

# Finding ***YOUR*** Best Physical Therapy Plan

John Scandura, PT, MSPT, OCS, CSCS  
Rehabilitation Services Manager, South Lake Hospital



# ■ Welcome to The Myositis Association Annual Patient Conference



# About the presenter



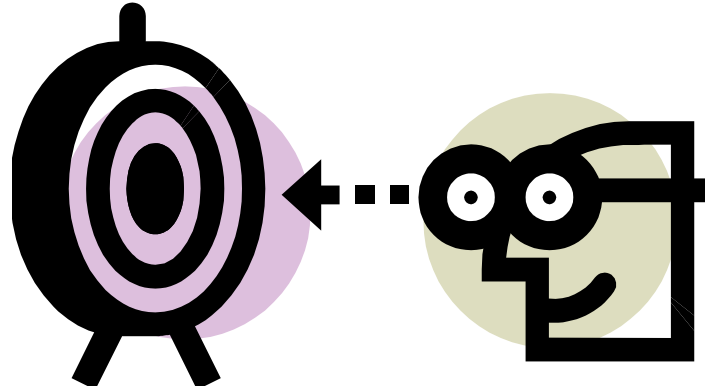
South Lake Hospital  
Clermont, FL

- A 122-bed community hospital in the heart of central Florida.
- Focused on health, wellness, and community education.

John J. Scandura, PT, MSPT, OCS, CSCS: Manager of rehabilitation services at South Lake Hospital. Graduate of the University of Central Florida program in physical therapy. Board certified in orthopedic physical therapy by the ABPTS.

# Goals for the presentation

- Learn about the physical therapy profession
- Learn what physical therapists can do to help with myositis
- Ask plenty of questions
- Be open and participative
- Have fun!



# Brief Myositis Overview

- Idiopathic inflammatory myopathies
  - Idiopathic = spontaneous or unknown cause
- Inclusion body myositis (IBM)
- Dermatomyositis (DM)
- Polymyositis (PM)

# Inclusion Body Myositis

- IBM is most common form
- Occurs mostly in patients over 50 y.o.
- Approx. 30% of all myopathies
- Diagnosis often delayed 5-8 years after onset
  - (slow evolution of disease)
- Weakness of:
  - quadriceps (thighs), forearm flexors (wrist and hand flexors), ankle dorsiflexors, swallowing also can be affected
- Often asymmetric

# Inclusion Body Myositis

- Proteins clump (inclusion bodies) and become toxic to muscle
- Relatively unresponsive to immunosuppressive therapies
- Slow progression
- Usually painless

# ■ Dermato- and polymyositis

- Reduced muscle function
- Fatigue
- Interstitial lung disease
- Proximal muscle weakness
- Lower aerobic capacity



# Presentation of Idiopathic Inflammatory Myopathies

Clinical Symptoms	Polymyositis	Dermatomyositis	Inclusion Body Myositis
Proximal muscle weakness	++	++	++ (quads)
Distal muscle weakness	+	+	++(finger flexors)
Low muscle endurance	++	++	+
Skin rash	+	++	-
Interstitial lung disease	+	+	-
Nonerosive arthritis	+	+	-
Cardiac involvement	+	+	-
Autoantibodies	80%	80%	20%

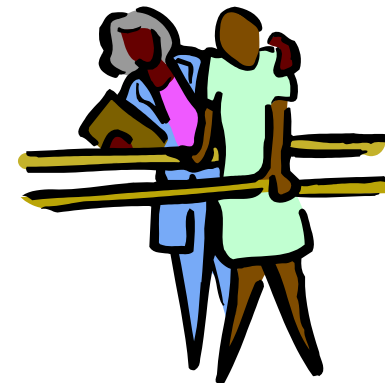
Lowell and Lundberg 2011

# What is Physical Therapy?

- Physical Therapy (or PT) is a health care specialty involved with evaluating, diagnosing, and treating disorders of the musculoskeletal system.
- Physical therapists can:
  - Help improve or restore mobility
  - Reduce need for surgery
  - Reduce pain
  - Decrease need for long-term medications and side effects

# Who are Physical Therapists?

- Highly-educated, licensed health care professionals
- Apply research and evidence-proven techniques to get people moving
- Extensive clinical expertise
- More than 92% of new graduates are doctors of physical therapy (DPT)



# How to Choose YOUR PT!

- The most important member of your health care team IS YOU!
- Be an informed consumer
- Freedom of choice
- Directly accessing physical therapy *IS* possible



# How to Choose YOUR PT!



- Be sure to pick a *licensed* professional
- Ask your friends, family, neighbors
- Call some clinics or show up...unannounced
- Ask if the therapist's clinic participates with your insurance plan
- Do they submit claims for you?

# PT Specialization

- PTs can specialize once they demonstrate expertise in a given area
- “Board Certified” professionals
- Eight specialty areas including:
  - Orthopedics
  - Neurology
  - Geriatrics

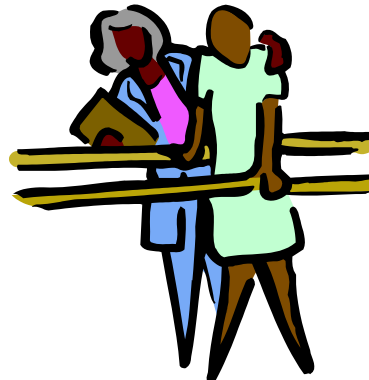


# How can PT help me?

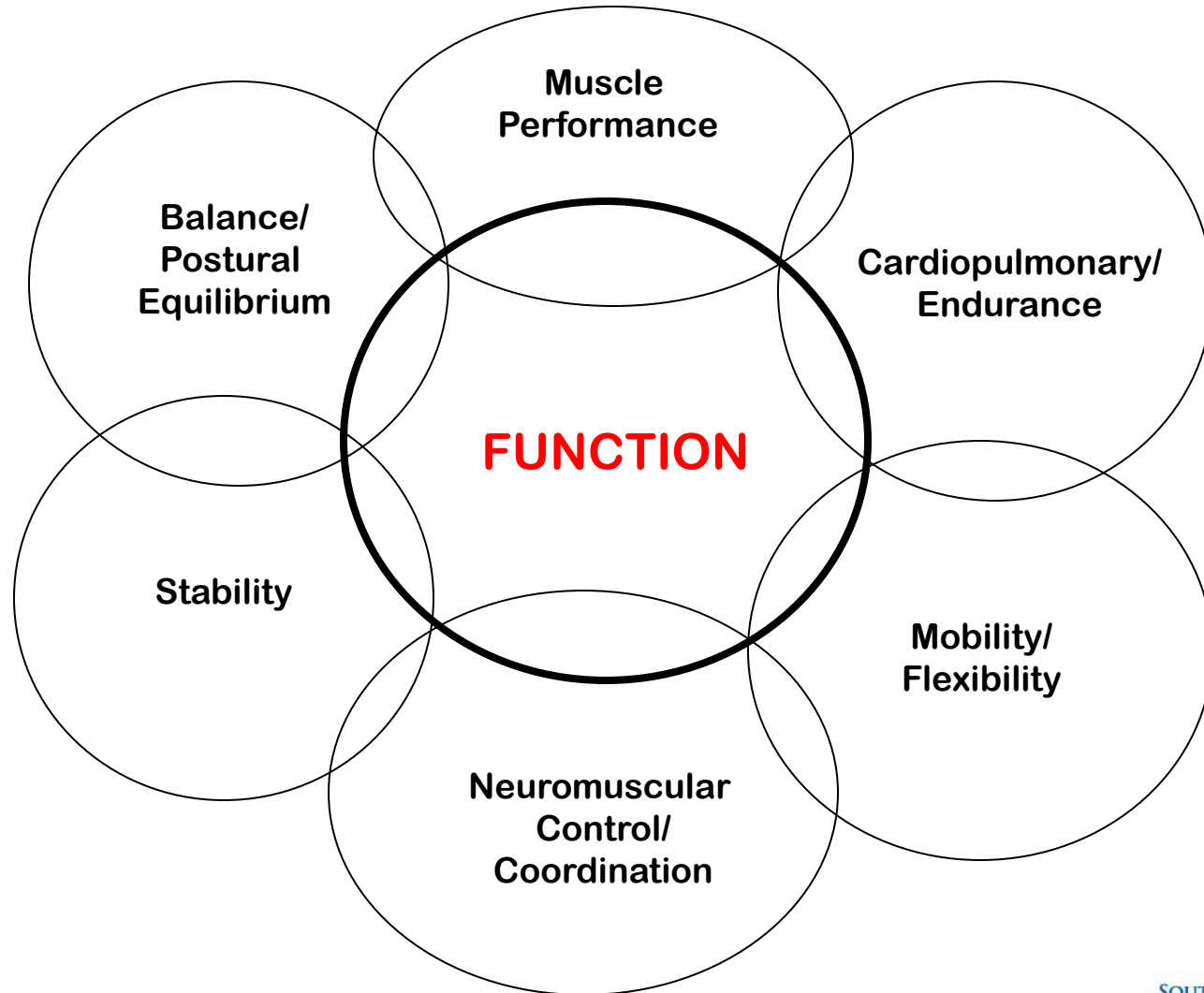
- Dynamic profession with established theoretical and scientific background
- Widespread clinical applications for:
  - Restoration
  - Maintenance
  - Promotion



Optimal Physical Function



# Interrelated aspects of function





# Before you come

- Question list:
  - Be prepared to maximize time spent with your PT
- Symptom List:
  - How long?
  - Most bothersome?
- Medical history:
  - even if it is unrelated to condition
- Medication list:
  - Both prescription AND over-the-counter
- Wear comfortable clothing that you can move freely in

# Your Appointment

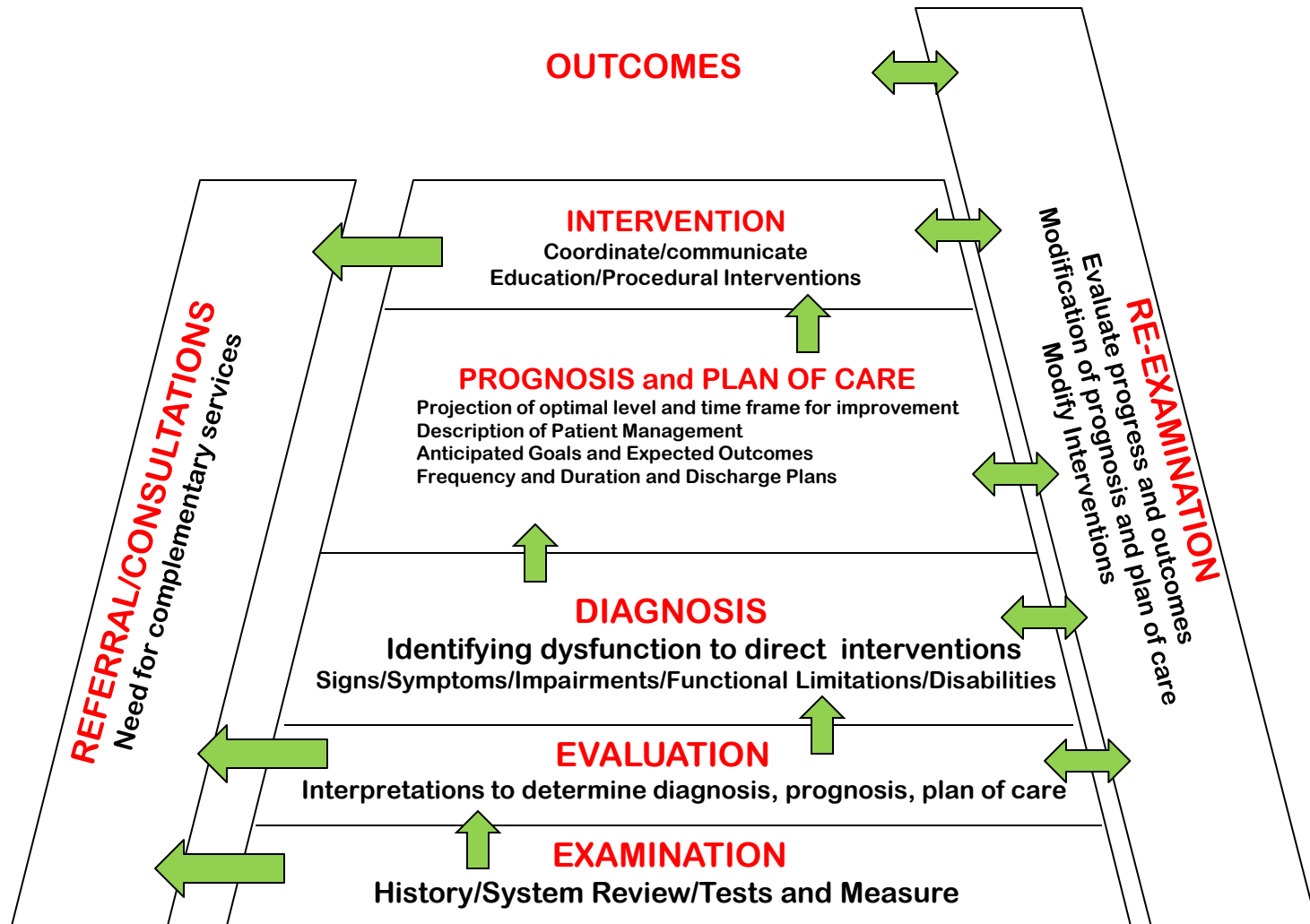
- First visit:
  - Complete examination and evaluation
    - Identify current and potential problems
  - Specific goals tailored to YOUR needs
  - Care planning:
    - Specific interventions
    - Proposed timetable to achieve goals
    - Movement and Function optimization
  - Home activity prescription

Be prepared to ask *any* questions regarding care, intervention and expectations!

# 1<sup>st</sup> Visit Expectations

- Expect a LONG question and answer session
- Expect a DETAILED examination
  - Strength, Flexibility, Range of motion
  - How you move
  - How you walk
  - How you use your body for lifting/bending/twisting (mechanics)
  - Home environment
- Mutual goal setting
- Education

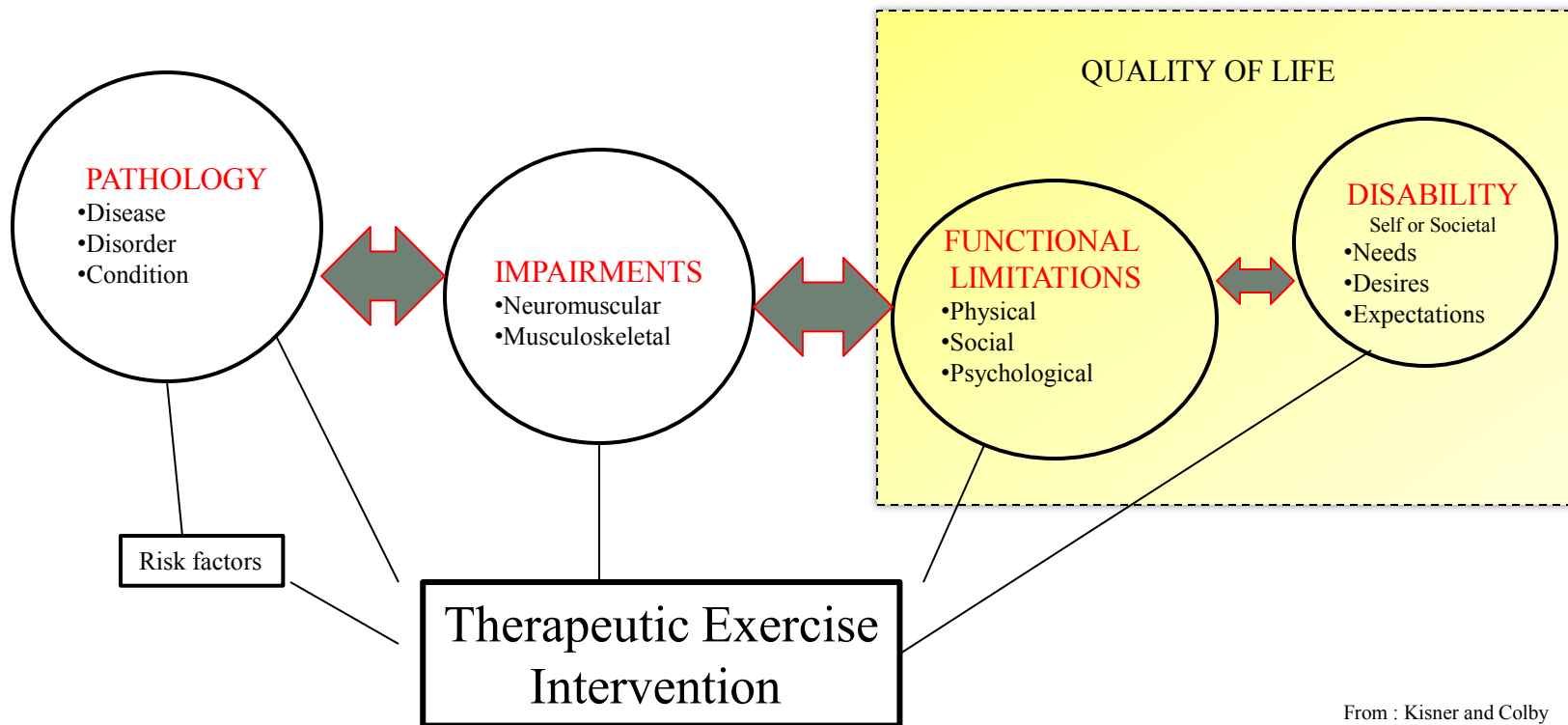
# Outcomes Oriented Model of Patient Management



# Disablement Models

- Refers to the impact and functional consequences of acute or chronic conditions,
- On specific body systems,
- That compromise an individuals ability to meet necessary, customary, expected, and desired societal functions and roles.

# Impact of Exercise on Disablement



From : Kisner and Colby

# Importance of Exercise

- Exercise won't "CURE" myositis but
- It may help mediate certain parts of the disease
  - Increased muscle strength
  - Increase flexibility
  - Improve cardiovascular function
  - Help prevent further loss of muscle function
  - Possibly decrease medication levels

# Benefits of Exercise

1. Weight control
2. Combatting disease processes
3. Elevated mood
4. Elevated energy
5. Improved sleep
6. Improved physical intimacy
7. Social connectivity



# Risk of Exercise

- Exercise does impose some risks...
  - CPK levels
  - Weakened areas can be at risk without proper guidance
  - Increased inflammation?
  - Being too reactive...
    - Over doing it because it is new and exciting
    - Too much, too soon

# Exercise modifications

How do I know if I've done too much?

- At the end of a session you should feel slightly fatigued but not exhausted
- You should be fully recovered by the next day
  - Can take 2-3 days if new to exercise
- Adequate time must be allowed for adaptations to occur (4-12 weeks)
- Best level of exercise is ever evolving
  - Must continue to challenge (safely) to improve
- If you feel very fatigued after a land based exercise program consider using an aquatic medium

# Exercise modifications

- What if it is too difficult?
  - Change the length of time
  - Change your posture
    - Against gravity or assisted by gravity
    - Aquatic exercises
  - Decrease the number of repetitions or sets of an exercise
  - Reduce the amount of resistance of an exercise
  - Increase time between exercises
  - Subtract exercises from your program

# Exercise modifications

- Rest is as important as the actual exercise
  - Allows for muscular recovery
  - Allows for healing of microscopic muscle damage
  - The bigger the workout, the longer the rest
- Move at your own pace



- Most important: HAVE FUN, BE SAFE, and BE POSITIVE

# What does proper exercise look like?

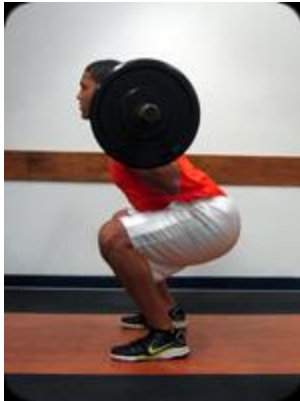
- Starts gradually
- Works on movements that:
  - Increase flexibility (stretching)
  - Develop strength
  - Enhance endurance
- Allows for warmup prior to stretching
- Gently works involved muscles
- Passive → Active Assisted → Active → Resistive
- It should focus on **FUNCTIONAL** movements
- ***STRENGTHENS*** non-affected muscles, ***PROTECTS*** the affected ones

# Closed Chain Exercise

- Moves multiple groups and body parts at once
- Considered functional movement
- Involves moving over segments that are fixed to an unmoving surface
  - Examples: push-ups, squats, sit-to-stand
- More energy used (increased fatigue) but also more functional
- Mimic activities of daily living
- Safer for joints due to compression and stability

# Examples of Closed Chain Exercises

Squat



Lunge



# Examples of Closed Chain Exercises

Sit-to-stand



Push-up





# Open Chain Exercises

- Moving body part is free, not fixed
- Isolation of specific muscles
- Part of a functional movement
- Less energy expenditure but can locally fatigue muscle groups

# Examples of Open Chain Exercises

Knee Extension



Bicep Curls



# Examples of Open Chain Exercises

## Shoulder Raise



## Straight Leg Raise



# Aquatic-based Therapy

- Physical therapy in aquatic medium
- Uses the properties of water to decrease affects of gravity on the body
- Total body workout
- Water adds buoyancy, resistance, hydrostatic pressure
- Decreased dependence on assistive devices



# Fall Reduction and Wellness Promotion

- Falls: major health concern
- 1/3 of adults over 65 fall each year
- 20-30% will incur moderate to severe injuries
- Elderly adults are hospitalized 5x more for fall injuries than any other causes
- Leading cause of injury deaths
- Most common non-fatal injury
- Most common hospital admission

CDC National Center for Injury Prevention and Control

# Fall Prevention

- Fall risk factors:
  - ✓ Muscle weakness
  - ✓ Impaired ADLs
  - ✓ Gait deficits
  - ✓ Use of assistive device
  - ✓ Neurological deficits
  - ✓ Balance deficits
  - ✓ Visual deficits
  - ✓ Advanced age
  - ✓ Depression
  - ✓ Cognitive impairment
  - ✓ Medications
  - ✓ Cardiovascular deficits

# Fall Prevention

## 1. Exercise regularly

- Improve leg strength
- Balance exercises
- Tai Chi

## 2. Medication review

- Ask your pharmacist or doctor
- What medications cause dizziness or drowsiness?

## 3. Vision Checks

- Have your doctor check yours eyes yearly
- Consider one set of eyewear without bifocals

## 4. Home environment

CDC National Center for Injury Prevention and Control

# Fall Prevention

## Making Your Home Safer

- Floors:
  - Remove throw rugs
  - Clear clutter
  - Have cords tucked away
- Lighting
  - Low light situations increase fall risks
  - Night lights
  - Stair well lighting
  - Illuminated switches
- Stairs/Steps
  - Handrails
  - Good state of repair
  - Free of objects



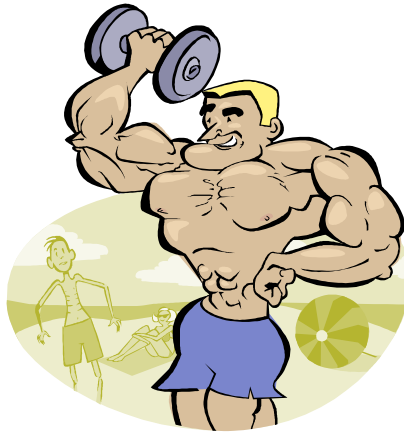
# Importance of Weight Management

- Recent study found that obese seniors are more likely to fall than their normal weight counterpart
- If injury occurred, they are less likely to recover
- A sedentary lifestyle can also lead to increased weight
  - Muscle loss due to myositis can lead to overall disuse and atrophy of non-affected muscles



# Weight Management and Strength Training

- Strength training is crucial to weight control
- Increase muscle mass = higher metabolism
- Up to 15% increase in metabolic rate



# Questions?





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