

# Balance and the Slippery Slope of Aging— Exercise Guidelines & Winter Exercise

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“We don’t stop playing because we  
grow old; we grow old because we  
stop playing”

George Bernard Shaw





**“How old would you be if you didn’t know  
how old you were?”**

**Attributed to Satchel Paige**



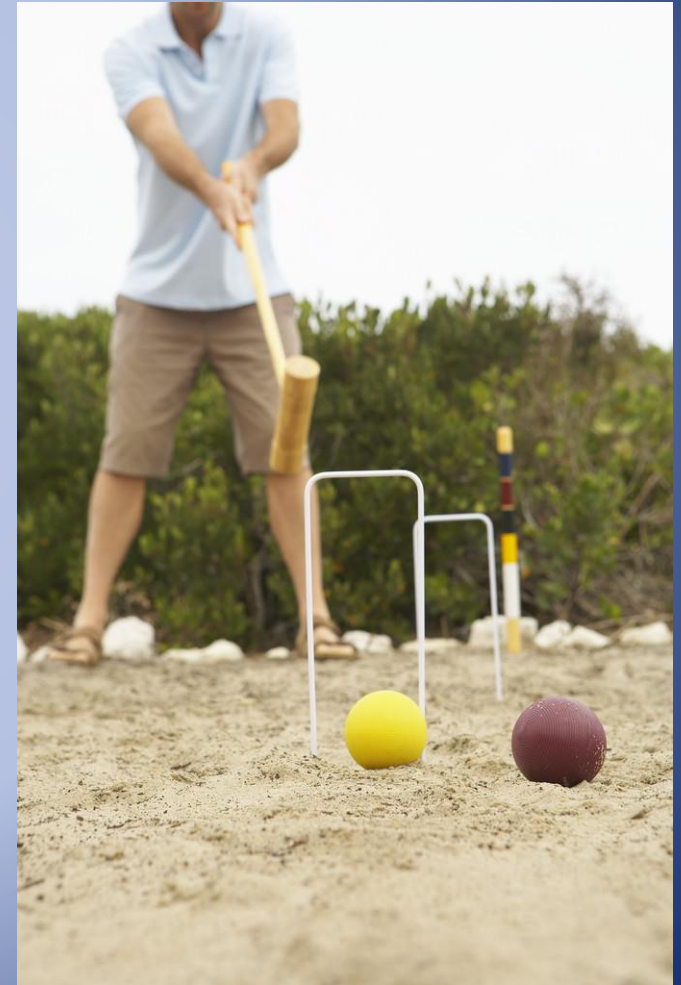
# So What Are The Benefits of Regular Physical Activity?

- Higher activity levels are associated with lower death rates from heart disease, all cardiovascular disease, & type II diabetes.
- For people with known heart disease, death rates are decreased for people who have higher activity levels.



# Benefits of Regular Physical Activity

- More activity with less fatigue
- Reduce risk for breast, colon, bladder, endometrium, esophagus, kidney, stomach, lung cancer
- Decreased risk of osteoporosis
- Decreased anxiety & depression
- Improved feelings of self-worth
- Improved performance of work, recreational and sport activities
- **Improved Quality of LIFE !!!**





# Benefits of Regular Physical Activity

- Increase Weight Loss
- Long-Term Maintenance of Weight Loss
- Increase muscle strength- you need muscle to MOVE!
- Increase flexibility
- Reduces risk of falls and fractures
- Lower risk for developing vascular dementia



# Deconditioning/Age RELATED changes in Muscle Mass

- Deconditioning or chronological age??
- What happens to muscle mass, strength, endurance & function w/deconditioning?
- **An activity program can reverse the effects of deconditioning and can be started at any age, with any body type or presence of disease.**



# What Happens With Adoption of a Sedentary Lifestyle/Deconditioning?

- Decreased endurance
- Increased fatigue
- Increased incidence of cardiovascular disease (heart attack, stroke)
- Decreased strength/size of muscle fibers
- Loss of muscle mass—replaced with fat mass
- Decrease in function/activity
- Increased incidence of osteoporosis and arthritis
- Increased reaction time & movement time
- Increased incidence of dementia



# Age/Deconditioning Related Changes in Muscle Mass

- **DECONDITIONING exacerbates physiological aging process.....**
- Moderate strength training--slowing “normal” loss of mass & strength w/aging.
- **Older individuals (if trained properly & progressively) CAN INCREASE THEIR MUSCULAR STRENGTH, ENDURANCE & FUNCTION.**
- Muscle responds to vigorous training w/rapid improvement into 9<sup>th</sup> decade.
- **Don't use or accept age as an excuse to be weak.**

# How Do I Become More Active?

- 1. What are your current activities.
- 2. Identify your barriers to activity.
- 3. Make activity a PRIORITY.
- 4. Make activity interesting & FUN—what do you enjoy, what would you like to do?
- 5. Set goals that are specific, realistic & important to you.
- 6. Make activity part of your regular routine—yard work, household activity, taking the stairs, walking the dog, strength training or stretching during commercials.

# What is the Activity Goal?

- **Aerobic Goal:** 150 min/week mod activity or 75 min/week of vigorous activity
- 20-60 minutes/day; 3-7 days per week; intensity of “fairly light to somewhat hard”, “talk test” is moderate intensity.
- **Strength Training Goal:**
- 2-3 times per week; 8-12 exercises total (upper & lower body & trunk); 2-3 sets per exercise; 8-10 repetitions per exercise; intensity “somewhat hard”. DO NOT HOLD YOUR BREATH with exertion.
- **Flexibility Goal:**
- 2-3 times per week; 8-10 exercises total; stretch to range of motion tightness and hold for 15-30 seconds without bouncing; 2-4 reps per exercise.
- **Neuromotor Goal:** incorporate balance activities into strength or aerobic activity 2 times per week.



# What Types of Aerobic Activities?

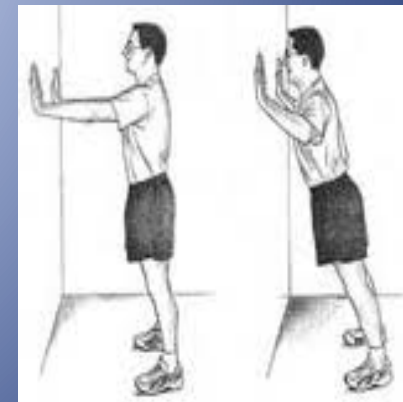
- **Traditional Activities:** walking, hiking, swimming, biking, downhill & cross country skiing, tennis, running, canoeing, racquetball, golf, etc.
- **Non-Traditional:** yoga, Pilates, water movement, gardening, yard work, dancing, Tai Chi, shopping, cooking, playing with grandchildren, activities of daily living including household chores.



# What Type of Strength Activities?

Strength Equipment is not needed to increase strength. Can use thera-bands/thera-tubes, body weight, wall, sturdy chair.

Can be done while standing or sitting.



# What Type of Flexibility Activities?

- Can also be done without equipment.
- Can use thera-bands/thera-tubes, body weight, wall, sturdy chair.
- Can be done while standing or sitting.





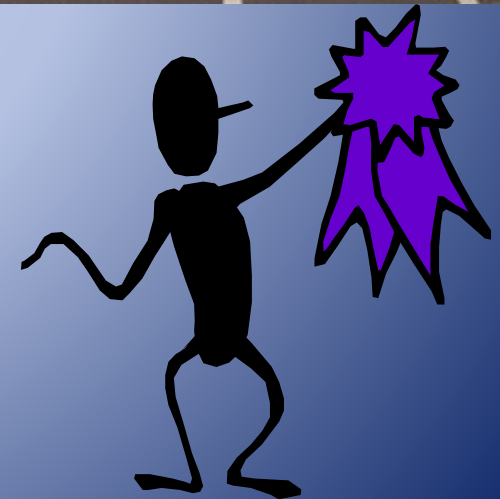
# Secrets of Exercise Motivation

- 1. Choose to be Active—Make the Commitment—Try 8 weeks of regular exercise (20-30 min/day) 3-4 times/week —you'll see the difference 😊
- 2. Remove or neutralize your barriers to exercise.
- 3. Keep an exercise log--what you did, how long, time of day, how you felt. Research demonstrates that individuals who record their exercise have greater adherence to exercise than individuals who don't keep log.
- 4. Write down your personal reasons for exercising and short and long term realistic goals.



# Secrets of Exercise Motivation

- 5. Choose exercise that you enjoy or at least tolerate and make it as comfortable as possible—music, books on tape, TV, comfortable clothing, foot ware.
- 6. Reward yourself when you achieve short-term and long-term realistic goals.
- 7. Try to make activity a regular routine (morning, lunch, evening) and choose a time when you are more energized.



# Secrets of Exercise Motivation

- 8. Fit in activity whenever possible. You can break your 30 minutes of exercise in five 6 minute sessions. **SOMETHING IS ALWAYS BETTER THAN NOTHING**
- 9. Take one step and one day at a time. Your body will adapt better if you start slowly and you'll get stronger without increasing your risk of injury.
- 10. Avoid making too many lifestyle changes at once.





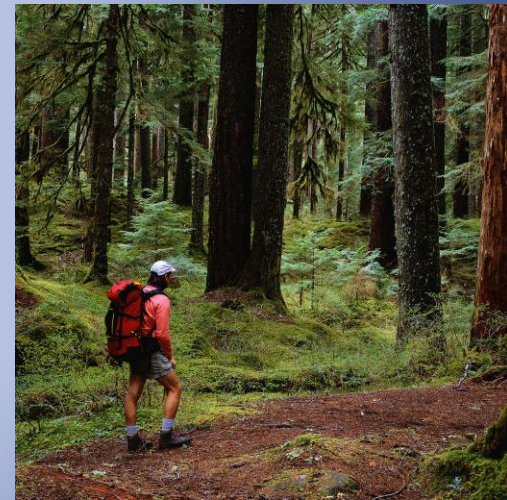
# Secrets of Exercise Motivation

- 11. Consider an exercise partner—it's more difficult to cancel on a friend.
- 12. Variety of activity can be the spice of life.
- 13. PAIN IS NO GAIN
- 14. Recognize over fatigue and the need to take a day off. Prevent mental and physical burn-out.



# Secrets of Exercise Motivation

- 15. **Make exercise CONVENIENT**
- Active at home: outdoor walking, home circuits (walking laps including stairs if possible & able) change speed of walking, outdoor activities. Strength training with bands, tubes, cans, tools, stability balls. Flexibility exercises either standing, sitting in a chair, on the floor.
- Exercise video/YouTube/library for DVD
- Active at work: lunch walk, stairs, indoor laps, fitness facility close to work.
- You do not need equipment to be active!
- County & State Parks, walking trails, Erie canal, Malls



# Being Active in the Winter

- 1. Be Active at Home (see previous slide)—laps, stairs. Walls, chairs, thera-bands/tubes, body weight. Develop circuit—walk slow, walk faster, upper body strength, lower body strength, balance, core strength, repeat.
- 2. If active outside, dress in layers, hat/gloves, consider wind chill, foot ware/socks, footing/snow/ice, daylight hours.
- 3. When coming back inside, keep dry clothes on for 10-15 minutes to allow body to acclimate to indoor temperature.



# Being Active in the Winter

- 4. Drink water—most older adults are dehydrated and activity can worsen dehydration.
- 5. Use indoor facilities like the mall to walk.
- 6. Sign up for activities at Healthlink, Senior Centers, free classes offered at YMCA or other fitness facilities.
- 7. Online activity videos/DVD's from library
- 8. Be careful with shoveling/snow blowing

# Nuts & Bolts of Activity

- Everyone has a different starting point
- INDIVIDUALIZE!!!
- There is no magic or perfect program—every person is unique & requires a unique program, adaptations or modifications!



# Nuts & Bolts of Activity

- **START SLOWLY**—especially if you have been inactive.
- Be creative—activity is all around you.
- Be flexible—after all, this is CNY and weather changes quickly. Some activity is always better than no activity!
- Be patient—improvements in fatigue, strength, endurance, and quality of life usually take a minimum of 6-8 weeks.
- **Consistency** is the key to success
- **Believe in yourself—YES YOU CAN!**





# General Exercises to Improve Balance/Flexibility/Strength

- Toe/Heel Raises/Circle—Sit/Stand
- Lower Leg Stretch--Stand
- Hamstring Stretch--Sitting
- March in Place—Sit/Stand
- Hip Pendulum—Stand
- Over head Reach—Sit/Stand
- Arm Circles—Sit/Stand
- Draw In (10x10sec) & Butt Squeeze (10x10sec)—Sit/Stand
- Sit to Stand--Sitting
- Wall Squats--Standing
- Wall Push Up—Standing
- Chair Push Up--Sitting
- Seated Sit-ups—Sitting
- Curl Ups—floor/bed
- Front/Side Lunges--Standing
- Head/Neck Flexibility—Sit/Stand
- Upper Body Flexibility—Sit/Stand

# One Final Note

- **KEEP MOVING**--you will feel the physical, emotional and quality of life benefits of being active.
- **No More Excuses**--whatever your level of ability, you can be active.
- **YES YOU CAN!**
- <https://go4life.nia.nih.gov/exercises/>
- Great resource for strength/flexibility/balance/endurance exercises

