

Be Fall Free!!!

**A Guide to Improving Balance and Reducing
Your Risk for Falls!!!!**



H2 HEALTH



(800) 699-9395

Good balance can often seem like good luck. Some people have it, some people don't. Some people can become graceful ballerinas, while some have trouble not tripping over their own feet.

But the truth is, good balance is a lot more complicated than luck. And maintaining good balance while you age can help prevent dangerous accidents, and many complications down the road.

What is Balance and How Does it Work?

Our sense of balance is controlled mainly by a maze like structure located in our inner ear. The medical term for all of the parts of the inner ear involved with balance is the vestibular system (see Figure 1).

This balance system works with our eyes, muscles, and joints to maintain orientation or balance. When maintaining perfect balance while standing on one leg, your center of gravity will be exactly above the point where you touch the ground. If you are standing on two feet (which you normally are), your center of gravity will be exactly between them.

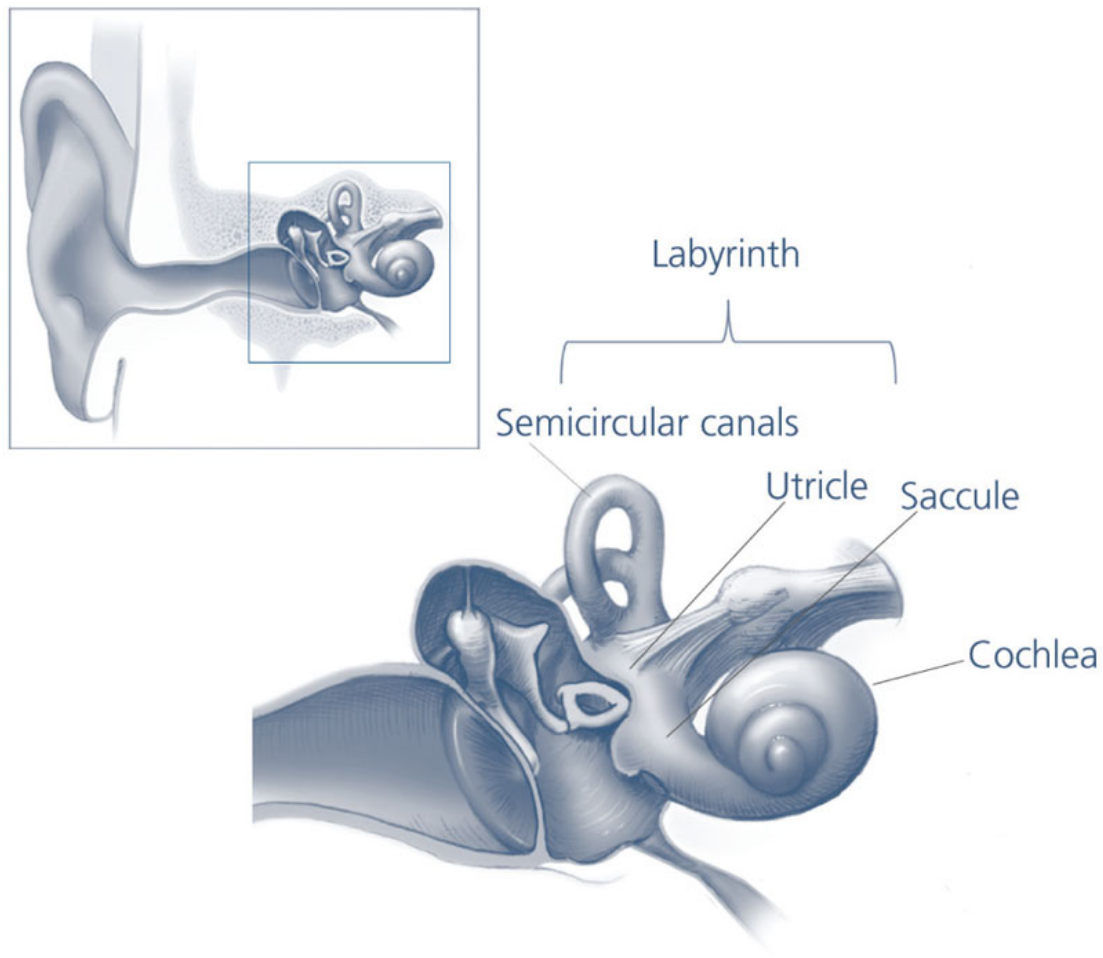


Figure 1: The vestibular system in relation to the ear.
Credit: NIH Medical Arts.

The key to maintaining good balance is being able to detect the beginnings of a shift from your perfect stance (when you begin to wobble).

At this moment of detection, your body needs to make an adjustment to retain your balance. This realization and subsequent adjustment is no easy task, which is why good balance takes practice. And lots of it.

But before we get to practicing, let's check out some symptoms of balance disorders.

Symptoms of Balance Disorders

According to the National Institute on Deafness and Other Communication Disorders (NIDCD), when balance is impaired, an individual has difficulty maintaining orientation. In other words, you might have a tough time doing this:



Symptoms of someone who suffers from a balance disorder might include:

- A sensation of dizziness or vertigo (spinning)
- Falling or a feeling of falling
- Lightheadedness or feeling woozy
- Visual blurring
- Confusion or Disorientation

Other symptoms may include nausea and vomiting, diarrhea, changes in heart rate and blood pressure, and fear, anxiety, or panic. Some people also feel tired, depressed, or unable to concentrate.

Symptoms may fluctuate over a short period of time, or last for longer periods of time. In order to receive an accurate diagnosis, it is important that you tell your doctor which specific symptoms you are suffering from.

What causes balance disorders?

Now that we've covered some of the symptoms of a balance disorder, you may be wondering what causes these to occur.

According to the Ohio State University Extension, there are many factors that contribute toward making older adults more vulnerable to falls. These factors include:

- Impaired hearing and vision
- General loss of muscular strength and tone
- Arthritis
- Osteoporosis
- Vertigo
- Cerebrovascular insufficiency
- Neurologic disability (stroke)
- Postural hypotension (sudden decrease in blood pressure)
- Illness

Many side effects from medications include dizziness as well, so make sure to check the side effects of any medication you are taking.

Most Common Balance Disorders

- **Benign paroxysmal positional vertigo (BPPV)** is one of the most common causes of vertigo — the sudden sensation that you're spinning or that your head is spinning inside.

BPPV is characterized by brief episodes of mild to intense dizziness. Symptoms of BPPV are triggered by specific changes in the position of your head, such as tipping your head up or down, and by lying down, turning over or sitting up in bed. You may also feel out of balance when standing or walking.

- **Labyrinthitis** is an infection or inflammation of the inner ear that causes dizziness and loss of balance. It is frequently associated with an upper respiratory infection such as the flu.
- **Ménière's disease** is associated with a change in fluid volume within parts of the labyrinth. Ménière's disease causes episodes of vertigo, irregular hearing loss, tinnitus (a ringing or buzzing in the ear), and a feeling of fullness in the ear. The cause of this disease is unknown.

- **Perilymph fistula** is a leakage of inner ear fluid into the middle ear. It can occur after a head injury, drastic changes in atmospheric pressure (such as when scuba diving), physical exertion, ear surgery, or chronic ear infections. Its most notable symptom, besides dizziness and nausea, is unsteadiness when walking or standing that increases with activity and decreases with rest.
- **Vestibular neuronitis** is an inflammation of the vestibular nerve and may be caused by a virus. Its primary symptom is vertigo.

Tips on how to improve balance

Fortunately, there are some good ways to significantly improve your balance.

First things first, as far as exercises go, the **sustained one-legged stand** should be your go-to guy.

1. Grab on to something sturdy, for example, a chair or a high counter.

2. Lift one leg off the ground, keeping that leg straight in front of you or off to the side and hold your stance.
3. See how long you can hold it for.
4. **If at first you don't succeed...**well, you know the saying.

Another great exercise is the **knee lift**.

1. Again, grab on to something sturdy.
2. Lift your knee as high as you can- up to your hip.
3. Hold this stance

Over time, you should be able to hold both of these longer. When you feel comfortable, try to depend less and less on the sturdy object, and more on your sense of balance.

Quick Tip: Fix your gaze to something stationary!

- When balancing, fixing your gaze onto something stationary can be a big help.
- What this does is enables you to detect when your body is shifting compared to what you are looking at.

- At first, focus on something closer, as detection of movement will be easier with a closer object.
- Once you feel comfortable, focus on something farther away.
- Over time, this exercise will get easier and easier as you become more comfortable with your sense of balance.

What to do next?

If you are experiencing any of the issues we've talked about here, it would be a good idea to talk to a therapist about them. Here at H2 Health clinics, you can receive a complimentary fall risk assessment at any of our locations.

Following a screening, our therapists may find it necessary to design a custom therapy program, focused on the individual needs of each patient. We look forward to speaking with you!