

SIU MEDICINE

DALE & DEBORAH SMITH CENTER
FOR ALZHEIMER'S RESEARCH
& TREATMENT

FALL PREVENTION and STEPPING UP Demonstration

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STEADI Trained Healthcare Provider

OTAGO Trained



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Why is Fall Prevention Important?



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**Center for Disease Control and
Prevention (CDC), 2023**
<https://www.cdc.gov/falls/facts.html>

- More than 1 in 4 people age 65 or older fall each year.
- About 36 million older adults are treated in the ER for a fall injury each year.
- More than 95% of all hip fractures are caused from falling.
- Falls are the most common cause of Traumatic Brain Injury (TBI).



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Brain Health and FALLS

-Older adults with mild cognitive impairment or certain types of dementia are 6-8 times more likely to fall.(Allan, et al, 2009)

-Balance and gait deficits and risk for falls increase as the dementia progresses.
(Fernando, et al, 2017)



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OTHER REASONS FOR FALLS in OLDER ADULTS

CDC, 2023 <https://www.cdc.gov/falls/facts.html>

- Lower body weakness
- Vitamin D deficiency (that is, not enough vitamin D in your system)
- Difficulties with walking and balance
- Use of medicines, such as tranquilizers, sedatives, or antidepressants. Even some over-the-counter medicines can affect balance and how steady you are on your feet.
- Orthostatic Hypotension (low blood pressure upon standing causing dizziness or lightheadedness)
- Vision problems
- Foot pain or poor footwear
- Home hazards or dangers such as broken or uneven steps, and throw rugs or clutter that can be tripped over.



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Do you have a BALANCE concern?



*ask yourself...

Do I feel unsteady, dizzy, or as if the room is spinning for brief periods?

Do I feel like I am moving when I know I am standing still?

Do I lose my balance and fall?

Do I feel as if I am falling?

Does my vision become blurred?



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How to Prevent Falls



- Ask your doctor or healthcare provider to evaluate your risk
- Talk to them about your medications
- Ask them about taking Vitamin D



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How to Prevent Falls



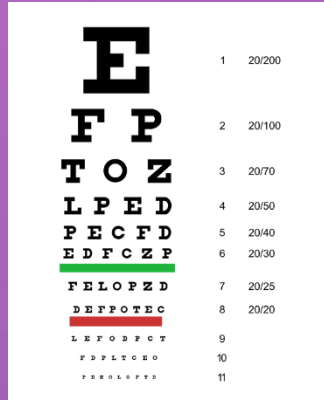
- Do exercises that make your legs stronger and improve your balance



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How to Prevent Falls



- Get your eyes checked at least once a year
- Update your eyeglasses if needed



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How to Prevent Falls



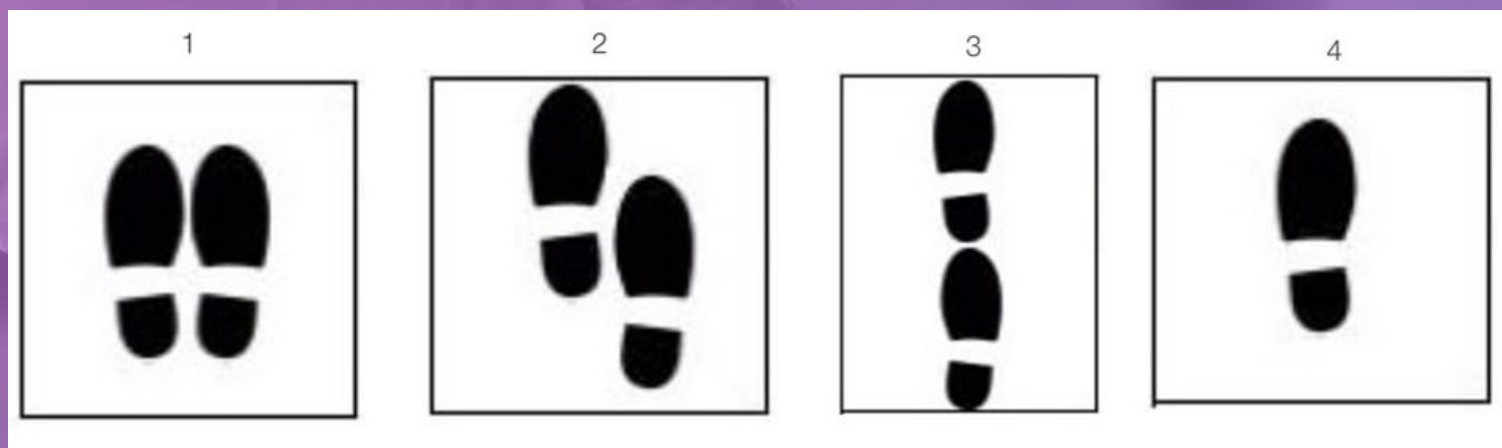
- Get rid of things you can trip over
- Add grab bars inside and outside your tub or shower and next to the toilet
- Put railings on both sides of stairs



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Four Stage Balance Test



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STEPPING UP- An evidence based exercise and dance program for people with Dementia and their Care partners.

*Developed by Eve Fischberg, OTR/L in 2016

Uses assessments and exercises from the Otago Program (Campbell and Robertson, 2003)

Features-

1. Group Support and Encouragement- A supportive environment for PWD and their CPs may also reduce caregiver burden and fall risk for the PWD (Fernando, 2017).
2. Fall Risk Reduction
3. Fitness including strength training, chair yoga, and dance (multi-modal exercise)
4. Home Exercise Program
5. Fun



What do we do in Stepping Up?





-Perform evidence-based fall risk assessments each semester

-Develop individualized exercises for each person to perform in class and at home



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INCLUDING:

- *Warm-ups
- *Resistive lower body exercises
(ankle weights according to ability)
- *Static and dynamic balance exercises



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EACH CLASS INCLUDES A
CHOREOGRAPHED
DANCE THAT PROVIDES
AEROBIC AND BALANCE
CHALLENGES

ENJOY MOVING TO GREAT
MUSIC WITH THE GROUP



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Dance and Dementia



- A small study of older adults with AD in nursing homes; participation in regularly scheduled guided dance activities possibly affected the self-reported quality of life and well-being, as well as improving mood and social interaction (Vella-Burrows, 2016)
- Dance/movement therapy can even maintain and at times improve memory and cognitive functioning. The focus of communication is on non-verbal attunement and mindfulness, both of which become increasingly important as many dementias affect language and cognitive impairment. (Hornthal 2018)



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Dancing Through Dementia

Dance/movement therapy offers individuals the opportunity to be truly present, to engage in their senses, and to tap into their independence, individuality, and self awareness. It is so much more than “dance”. It is about connecting to the core self and existing in potential and possibility. Remember we can move the body to move the mind! (Hornthal, 2018)



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COOL DOWN

End each class with a cool-down including relaxing chair yoga and stretching to soothing music



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Let's Try it!



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THANK YOU!



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