

Diabetes and fall prevention strategies

Falls are a very serious concern for individuals over the age of 65, they are the most frequent cause of fatal injury and nonfatal trauma related hospital admissions for older adults (Vinik et al., 2017). Individuals who have type 2 diabetes and are over the age of 65 are at a 67% higher risk of falling than their peers (Pijpers et al., 2012). There are many factors contributing to this phenomenon including:

- Diabetes causes an elevated blood glucose level which can lead to neuropathy and decreased strength and sensation in the legs and feet.
- Elevated blood glucose levels also affect the nerves in the eyes and causes poor vision.
- Hypoglycemia is common and causes sudden dizziness.
- Many people who fall do not report it to their doctor and do not receive proper treatment which leads to recurrent falls.

The following intervention strategies can help to maximize safety and protect you by reducing your risk for falls.

Shoes

Footwear should meet the following requirements to maximize safety and reduce the risk of falls: tight fastening, lightweight, substantial tread with a firm and molded sole/insole (Paton et al., 2013). Therapeutic shoes are sometimes covered by insurance programs and are recommended to prevent foot ulcers and promote safe mobility, speak with your primary care provider to discuss this option. Find information on insurance coverage and how to get the shoes [here](#).

Environment

Vision changes related to diabetes can increase the risk for falls. Use the following tips to maximize safety in your own home:

- **Lighting:** use LED lighting to brightly light your home without producing glare
- **Clutter:** remove it or anything that sits low on the floor and you could trip on, remove cords if possible, tape cords to floor if necessary
- Remove **floor rugs**
- **marking steps:** use brightly colored tape to mark the steps or changes in surfaces

Exercise

Chair yoga or tai chi can be part of a gentle exercise program to improve overall strength and balance. If you experience any unsteadiness or discomfort through these exercises, stop immediately and discuss alternatives with your primary care provider. This is a 30 minute chair yoga video, you can find various chair yoga and tai chi practices by going to www.youtube.com and entering your search terms at the top.



<https://www.youtube.com/watch?v=kgkw4bLkXxw>

Impact on Function

A fear of falling or a fear of consequences from a fall could lead to limited participation in daily activities such as cooking meals for yourself or for family. Implementing these strategies could help to maximize safety and limit the risk for a fall while allowing you to continue to engage in the daily activities of your choice.

Safety

Safety is the number one concern when addressing falls. If you feel unsteady or fearful with any of the interventions, stop immediately.

Consult

- Discuss any new exercise regimen with your primary care provider
- If you have recently had a fall, ask your primary care provider if you could benefit from a home occupational therapy evaluation to maximize your strength and safety within your home or community environment
- Discuss a consultation with a podiatrist to minimize secondary complications from diabetes

References:

Paton, J. S., Robers, A., Bruce, G. K., & Marsden, J. (2013). Does footwear affect balance? *Journal of the American Podiatric Medical Association, 103*(6).

Pijpers, E., Ferreira, I., Jongh, R., T., Deeg, D. J., Lips, P., Stehouwer, C. D. A., Kruseman, A. C. N. (2012). Older individuals with diabetes have an increased risk of recurrent falls: analysis of potential mediating factors: the longitudinal ageing study Amsterdam. *Age and Ageing, 41*(3), 358-365.

Vinik, A. I., Camacho, P., Reddy, S., Valencia, W. M., Trence, D., Matsumoto, A. M., Morley, J. E. (2017). Aging, diabetes and falls. *Endocrine Practice, 23*(9), 1117-1139.