



A Better Life Through Better Balance

Poor balance is without doubt one of the highest risk factors influencing mortality and morbidity in the senior population.

Falls are the largest contributor to hip and pelvic fractures as well as fractures of the forearm and shoulder. Complications leading from serious trauma can significantly impair life expectancy and independence creating a domino effect from a multitude of possible complications such as pneumonia or deep vein thrombosis resulting from enforced bed rest or following joint replacement surgery.

There are many compelling reasons therefore on a personal as well as community level to ensure that individuals at risk of impaired or diminishing balance seek early intervention to maintain independence.

There are many reasons why balance may deteriorate over time and it is vitally important to identify the specific cause(s) as early as possible.

Many of us might have experienced transient balance impairment as part of a middle ear problem, vertigo or Meniere's Disease. In these cases, once the condition is managed, balance is restored.

Less frequently, poor balance can result from peripheral neuropathy or progressive deterioration of the sensory fibres of the lower limbs. This can result

from uncontrolled diabetes or through excessive alcohol or recreational drug use.

Progressive balance impairment can also be an early indicator of a number of neurological conditions including Parkinson's Disease, Motor Neurone Disease and Multiple Sclerosis among others.

By far, the most common neurological cause for balance impairment in the senior population is non-specific cerebellar atrophic changes. The cerebellum is a lobe of the brain located at the back of the skull and is responsible for assessing and responding to alterations in body positioning. As with all brain matter, the cerebellum is also subject to possible degenerative changes in later life. Head trauma, stroke, alcohol and recreational drug use can accelerate or precipitate atrophy.

In the absence of any specific medical or neurological cause for diminished balance, undertaking regular balance exercises can help restore function.

It is advisable to seek the assistance of an exercise physiologist or physiotherapist who can structure and progress a suitable programme as well as provide the necessary support to avoid injury.

In general, it is best to start in the

most stable position (eg on all fours, and practice lifting a limb sequentially). This may not be possible or may require modification if the subject has painful or arthritic knees.

In the absence of knee pain, the subject can progress to kneeling on a mat and stretching forward to a designated point such as a balloon on a string.

Progress to sitting with feet on the floor and later feet off the floor and finally bending a hip and knee whilst standing on one leg.

Aim to perform all exercises slowly and accurately and avoid fatigue to optimise quality of movement.



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He has a long standing clinical interest in muscle

flexibility in the sporting population particularly in relation to neural influences and, his association with Bond University over the last few years has enabled him to undertake research in this area resulting in two studies to date the first of which was published in "Manual Therapy".