We learn to keep our balance from the time we begin to stand and walk. It is a skill we take for granted until something happens that disturbs our sense of balance or causes vertigo and dizziness.

The human body relies on three main systems to keep itself balanced:

**The Eyes**
We rely heavily on our vision for balance. Everything we see is transmitted from our eyes to our brain. The brain uses this information to keep the body upright. It also helps us avoid tripping hazards and to adjust for changes in surfaces.

**The Nerves**
We rely on our sense of touch to transmit information from our hands or feet to our brain. The brain uses this input to control how our muscles react and move to help keep us stable, even as our body moves or sways.

**The Inner Ear**
The vestibular system is located in the inner ear and also helps keep the body balanced. Its job is to tell the brain where our head is in space. It picks up all kinds of information about rotation, acceleration, tilt, and turns of the head and sends that information to the brain. The brain uses this information to keep us steady on our feet.

If any one of these three systems is not working properly, your brain will not receive accurate information. The result is dizziness or vertigo, and your balance can be affected.

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**Vestibular Hypofunction**
A diagnosis of vestibular hypofunction means that something has happened to the nerves within the inner ear. They may no longer be firing accurately or as fast as they should.

The inner ear is stimulated by head movement. If the vestibular nerve is damaged, the information cannot travel up the nerve to the brain and the eyes fast enough for the brain to react to the movement. If the nerve is not firing correctly, the information may also be mixed up when it reaches the brain.

If the brain is not getting enough input, it cannot tell the body what to do to correct for each motion of the head or trunk. The result is that you may lose your balance, sway, or tilt over to one side. You may also feel dizzy.

The vestibular nerve also sends information from the inner ear to the eye. If the nerve is damaged, it no longer sends correct information to the retina, which is the sensory area of the eyes. The retina then relays this incomplete message to the brain, which the brain perceives as movement.

You may have experienced this if things appear to be moving when they are not. You may look at an object and when you turn your head, it appears to move. As this happens often throughout your day, it can make you dizzy. It may even increase to the point where you feel like you are spinning every time you move your head.
Vestibular Rehab

Vestibular rehab is very important for your recovery from this nerve damage. Your physical therapist will guide you through a series of exercises that promote recovery of the vestibular system. The goal is to decrease your dizziness and restore your balance.

The exercises include specific movements of the eyes, the head, or the body in order to stimulate the nerves of the inner ear and retrain the natural reflexes you may have lost. You will also do exercises with your eyes closed. This increases the strength of the vestibular system because you cannot rely on your vision to keep yourself balanced. When your eyes are closed, you force the vestibular system of the inner ear to work harder and become stronger.

The exercises you will be doing may increase your dizziness at first. This is a normal response, and your physical therapist will help you work through this and pace yourself. The nerves of the inner ear must be stimulated in order to heal. This often means you will have to push yourself to do things that might make you feel temporarily worse. Remember, this is normal and expected and must occur in order for you to recover. With time and practice, normally a few weeks, the dizziness should become less severe and your tolerance to motion should greatly increase.

Improving balance and getting rid of dizziness does not happen quickly. It requires daily practice and patience. Talk with your physical therapist about any questions or concerns.