outcomes

- At the end of this lesson you will be able to:
- Understand the exercise implications for client's medications.
- Design a programme for a client based on their individual needs.









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Learning Outcomes

- Apply the FITT principle of training to safely implement an exercise programme.
- Evaluate the programme to monitor progress.




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Programme Planning - Screening




- Screen client using Par Q questionnaire (Revise Topic 1 Lesson 1)
- Identify client's goals
- Identify risk factors if any




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Screening



- Identify exercise implications of any medication client may be taking (revise Topic 1 Lesson 2 Parts 1 and 2) This list is not exhaustive and may need further research and connection with client's GP.



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Programme Planning




- Plan programme content taking into consideration:
 - Time
 - Equipment available
 - Client preferences



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Programme Planning


- Principles of training – Intensity, Frequency, Type, Individual differences etc
- Fitness testing
- Programme Evaluation



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General Guidelines


- Lower body exercises are very important for older adults – prevent falls
- Strength training – healthy bones and joints
- Aerobic exercise to improve heart and lung function, and Flexibility training – yoga and Tai Chi- improved mobility and boost immune system



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General Guidelines

- Upper body strength – independent living – carrying groceries, doing daily tasks.
- Brain training – Exercise the brain everyday –puzzles, crosswords, board games, card games etc.









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FITT General Guidelines




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- Aerobic Exercise:
- Frequency : ≥ 5 days per week for moderate intensity
 ≥ 3 days per week for vigorous intensity
 $\geq 3-5$ days per week for combination of moderate and vigorous.







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- Intensity : Borg RPE Scale – 5-6 Moderate and 7-8 Vigorous
- Time: 30-60 mins moderate, 20-30mins vigorous, or a combination of bouts of 10mins each.
- Type: Any exercise that does not exacerbate orthopaedic problems – walking, aquatic, stationary cycling etc.







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FITT General Guidelines




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- Resistance Exercise:
- Frequency : ≥ 2 days per week
- Intensity : Light – 40%-50% 1RM (5-6 RPE) for beginners
 Moderate to Vigorous- 60%-80% 1RM (7-8 RPE)














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FITT Resistance

- Time : 8-10 exercises working major muscle groups. 1-3 sets of 8-12 reps each
- Type: Progressive weight training, stair climbing and other strengthening activities that use major muscle groups.







     

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FITT Guidelines Flexibility

- Flexibility:
- Frequency: ≥2 days per week
- Intensity: POT – tightness or slight discomfort







     

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Flexibility

- Time: 30-60secs
- Type: Static, slow stretching. Avoid ballistic, rapid movement.
- **TASK:** Besides FITT what general guidelines should you consider before planning a programme for the older adult?

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Physical Activity Recommendations for Patients with Specific Medical Conditions

- Arthritis/Musculoskeletal Pain
- Evidence supports land or aquatic based physical activity



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Physical Activity Recommendations for Patients with Specific Medical Conditions



- Aerobic training 3-5 times per week and resistance 2-3 times per week
- Walking, cycling, lower extremity strengthening exercises, tai chi and aquatic exercises (aerobics, strength training in a heated pool) can all alleviate pain and improve function in patients with osteoarthritis.



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Physical Activity Recommendations for Patients with Specific Medical Conditions


- Diabetes:
- Aerobic training at least 3 days per week with no more than 2 consecutive days between bouts of activity (150mins of moderate to vigorous activity)
- Resistance training at moderate to vigorous intensity at least twice a week on non-consecutive days.



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Physical Activity Recommendations for Patients with Specific Medical Conditions


- Falls:
- Include balance exercises, strength training, tai chi etc



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Physical Activity Recommendations for Patients with Specific Medical Conditions


- Obesity:
- Aerobic exercise for calorie expenditure
- Resistance exercises to maintain lean muscle and bone density



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Physical Activity Recommendations for Patients with Specific Medical Conditions


- Osteoporosis:
- Resistance exercise and high impact aerobic exercise. Add balance exercises to prevent falls.



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Evaluation


- Evaluate the programme by repeating the same tests with the client that they did before commencing the programme.
- Have a discussion – what did they enjoy/not enjoy?
- What did they feel worked well?



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Evaluation


- What benefits if any, did they notice?
- What changes would they like to implement in the exercise programme?
- How would they like to progress?



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Some Special Considerations

- Keep intensity light initially especially with unconditioned clients
- Progression should be individualized and tailored to tolerance.
- Muscular strength becomes more important with ageing clients.



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Some Special Considerations

- Older adults benefit from power training (ACSM Guidelines). Include single and multiple joint exercises (1-3 sets) using light-moderate load(30%-60%1RM) for 6-10 reps with high velocity.
- Individuals with sarcopenia(Loss of skeletal muscle mass and strength) need to increase muscle strength first before aerobic training.

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Next Lesson

- In the next lesson – Exercise Class Format and now move onto short quiz to test your knowledge on exercise prescription for the older adult.....

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Quiz

Click the Quiz button to edit this object

Welcome to the quiz on exercise programming for the older adult

Click the "Start Quiz" button to proceed

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