

## BALANCE EXERCISE

### Balance System Adaptation

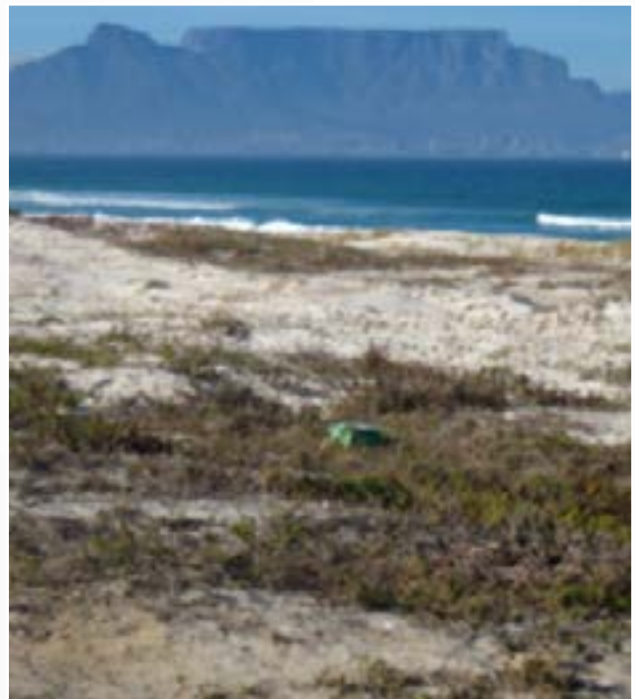
The human balance system is made up of four components: the ears, the eyes, the position sensors in the feet, legs, knees and hips, and the brain. The balance portion of the brain can make appropriate adjustments for problems with any part of the balance system. The exercises are designed to help the brain's adaptation process. They may at first cause more dizziness while doing them, but this is a good thing. This forces the brain to recognise that there is a problem and that changes need to be made.

### Balance Adaptation Exercises

These exercises are called Cawthorne Balance exercises. Start these exercises slow and progress to faster speeds. Also, these exercises take time, up to several months, before a difference can be noted. This depends on the severity and complexity of your balance system dysfunction.

1. SITTING POSITION – without arm rests
  - a. Eyes exercises – at first slow, then quick, 20 times
    - i. Up and down
    - ii. Side to side
    - iii. Repeat i and ii, focusing at arms length
  - b. Head exercises – at first slow, then quick, 20 times
    - i. Up and down
    - ii. Side to side
    - iii. Repeat i and ii, now focusing on a spot on
  - c. Shrug shoulders and rotate, 20 times
  - d. Bend forward and pick up objects from the ground, 20 times
  - e. Bend forward and pick up objects from the ground, 20 times
  - f. Rotate head, shoulders and trunk with eyes open, then closed, 20 times
2. STANDING
  - a. Repeat a.
  - b. Repeat b.
  - c. Repeat c.
  - d. Change from a sitting to standing position, with eyes open, then closed, 20 times.
  - e. Throw ball from hand to hand (above eye level)

- e. Throw ball from hand to hand under knees.
- g. Change from sitting to standing and turn around in
- h. Rotate head, shoulders and trunk with eyes open, then closed, 20 times
3. WALKING
  - a. Walk across room with eyes open, then closed, 10 times
  - b. Walk up and down slope with eyes open, then closed, 10 times
  - c. Participate in games involving stooping or stretching and aiming, such as bowling or shuffleboard.
  - d. Stand on one foot with eyes open
  - e. Walk with one foot in front of the other with eyes open, then closed.
  - f. Try walking on the beach. The floor is uneven, the horizon moving and if you fall you will not hurt yourself. It is an excellent spot to practice your balance exercises.



(Adapted from the Patient Discussion Booklet Series of the University of Utah Otolaryngology. Reprinted by Permission.)