Physical Activity: Little Changes for Big Results

Little Changes Add Up!
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- 23 years Certified Strength and Conditioning Specialist, National Strength Conditioning Association.
- 15 years of experience in diabetes prevention.
- 10 years of experience as a IHS Supervisor.
- 1.5 years as a Health Educator.
- Experience working with kids, adolescents, adults, elderly.
- Experience working with special populations.
Learning Objectives

• Deliver a sound exercise program to your clients.
• Describe how 150 minutes of exercise is beneficial to preventing or delaying diabetes.
• Incorporate HIIT into your exercise sessions.
• Discuss practical strategies to motivate your patients to make change.
• Incorporate into practice recommended modes and amounts of exercise.
The Old Days

• Si Tanka Band of Miniconjou in Regalia at a Wacipi Cheyenne River 8/9/1890
• No lifestyle diseases
• No membership to wellness centers
• Generally healthy people
131 Years Later

• Things have changed
  • Diabetes
  • Cancer
  • Heart Disease
  • Alcoholism/Drug Abuse
  • Suicide
  • Domestic Abuse
Time for Change

• Food is Medicine
  • Gut microbiome
  • Fiber
  • Fruit and vegetables
  • Eat fermented foods

• Exercise is Medicine
  • Move more throughout the day
  • Park farther away
  • Use stairs as much as possible
  • Exercise breaks
What does a sound exercise program look like?

• Assessment
• Goal setting
• Strength
• Cardio
• Flexibility
• Warm up
• Cool down
How to Incorporate Mode of Exercise

• Variety is the key to keeping things fresh
• Change reps, sets and exercises every 4 to 6 weeks
• Volume
  • Increase reps decrease sets
  • Decrease reps increase sets
• Multi joint movements at the beginning
• Single joint movements towards the end of the workout
Tools in the Exercise Toolbox

- Bands
- Stability balls
- Suspension trainer
- Medicine balls
- Sandbags
- Barbells
- Dumbbells
- Bodyweight
- Loops
- Kettlebells
- Slam ball
- Battle ropes
- Bosu ball
- Fat Gripz
- Soup cans
- Milk jug
Putting it All Together

Male Exercise Goals
• Get bigger
• Get stronger

Female Exercise Goals
• Toned
• I don’t want to get big
Putting it All Together (con’t)

• On size does not fit all
• Child 8-12
• Adolescent 13-17
• Adult 18+
• 19-29
• 30-39
• 40-49
• 50+
Putting it All Together (more)

• Body part workout
• Splits
  • Chest/Shoulder/Triceps
  • Back/Biceps
  • Legs
• Push/Pull/Legs
• Total body
• Periodization

• Chest/Shoulder/Triceps
• Chest – flat, incline, decline, fly
• Shoulder – OH press, lateral raise, front raise, high pull
• Triceps – skull crusher, triceps extension, dips
• 33 sets and 330 reps
Modified Exercises

- Squat
  - Wall sit
  - ROM squat
  - Sit to stand
  - Suspension strap

- Push up
  - Wall
  - Incline
  - Knees
What My Weight Training Looks Like

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<th>Exercise</th>
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<td>Core</td>
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- Push up, flat BP, incline bench press, suspension trainer
- Row, face pull, machine
- Squat, lunge, step up, calf raise, RDL, box jump
- Crunch, plank, pallof press, stability ball pass, wood chop
- Combo moves
Ways to Add Variety

• Ascending Pyramid – Start light weight higher reps and build to heavier weight fewer reps.

• Descending pyramid – Start heavier weight fewer reps and work down to lighter weight higher reps.

• EMOM – Start with one rep and complete the exercise. At the top of the next minute do two reps and rest until the next minute and complete 3 reps.
High Intensity Interval Training

- Burst of intense work followed by active rest/rest
- 1:1, 2:1, 1:2
- Various modes
- Studies show that this favors fat loss and reduction in blood sugar levels
- Tabata

• When to use HIIT
• When not to use HITT
• 1-2 X per week
HIIT 2:1
What Do You See?
What I See
Accessories

- Assist strap
- Anchors exercise tubes
- Increases the number of exercises you can do
- Combo moves
Band Exercises with Door Anchor
Cardiovascular Exercise

• Mode
  • Walking
  • Running
  • Biking
  • Swimming

• Intensity
  • Duration
  • Speed
  • Interval training
My Cardio Routine

- Easy Day
  - 45-60 minutes at a moderate pace
- Medium Day
  - 20-30 minutes at a vigorous pace
- Hard Day
  - 10-15 minutes Interval training

- On medium and hard days my total time will equal my easy day
  
  - For example, my hard day of 15 minutes of interval training is followed by 30-45 minutes of moderate paced exercise for a total of 45-60 minutes

- 10,000 step goal 6 days of the week
Preventing or Delaying Diabetes

• Lower your risk of developing diabetes by:
  • Reducing your weight by 7%
  • Exercising moderately for 150 minutes per week

• 150 minutes is only 30 minutes fives days of the week
• 150 minutes of exercise is a good start
Activities to Help Meet the DPP Goals
Activities to Help Meet the DPP Goals (con’t)
Activities to Help Meet the DPP Goals (more)
Motivation

• Intrinsic Motivation
  • Weight
  • Blood pressure
  • Blood sugar
  • Family
  • A sense of accomplishment
  • Something that changes your health or mental wellbeing

• Extrinsic Motivation
  • Exercise garment
  • Orthopedic footwear
  • Advertising headwear
  • Something that can be earned to reward your hard work
What Motivates You?
Learn from Trusted Sources

• Juan Carlos Santana
• Mark Verstegen
• Vern Gambetta
• John Blievernicht
• Len Kravitz
• Dan John
• Nick Tumminello
• Mike Boyle

• National Strength and Conditioning Association
• American College of Sports Medicine
• National Academy of Sports Medicine
• American Council on Exercise
• Group Exercise Certification
• Special Populations Certification
Questions
Pilamaya – Thank You!