















# FALLING FACTS: The 'Silver Tsunami'

- 1/3 of people over 65 will report a fall each year
- 2/3 of those who fall will fall again in 6 months
- Impact of falls:
  - > Hip fracture \$2 billion annual medical cost
  - >30% require medical attention
  - >25% remain functionally more dependent
  - >25% die within 6 months
  - Falls are the leading cause of death from injury for people over the age of 65

### 20% - 30% of Aging Adults Have a Fear of Falling!



### Falls with NO injury still have a negative impact on your health!

Fear
 Loss of Confidence

Restrict Activities

CYCLE OF INCREASED FALL RISK!

#### YOU CAN DECREASE YOUR RISK OF FALLING Good News! ©

*Is the Big Balance Theory... YOU have control!* 

Falling is NOT part of the aging process!

# Falling is due to a series

of risk factors:

Both internal and external

## **Risk Factors**

#### **INTERNAL**

Having to do with your body, the state of your health and your mind

### EXTERNAL

Having to do with the environment; inside & outside the home

## **EXTERNAL RISK FACTORS**

Most Common reason for falls is...



Tripping!

- ≻55% occur in home
- 25% occur near home
- Most occur on the same level

## **External Hazards:**



1/3 of falls are due

hazards

in the home!

to environmental

- Poor lighting
  - Loose rugs
  - Lack of railings
  - Unsteady furniture
  - Pets
- Clutter
  - Improper use of assistive devices

## **INTERNAL RISK FACTORS:**

- Lack of Physical Activity Muscle Loss
- Sensory System Decline
   Diminished Vision, vestibular system and sensors in the skin
- Medical Conditions Medications Weakness, Dizzy, Tremors

## **Medications**

- Reduces Mental Alertness
- Cause drop in blood pressure-dizzy
- Multiple medications can have interactive effects
- Multifactorial problem with physical decline



Central Theme of today's Discussion... 'Optimal Aging' Chronological Age vs. Biological Age A result of lifestyle!

### Progression of Fall Risk Aging & Physical Inactivity

HEALTH DISORDER  $\implies$  <u>GET SICK!</u>

LEADS TO:

- Decreased activity (muscle loss)
- Multiple medications (weak dizzy)

IMPAREMENTS *POOR POSTURE!* 

#### LEADS TO:

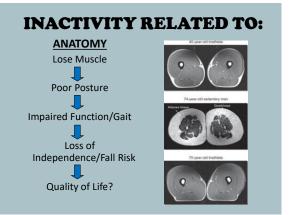
- Functional Limitations
- **POSSIBLE FALLS**!

### Decreased Physical Activity & Age Related Muscle Loss:

- 1. Less Muscle
- 2. Less Strength
- 3. Less Balance

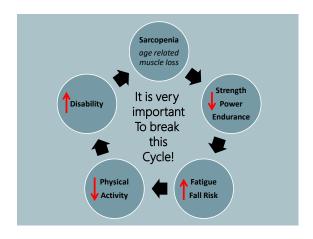
# Sarcopenia





### ANATOMICAL & STRUCTURAL DECLINE...





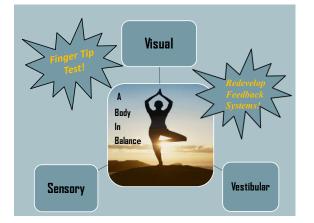
# Staying Active is Critical to Aging Optimally



Aging well is not a game of chance... It's one of choice!

Exercise can delay and in some cases even reverse the effects of aging!

- You can maintain and regain muscle at any age!
- You have the ability to train the systems that affect balance





# "I'm Fearful of Falling"



### SOLUTION:

- Get a Balance Assessment
- Stay Active! Improve/Maintain Strength
- Practice Balance Exercises
- Reinforce Motor Skills that support functional tasks
- Reassess

# **Physical Vulnerability:**

#### A level of decline where one is in danger of losing the ability to perform ADL

### Defense!

- Maintain muscle
- Maintain flexibility
- Train movement patterns



### Multi-System Approach for Fall Prevention!

- Assess
- Strength training for endurance and power

Balance & motor

skill reinforcement

Sensory training



# www.cdc.gov/steadi



### Mayo Clinic 6-Step Fall Prevention Plan:

- 1. See your doctors (eyesight, medications)
- 2. Keep Moving (maintain muscle)
- 3. Sensible Shoes (support & stability)
- 4. Safe Environment (reduce trip hazard)
- 5. Good Lighting (assists with vision)
- 6. Assistive Devices (support & stability)

# **Take Control!**

### <u>ACTIVE</u>

- Improved body composition
- Improved BMD
- Increased ROM
- Increased functional ability and independence
- QUALITY OF LIFE!!!

# INACTIVE

- Strength Loss
   Posture/Balance
- BMD Loss
   Injury
- Loss of ROM
   Function
- Poor BMI
   Disease

### Reducing Fall Risk and Improving the Quality of Life...

It's not just about how long you live..... it's about how long you live well!



# HIGHLY RECOMMENDED:

To consult with your health care provider...



- Discuss fall risk factors
- Discuss plans to exercise

