

## How Can Physiotherapy Help

- physiotherapists are specifically trained in musculoskeletal assessment. This makes them the ideal health professionals to treat injuries or problems with joints, bones, muscles, tendons and ligaments. They can recognize contributing factors to imbalance and dizziness.
- After a detailed **assessment**, a **treatment plan** would be designed, to meet the needs and goals of the client. This may include:

### Education

- of condition and contributing factors
- of proper posture and of appropriate activity levels
- on appropriate assistive devices and adaptation for daily function

### Exercises

- to decrease dizziness, increase balance function and increase activity levels

### Manual Therapy

- cranial treatment to decrease pressure on specific skull bones and nerves
- to improve position and movement of joints, to promote neutral posture and to assist in balance retraining

**For more information or, should you require physiotherapy treatment, please contact**

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PHYSIOTHERAPY. IT'LL MOVE YOU

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# *Balance and Dizziness*



## **What You Should Know**

**Look inside to see how Physiotherapy can help you to..**

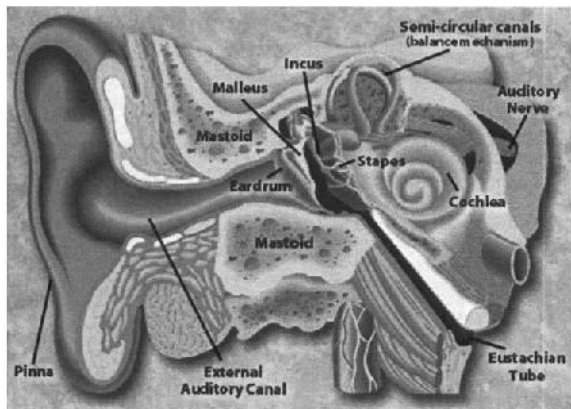
- Improve balance and coordination
- Help compensate for permanent problems

## Explaining Balance: The Vestibular System

We are able to respond to changes in our body position, the effect of gravity and focus on moving objects due to our Vestibular System

This system uses information obtained from tubes and chambers in our inner ear, and sends messages along the nerves to the brain.

The brain combines this information from messages from our joints, eyes and other parts of the body to determine where we are and how to respond. It then sends a response to the muscle and other systems to react appropriately.



When the Vestibular System is damaged, it has little ability to repair itself. The body recovers by having the brain reset to compensate for the unmatched signals sent from the good and bad ear. This occurs naturally in most people but some people need help rehabilitating the Vestibular System.

Temporary problems such as ear infections, restricted joint movements do not cause permanent damage but may also need help rehabilitating back to normal.

## Vestibular Rehabilitation

Rehabilitation is designed to provide small, controlled and repeated doses of movements which cause dizziness to desensitize the balance system and enhance fine tuning involved in long term compensation.

Specific exercises to improve balance and proprioception are also used.

Medications can help to decrease the symptoms by lessening the brain input but once the acute phase is past, inactivity and medications can interfere with the long term compensation process.

### Problems in the system can be caused by:

- damage to the ear, eyes and joints including head trauma ( whiplash)
- BPPV –small crystals within the ear get displaced
- ear infection/injury or toxicity (ie certain medications)
- disorders that affect fluid levels in the ear (Meniere's disease, endolymphatic hydrops)
- benign tumors ( acoustic neuroma)
- degeneration of the ear
- barotraumas (scuba diving)
- Vascular (blood) insufficiency(stroke)

### Primary Symptoms

Dizziness

Lightheadedness

Disorientation

Difficulty walking

Difficulty focusing on objects ( reading, writing, speech)

### Secondary Symptoms

Inactivity due to avoidance of dizziness

Increased risk of fall

## What can you do

- Keep visual cues as seen as possible
- Use good lighting, night lighting, appropriate glasses
- Practice standing on 1 leg
- Use care when your support surface is altered (ie walking on rough ground, loose gravel, soft rugs) and avoid clutter.
- Use good footwear
- Avoid high risk positions (ie balancing on stools, reaching with your head tilted back)
- Use assistive devices as needed – cane, walker, handrails, antiskid devices in bathroom