How to Hook People on Exercise and Keep them Engaged

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Disclosure to Participants

Notice of Requirements For Successful Completion
- Please refer to learning goals and objectives
- Learners must attend the full activity and complete the evaluation in order to claim continuing education credit/hours

Conflict of Interest (COI) and Financial Relationship Disclosures:
- None

Non-Endorsement of Products:
- None

Off-Label Use:
- None

Why Exercise?


Worthy of Attention

• "We speculate that physical inactivity is an actual cause of much of prediabetes cases in those less than 60 years of age."
• Sedentary lifestyle = elevated risk for T2D
• Increasing activity improves insulin sensitivity in muscle; promotes utilization of blood glucose
• Post-workout, glycogen depletion prompts glucose uptake
• Physical training increases muscle GLUT4 protein and mRNA in patients with T2D


Adults/children spend ≥70% of the waking day working at a desk, riding in a car, eating a meal, playing video games, working on computer, and watching TV.


Introducing Metabolic Profiling

Interventions at Work
- Stand and walk around office every 30 minutes
- Stand and move every time you drink some water
- Walk to the farthest bathroom in the facility
- Take a walk break with every coffee break
- Consider walking and talking
Interventions at Home

- Get up and move during every commercial
- Stand and move for the opening TV show segment
- At the end of reading 4, 6 or 8 pages, get up to walk around the room or house

Len’s New WEB Site with NEAT Movement IDEAS

Metabolic Profile Form

NOW! Create a Metabolic Profile

Email Lena for Form lkravitz@unm.edu

Thomas Jefferson

“Walking is the best possible exercise. Acclimate yourself to walk very fast.”
For substantial health benefits, adults should do at least 150 minutes (2 hours and 30 minutes) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous intensity aerobic activity.

Current Aerobic Guidelines
Healthy Adults

ACSM & ADA Cardio Guidelines
Type 2 Diabetes & Pre-Diabetes

- 150 min: at least 3 times/wk; preferably up to 5 times/wk
- No more than 2 consecutive days between bouts (due to transient nature of exercise on insulin action)
- 40-60% of VO$_2$max (moderate intensity; somewhat hard)
- Greater health benefits at >60% VO$_2$max; Hard

Special Topic Discussion
“More is better”
Physical activity above the recommended minimum amount provides even greater health benefits.

Is There a BEST Mode?
Modes that use large muscle groups (that patients ENJOY!)

ACSM & ADA Cardio Guidelines
Type 2 Diabetes & Pre-Diabetes

What is Multi-mode Training?

Within Week (M,W,F)
Within Session

What is Multi-mode Training?

Current Resistance Training Guidelines
Healthy Adults

“Adults should also do muscle-strengthening activities that are moderate or high intensity and involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.”

ACSM & ADA Resistance Training Guidelines
Type 2 Diabetes & Pre-Diabetes
• At least twice weekly on nonconsecutive days
• Ideally three times a week
• Initially 50% of 1RM; 10-15 repetition maximum (RM)
• Gradually increase to 75%-80% of 1RM; 8-10 RM


ACSM & ADA Resistance Training Guidelines cont.
Type 2 Diabetes & Pre-Diabetes
• Optimal Goal
• 3 times/week of resistance training
• 3 sets of 8-10 repetitions (75-80% RM) per exercise
• Major muscle groups of the body


ACSM & ADA Resistance Training Guidelines cont.
Type 2 Diabetes & Pre-Diabetes
• 5-10 exercises of major muscle groups
• The majority of studies with resistance training and diabetic participants train the gluteals, thighs, chest, back, core, shoulders and arms.


ACSM & ADA Resistance Training Guidelines cont.
Type 2 Diabetes & Pre-Diabetes
• Special Recommendation
• ADA and ACSM recommend that T2D exercisers doing resistance training always be properly supervised by a qualified exercise training (to minimize risk of injury).


ACSM & ADA Resistance Training Guidelines cont.
Type 2 Diabetes & Pre-Diabetes
• For greater blood glucose control, gradually increase with heavier weights FIRST vs. doing more sets
• Start with single set training: progress to 2-3 sets
• If training 2 times/wk, progress gradually to 3 times/wk


Resistance Training & Aerobic Exercise
Δ A1c improvements are better with combined exercise programs of resistance training and aerobic exercise

"To lengthen thy life, lessen thy meals."

Benjamin Franklin

Exercise Dropout Variables

• Lack of positive feedback
• Inconvenient time/location
• Social isolation
• Low enjoyment ratings
• Initial exercise intensity

Exercise Adherence Strategies

• Positive Feedback
• Qualified exercise professional
• Variety
• Support Systems
• Goal(s) setting

Exercise Adherence Strategies cont.

• Rewards and reinforcement
• Safe equipment
• Exercise intensity
• Scheduling of exercise
• Workout companion(s)

Super Adherer to Exercise

• Highly motivated to achieve
• Very determined
• Super adherer to daily life activities
• Avoids things that can bring them harm
• Believes physical activity is very meaningful


Qualities of Effective Teachers

- Motivate each client to succeed
- Have a positive outlook for each client
- Teach with high integrity
- Believe in each client’s ability to achieve goals
- Engage clients in problem-based learning
- Have a personal drive for excellence which they instill in each client
- Openly share and discuss knowledge and research with client
- Are forward thinking professionals - often think "outside the box"
Final Quote

“You control everything! The thoughts you think, the words you utter, the foods you eat, and the exercise you do.”

Thank You!
Any Questions?