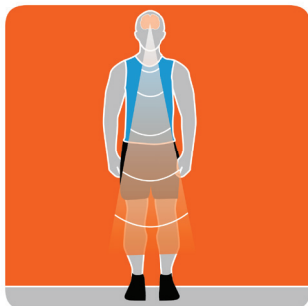




orthopedic ONE

WHAT IS THE BALANCE SYSTEM?

There are three main components that work together to promote balance.



1. PERIPHERAL SENSORY SYSTEM

VISION

Tells where you are in relationship to the world around you. For example, being 5 feet 6 inches away from the floor or two inches away from a wall.

PROPRIOCEPTION AND SOMATOCEPTION

Gets information from your feet, such as the type of surface you are standing on and how your joints are positioned. For example, rolling your ankle 10 degrees outward. This also tells you where your head is positioned.

VESTIBULAR SYSTEM

Your inner ear organs communicate with your brain about the movement and position of your head through canals in your ear that feel movement and keep your vision clear.

2. CENTRAL PROCESSING

PERIPHERAL SYSTEM

Connects with your brain to process all of this, and gathers information from other parts of your brain (called the cerebellum and the cerebral cortex). Based on what it receives, your brain will "fine-tune" what information from each system can be used for balance.

3. MOTOR OUTPUT

After your brain is done fine-tuning, it shares the most important information to keep you steady. For example, quickly taking a step if someone bumps you.

If this system does not work correctly, you can feel dizzy or off-balance which can lead to falls. A physical therapist may be able to help find the source of your unsteadiness and help you get your systems working together properly.