

STAYING VERTICAL:

Balance and Falls Reduction

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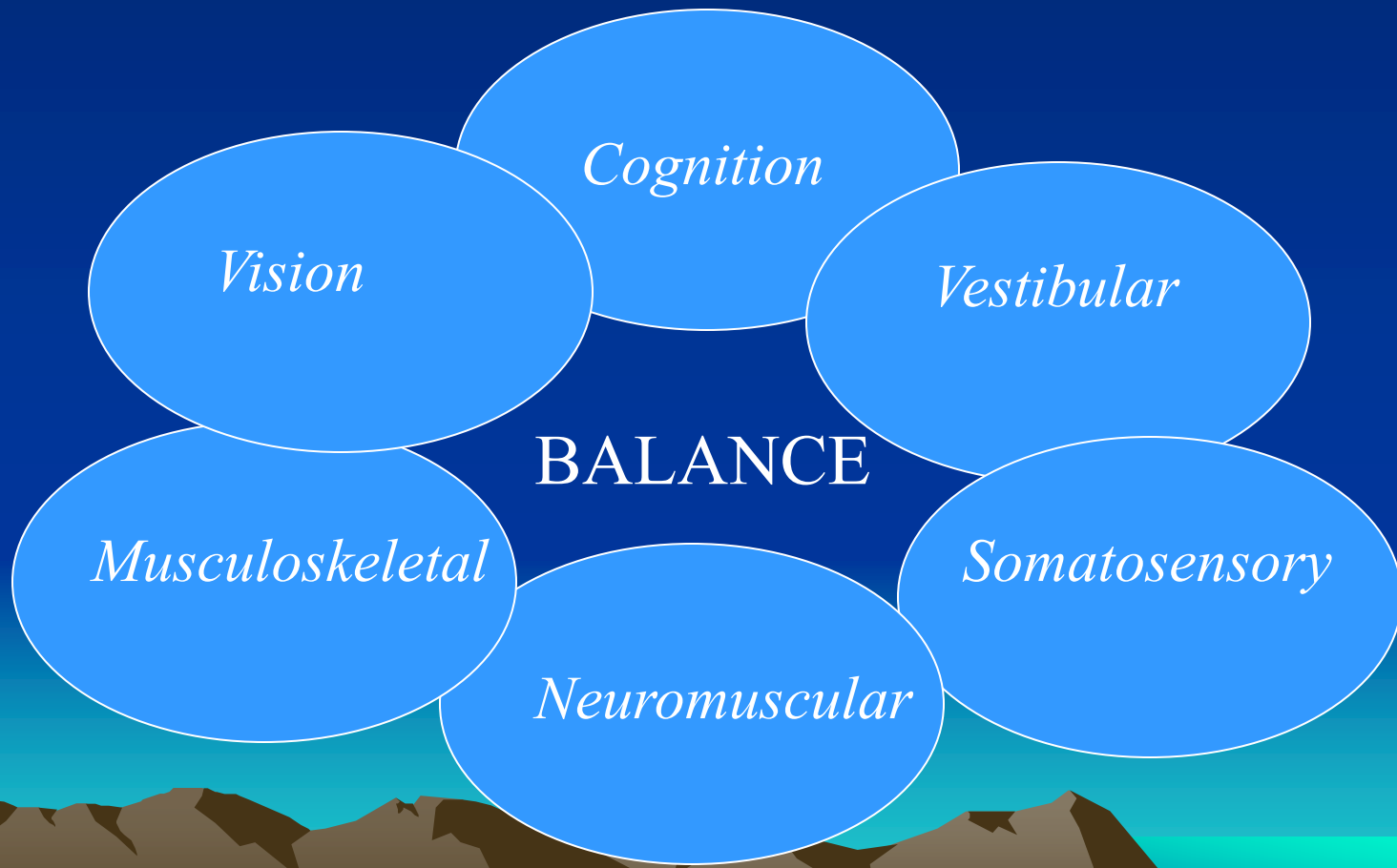


What is balance?

- The ability to control and maintain your body's position as it moves through space
- Requires coordination of sensory systems (vision, proprioception and vestibular), neurological and muscular response
- Balance is a skill – a learned motor pattern... you can keep it or relearn it by PRACTICING IT!!!



Model for Postural Control



Typical Changes with Aging

- Reduced flexibility and strength
- Decreased coordination and reflexes
- Vision and sensory changes
- Gait: slower speed, shorter step, wider base of support



The Problem - Falls

- 1 out of 5 falls results in a serious injury
- Increased risk with advancing age



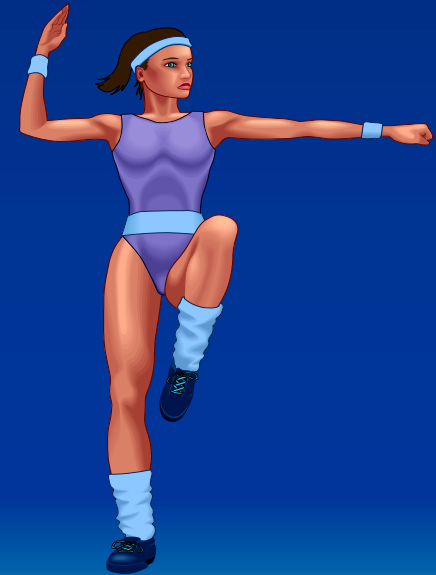
Fear of Falling

- 60% of fallers express “fear of falling”
- 33% indicate restriction of activities due to fear
- Fear of falling also indicated by non fallers



What is your risk?

- If a person is unable to balance 5 seconds on one leg, they are at risk for INJURIOUS falls.



Assessment

- Screens
 - History of Falls
 - Tandem Stand or Walk
 - Single leg stand
 - Stand and Reach – Less than six inches highly predictive of falls
 - Timed Up and Go (TUG)



Detailed Assessment

Often done by a Physical Therapist

- Tinetti Scale
- Berg Balance Scale
- FEMBAF – Fast Evaluation of Mobility, Balance, and Fear
- Dynamic Gait Index
- Activities Balance Confidence Scale



If you are falling often or have an injury, See a Physical Therapist

- PTs are able to develop an exercise program for you that will be appropriate for your condition
- PTs will evaluate your posture, your strength, your range of motion, and your conditioning status and will develop a balance program which should help keep you fit as well as safe
- PTs can answer your questions or refer you to others who will



Causes of Falls

Within the Person
And
The Environment



Fall Factors

Personal:

↓ Vision, hearing

↓ Strength

↓ Balance

Medications (4+)

Lack of sleep

Mental status

Chronic disease

Environmental:

Stairs

Clutter

Wet surfaces

Loose rugs/carpets

Cords

Poor lighting

Hurrying/rushing



Medications

- Anti-hypertensives
- Anti-depressants
- Levodopa
- Antipsychotics
- Any sedative drugs including some muscle relaxants
- Long-term steroids – proximal muscle weakness



What can YOU do to prevent falls?

- Begin a regular exercise program
- Review your medications with your health care provider or pharmacist



- Wear proper footwear
- Have your vision and hearing checked



Home Safety

- Good lighting
- Nonslip surfaces in bath/shower
- Remove throw rugs, clutter, obstacles
- Use sturdy chairs, railings, grab bars



Change Activities

- Allow for Dizziness:
 - Stand up slowly
- Reduce High Risk Behaviors
 - Use railing, move closer instead of reaching
- Use Assistive Devices if Recommended



Fall Prevention Study

-Journal of the American Geriatrics Society, 2021

- EXERCISE is the most effective method for decreasing the rate of falls in adults aged 65 and older who live independently.
- Exercise is especially effective in adults aged 75 and older.

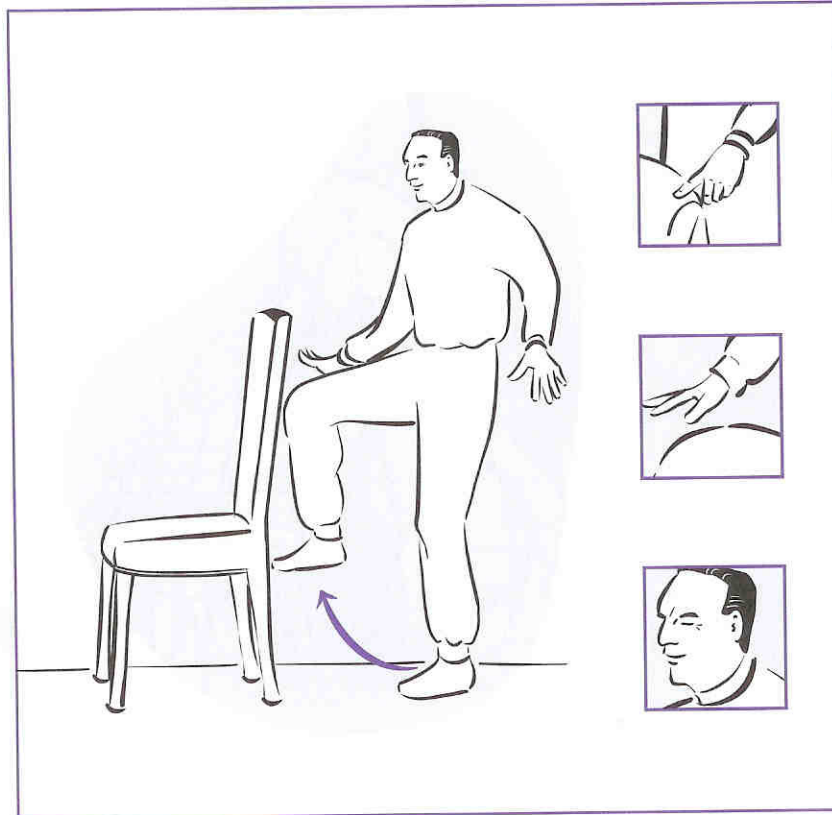


Balance Exercises

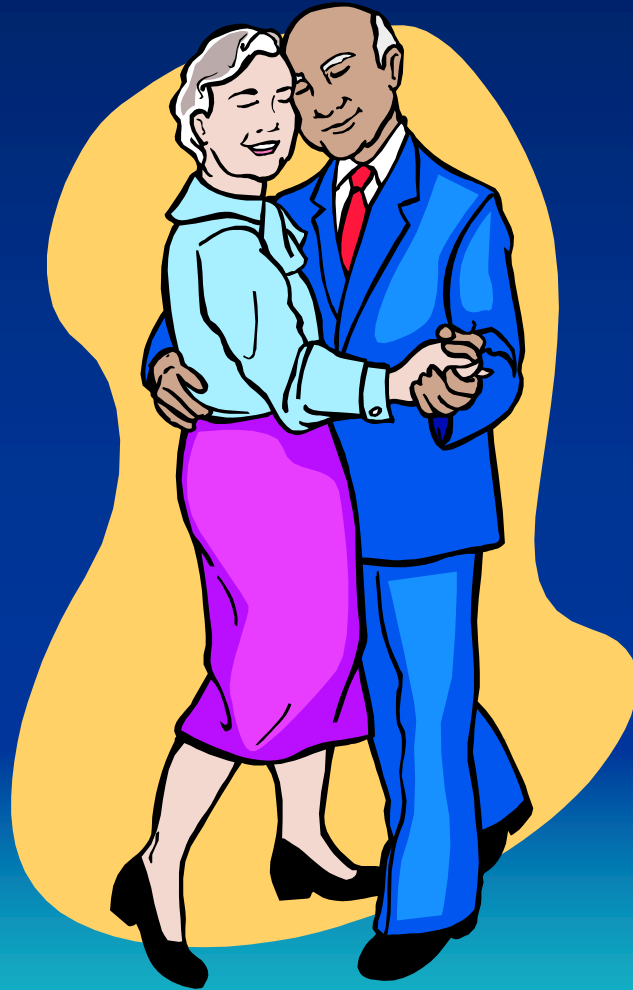
- Tai Chi
- Slow movements emphasizing one legged balance
- Regular Exercise Classes at the YMCA!
 - Moving For Better Balance
 - Stepping On
 - Senior Strength, Silver Sneakers



Strength/Balance Exercises



Fitness for Life!



It's never too early and it's never too late!

QUESTIONS ?

Talk to a Personal Trainer or a
Physical Therapist

