

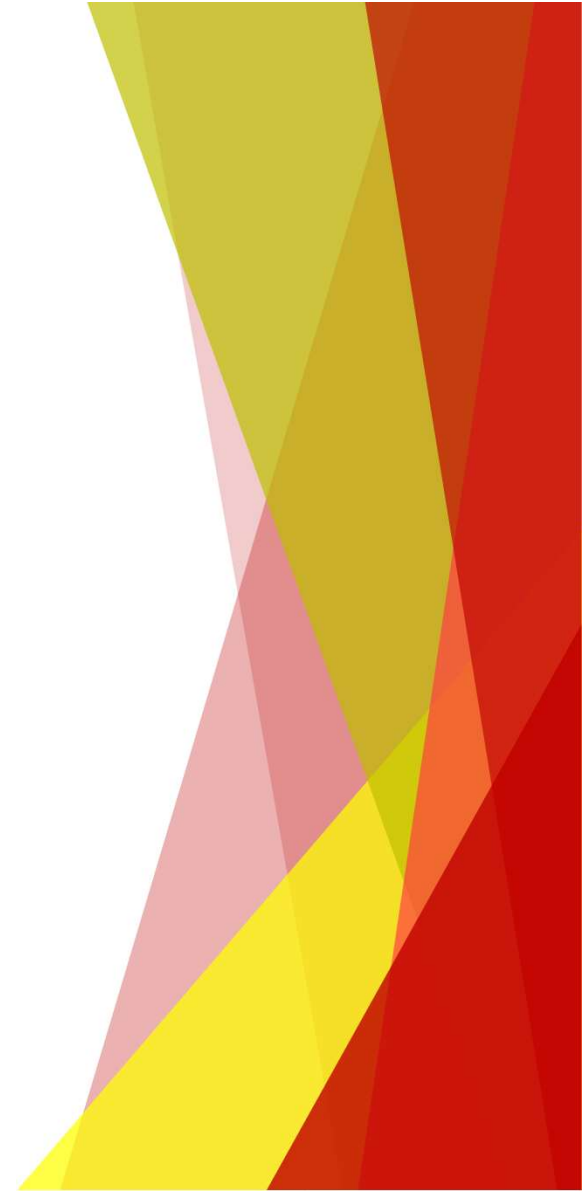
Physical Activity & Fall Prevention

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Overview

- ▶ It's Never Too Late: Moving Towards a Healthier You
- ▶ Why Movement Matters
- ▶ Getting Started
- ▶ Staying Motivated
- ▶ Evidence-based program for Fall Prevention & Arthritis
 - Walk with Ease
 - Importance of Physical Therapy





**“It’s Never Too Late: Moving
Toward a Healthier You”**

Why Movement Matters

- ▶ Boosts heart, bone, and muscle health
- ▶ Encourages healthy brain aging
- ▶ Improves mental health and mood and energy
- ▶ Maintains independence





Enhance Balance

- ▶ Practice single-leg stands (with support nearby)
- ▶ Try heel-to-toe walking to improve gait stability
- ▶ Use chair-assisted exercises for safety
- ▶ Incorporate gentle yoga or tai chi for mindful movement
- ▶ Train balance and coordination and with slow, controlled motions



4 Stage Balance Test

FOUR STAGE BALANCE TEST



First, stand with your feet together and hold for 10 seconds.



Next, stand one foot slightly in front of the other and hold for 10 seconds each side.



Then, put one foot all the way in front of the other, hold for 10 seconds each side.



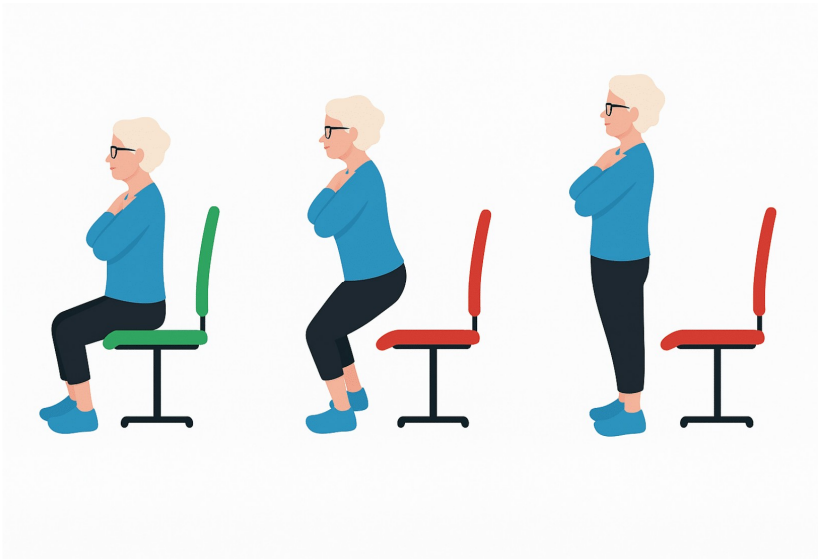
Finally, stand on one leg for 10 seconds each side.

Build Strength

- ▶ Try chair squats, heel raises, counter pushups
- ▶ Use resistance bands or household items
- ▶ Aim for 2-3 strength sessions/week



Sit to stand



Heel Raise Exercise-standing

20 times
2 sets



· Go up and down as slowly as possible.

Boost Endurance

- ▶ Choose activities you enjoy—like walking, biking, swimming, pickleball, or dancing
- ▶ Everyday tasks count too—vacuuming, raking, even grocery shopping
- ▶ Aim for about 21 minutes a day (150 minutes a week)
- ▶ Go at a pace that feels good—breathing a bit harder but still able to chat



How to get started!

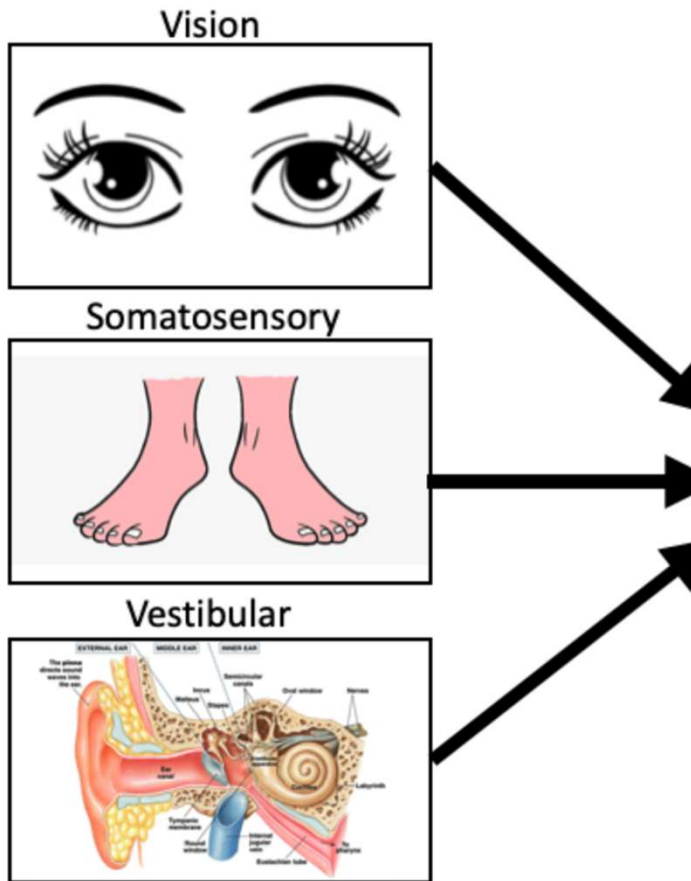
- ▶ Ease into it
- ▶ Incorporate movement into your day
- ▶ Focus on staying consistent
- ▶ Still having trouble? – help is available



Physical Therapy Evaluation and Treatment

- ▶ Appropriate for those with limited activity tolerance, fall risk, or limited mobility
- ▶ Evaluation focusing on strength, balance, mobility, and functional limitations
- ▶ Treatments design to reduce pain, address neuromuscular limitations, and improve function
- ▶ Home exercises and community exercise guidance





How does a PT specifically evaluate balance?

- ▶ 3 Systems that contribute to balance:
 - 1) Vision- Eyes
 - 2) Vestibular- Inner Ear
 - 3) Somatosensory- proprioception, muscles, joints, skin
- ▶ Information from all 3 systems is processed in the brain

Fall Cycle

- ▶ Physical Activity is Vital!



Modifiable Risk Factors

Internal Factors

Physical inactivity

Leg weakness

Poor balance

Improper use of cane or walker

Medication issues/errors

Low blood pressure when changing positions

Poor vision care/correction

Fear of falling

Social isolation/depression

External Factors

Stairs, uneven or wet surfaces

Trip hazards

Unsecured throw rugs

Lack of grab bars in bathrooms

Low chairs/toilets/sofas

Poor lighting

Cabinets and storage not easy to reach

Narrow doorways and/or paths limit use of needed assistive devices.

Stay Motivated



- ▶ Set realistic goals
- ▶ Track your progress and celebrate milestones
- ▶ Exercise with a friend or group for support and fun
- ▶ Find activities you enjoy—exercise should feel rewarding
- ▶ Remind yourself why you started—keep your “why” visible
- ▶ Schedule workouts like appointments to build consistency

Evidence-Based Fall Prevention Interventions

A Matter of Balance
Stepping On
Tai Chi for Arthritis and Falls Prevention **
Bingocize (R)
YMCA Moving For Better Balance
Tai Ji Quan: Moving for Better Balance TM **
Tai Chi for Prime
Fit & Strong **
FallScape
FallsTalk
Enhance Fitness **
Capable
Stay Active and Independent for Life **
Otago Exercise Program (OEP) **
Home Hazards Removal Program
Healthy Steps in Motion
Healthy Steps for Older Adults

Walk With Ease



AAEBIs and Falls Prevention

Did you know that a few of the Arthritis-Appropriate, Evidence-Based Interventions (AAEBIs) are also considered evidence-based falls prevention programs by The National Council on Aging (NCOA)? This means they can do double the benefit- help prevent falls AND manage OA. Read about each one below and click on their name to learn more!



Enhance®Fitness

A low-cost, evidence-based group falls prevention and physical activity program developed specifically for older adults.



Fit & Strong!

An evidence-based physical activity/behavior change intervention for older adults who have lower extremity joint pain and stiffness related to osteoarthritis.



The Otago Exercise Program

(OEP) is a series of 17 strength and balance exercises delivered by a Physical Therapist or a Physical Therapy Assistant in the home, outpatient or community setting.



Stay Active and Independent for Life

(SAIL) is a strength, balance and fitness program for adults 65 and older that includes exercises to improve strength, balance, and overall fitness.



Tai Chi for Arthritis and Falls Prevention

Many studies have shown Tai Chi to be one of the most effective exercises for preventing falls. This program helps people with arthritis improve muscular strength, flexibility, balance, stamina, and more.



Tai Ji Quan: Moving for Better Balance™

An evidence-based falls prevention program delivered in two one-hour sessions each week for 24 weeks. Each session consists of warm-up exercises, core practices, and brief cool-down exercises.

For more information on Falls Prevention head to [THIS LINK!](#)



Walk With Ease



- Developed by the Arthritis Foundation for arthritis care
- Promoted by the CDC as a 'Lifestyle Management Program'
- Coordinated in Iowa in collaboration with the Iowa Community HUB.

The screenshot shows the CDC website page for the "Walk with Ease (WWE) - Group" program. The page is titled "Arthritis" and "Walk with Ease (WWE) - Group". It includes a search bar, social media icons, and a navigation menu. The main content area is divided into sections: "About the program:", "Objectives:", "Target Audience:", and "Key Activities:". The "About the program:" section states that WWE is a group program combining self-paced walks with discussions about health-related topics, and that it is also available in Spanish for Spanish speaking adults. The "Objectives:" section lists five goals: improve balance and strength, improve arthritis symptoms, increase strength, increase walking pace, and improve confidence in one's ability to manage arthritis symptoms. The "Target Audience:" section lists two groups: adults with arthritis and older adults. The "Key Activities:" section lists three activities: review guidebook, group education and discussion about arthritis and health behaviors, and a group education and discussion about arthritis and health behaviors. A photograph of a man and a woman walking a dog on a grassy hill is also visible.

Walk with Ease (WWE) - Group

About the program:

- Walk With Ease (WWE) is a group program that combines self-paced walks with discussions about health-related topics.
- **Note:** The program is also available in Spanish for Spanish speaking adults.

Objectives:

Walk With Ease aims to:

- Improve balance and strength.
- Improve arthritis symptoms.
- Increase strength.
- Increase walking pace.
- Improve confidence in one's ability to manage arthritis symptoms.

Target Audience:

- Adults with arthritis.
- Older adults.

Key Activities:

- Review guidebook.
- Group education and discussion about arthritis and health behaviors.

What's in the Program?



- Motivational tools, strategies, and resources
- Instructions to safely start and progress walking
- Exercises to strengthen and stretch muscles
- Information about arthritis, symptom management and exercise



Local

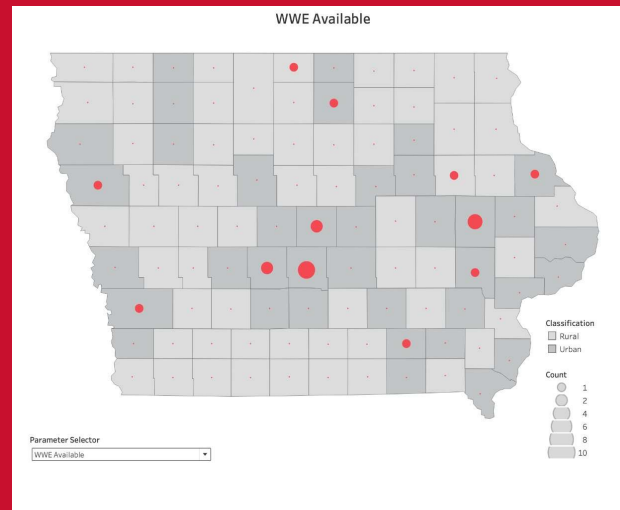
- Increase physical activity and prove the effectiveness of physical therapy and exercises in preventing falls

Statewide

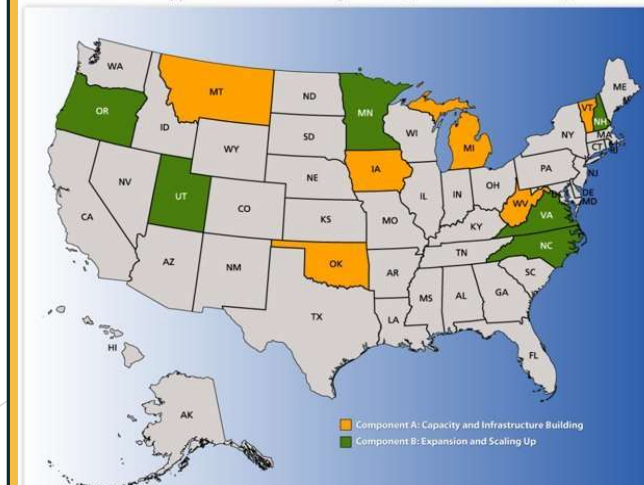
- ISU has received funding to spread this program throughout the state of Iowa
- Increase access to rural parts of the state

Nationwide

- Only 12 states received CDC funding for this project
- Iowa has been the sole state selected to receive funding to be the nation's role model



State Public Health Approaches to Addressing Arthritis, (CDC-RFA-DP-23-0001), Awardees



How to Sign Up

Email Research Scientist Abbie Coniglio, MS at abbiec@iastate.edu or walkwithease@iastate.edu

Register for Virtual Walk With Ease!

Check out our website!

- <http://www.walkwitheaseisu.org/>

