Exercise Tips and Hints for Chronic Disease Management
Understanding & Improving Exercise Adherence

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BUT PEOPLE DON'T JUST DO IT.

Outline

- Benefits of Exercise
- Present a framework and tips to understand exercise adherence
- Identify targets and hints to promote exercise adherence
- Encourage self reflection on current practices to promote exercise adherence

Exercise - any bodily activity that enhances or maintains fitness and overall health and wellness

Fitness - a measure of the body's ability to function efficiently and effectively in work and leisure activities

Aerobic Fitness

<table>
<thead>
<tr>
<th>Age (yr)</th>
<th>Maximal oxygen uptake (mL/kg - min^-1)</th>
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</thead>
<tbody>
<tr>
<td>Women</td>
<td>Poor</td>
</tr>
<tr>
<td>20-29</td>
<td>28.21</td>
</tr>
<tr>
<td>30-39</td>
<td>27.12</td>
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<tr>
<td>40-49</td>
<td>26.30</td>
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<tr>
<td>50-59</td>
<td>25.27</td>
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<tr>
<td>60+</td>
<td>24.25</td>
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<tr>
<td>Men</td>
<td>Poor</td>
</tr>
<tr>
<td>20-29</td>
<td>37.37</td>
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<td>30-39</td>
<td>36.39</td>
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<td>40-49</td>
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<td>50-59</td>
<td>34.34</td>
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<tr>
<td>60+</td>
<td>33.33</td>
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</tbody>
</table>

The Physical Fitness Specialist Certification Manual, The Cooper Institute for Aerobics Research, Dallas, TX, revised 1997.

Often use the unit "MET" = 3.5 mL/kg/min

Importance of Aerobic Fitness

Risk of death decreased by 15-25% for every 1-MET increase in fitness

Tip – Know Your Fitness

http://www.ntnu.edu/cerg/vo2max

Tip – Don’t Worry Too Much About the Fat

Understanding Adherence

M: Motivation (Meaning)
A: Action Plan
P: Preferences
P: Problems
S: Support

Fitness vs Fatness

Let’s assume there is at least some motivation.

Motivation: 94% — Tip: Understand the personal meaning and value of exercise?

Personal meaning of exercise:

What does exercise mean for the individual?
What is the return?
What is the associated value?

- Gains
  - Physical independence?
  - Quality sleep?
  - Confidence?
  - Fear?
  - Discomfort?
  - Realisation of inability?

- Losses
  - Pain?
  - Feeling incapable/old?
  - Depressive symptoms?
  - Time?
  - Relaxation?

Understanding exercise adherence:

- Motivation
- Tip – Understand the personal meaning and value of exercise?

The Big Stick?

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

M: Motivation (Meaning)
A: Action Plan
P: Preferences
P: Problems
S: Support

Motivation
- Tip - Understand the personal meaning and value of exercise?

Action
- Tip – Plan to exercise, and have a backup plan

UNDERSTANDING EXERCISE ADHERENCE

PREFERENCES

- What
- How
- Where
- When
- With Whom

“Tell your fire pineapple to be my pointed tremor, but tell me over du a whre?”

REFERENCES

- Home-based
- Done alone

- Alone
- Morning
- Outdoors - Wrt functional wellbeing

ACTIVITY CONTEXT PREFERENCES
**ACTIVITY CONTEXT PREFERENCES**

**60-67 years (vs. 42-49)**
- Same age
- NOT vigorous
- NOT fixed time with scheduled sessions
- NOT competitive
- NOT team based


**ACTIVITY CONTEXT PREFERENCES**

BMI >30 (vs. BMI <25)
- Same sex
- Same age
- Supervised
- Team-based
- Fixed time with scheduled sessions


**ACTIVITY CONTEXT PREFERENCES**

Low Income (vs. High)
- Low cost
- Supervised
- Team-based
- Skill based
- Not just about exercise
- NOT outdoors


**ACTIVITY CONTEXT PREFERENCES**

High Psychological Distress (vs Low)
- Same sex
- Supervised
- Fixed time with scheduled sessions
- NOT vigorous
- NOT not just about exercise


**ACTIVITY CONTEXT PREFERENCES**

“Type A” Personalities

Ambitious, rigidly organized, impatient, obsessed with time management, multi-task, push themselves with deadlines, and hate both delays and ambivalence.
- Higher intensity exercise
- Less time

**BENEFITS OF HIGHER INTENSITY EXERCISE**

UNDERSTANDING EXERCISE ADHERENCE

- **Motivation**
  - Tip - Understand the personal meaning and value of exercise?

- **Action**
  - Tip – Plan to exercise, and have a backup plan

- **Preferences:**
  - Tip - Know the what, how, where, when and with whom

POTENTIAL EXERCISE BARRIERS

- **Personal**
  - Lack of time
  - Doing other things
  - Low skill/capacity
  - Fatigue
  - Poor physical health
  - Poor mental health
  - Risk assessment
  - Lack of confidence
  - Fear
  - Low self concept
  - Breathlessness
  - Dislike

- **Social**
  - Discouragement
  - Lack of encouragement
  - Care responsibilities
  - No/poor role models
  - Cultural barriers
  - Social stereotypes
  - Poor/misunderstood advice
  - Mistrust
  - Poor company

- **Structural**
  - Costs
  - Poor availability
  - Difficult access
  - No resources
  - Poor facilities
  - Low safety
  - Poor climate
  - Poor transport

CONDITION SPECIFIC BARRIERS

- **Diabetes**
  - Fear of hypoglycemia

- **Cardiovascular**
  - Fear of event

- **Musculoskeletal Conditions**
  - Fear of injury

- **Cancer**
  - Fatigue
  - Treatment side effects e.g., nausea

- **Overweight**
  - Discomfort
  - Embarrassment

- **Older adults**
  - Fear of injury
  - Ageist stereotypes
UNDERSTANDING EXERCISE ADHERENCE

- **Motivation**
  - Tip: Understand the personal meaning and value of exercise.

- **Action**
  - Tip: Plan to exercise, and have a backup plan.

- **Preferences**
  - Tip: Know the what, how, where, when and with whom.

- **Problems**
  - Tip: Be aware of the costs and difficulties.

Environmental Support

**Physical**
- Location
- Opportunities
- Resources
- Infrastructure
- Aesthetics

**Social**
- Informational
- Emotional
- Tangible
- Network
- Esteem

What Can You Do To Promote Exercise Adherence and Reduce Exercise Non Adherence?

Self Regulation

- Planning, scheduling, organising
- Proximal goal setting
- Action planning
- Self monitoring
- Coping in the face of difficulties
- Sense of control
  - eg exercise content, mode, timing
- Building successes
- Convention
- Flexible content
- Rescheduling options
- Booster sessions
- Supplementary material
- Ongoing support
- Follow-up

Tip – Understand how these can be supported.
SATISFACTION

- Positive experience is an important predictor of adherence
  - Independent of efficacy and expectations
- Encouraging others
  - Positive feedback
  - Feedback on effort (vs achievement)
  - Tailoring
  - Practicability
  - Lack of blame
  - Ongoing support and follow-up
- Dissociative experiences
  - Music
  - TV
  - Social chat

CONCLUSIONS

- Exercise non adherence is common, and is associated with a variety of factors
- The MAPPS framework provides a means by which to understand exercise adherence
- Using proactive strategies can improve exercise adherence. Key targets include
  - Self regulation
  - Satisfaction