

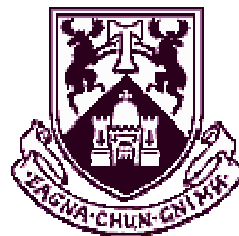
Getting the Balance Right Programme

Physiotherapy Exercises for People with MS



Strand B

People who use bilateral support (2 sticks, frame, rollator) to walk.



University of Limerick
Physiotherapy Department

This booklet is designed as a tool for Chartered Physiotherapists to enable them to implement the Strand B strengthening and balance programme from the Getting the Balance Right project.

Everyone completing these exercises should be assessed and supervised by a Chartered Physiotherapist during the programme to ensure their safety and the suitability of the exercises.

There are different levels of difficulty suggested and the starting point and progression of the exercises should be with consultation with a Chartered Physiotherapist. The difficulty of the exercise should be progressed so as to continuously challenge the participant. Details of how each exercise can be progressed are included below.

Participants should be aware that overheating due to exercise can cause a temporary worsening of symptoms, which is known as Uhthoff's phenomenon. For most people the worsening of symptoms is temporary and resolves within 30 minutes of stopping exercise. Strategies to minimise heat gain can include; exercising outdoors or near an open window or fan, or drinking iced water.

Participation in this programme led on average to statistically significant improvements in all measures. These included:

- 9% reduction of the physical and psychological impact of MS (measured using the MSIS 29 questionnaire).

- 13% reduction in the impact of fatigue

- 20% improvement in balance scores which were also clinically significant and resulted in 25% of them moving from a category of moderate fall risk, to low fall risk.

- 16% improvement in distance walked in 6 minutes.

Of interest these findings were similar to those receiving 1:1 physiotherapy.

We hope that this information is useful to you in implementing the programme in your area of clinical practice

Neasa Hogan, Dr Susan Coote
On behalf of the UL Physiotherapy Team

Strand B Programme

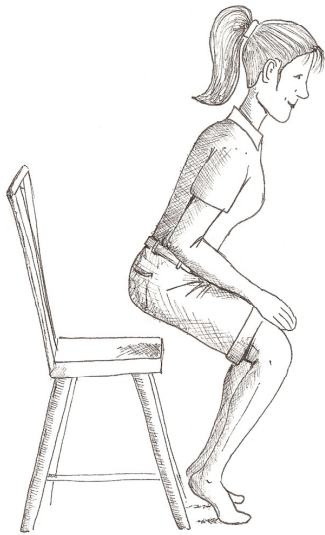
There are 6 exercises that can be carried out in a circuit style class with 6 participants. In order to optimise the intervention it is important to continuously challenge the participant. This is done firstly by increasing the number of repetitions and secondly by increasing the difficulty of the exercise.

The six exercises are to be performed in sets of 12. When a participant is able to perform 12 repetitions of an exercise safely this can be progressed incrementally up to 3 sets of 12 repetitions.

When a participant can perform 3 sets safely the exercise will be progressed so as to continuously challenge the participant. Not all participants will progress through all the exercises. The progression is dependent on the ability of the participant and their safety while performing the exercises

For safety reasons it is recommended that the exercises are completed within parallel bars.

1. Sit to Stand

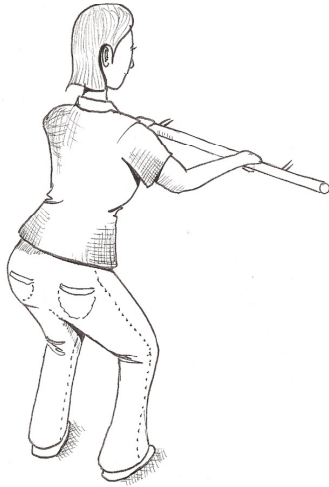


Hand Positioning – Participants may initially need to use hands for support to rise from chair, then progressing to hands by side and then to hands across chest.

Seat Height – Participants may initially require a higher seat height which can be lowered to increase the intensity of the exercise.

Weights – Handheld weights may be given to participants who need further progression.

2. Squat



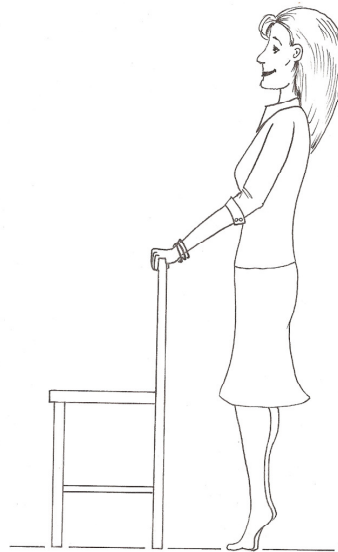
Support – Participants may initially need bilateral support, this can be decreased to unilateral and then to no support as participants' ability increases.

Weights – May be given to participants who are able to perform 3 sets of 12 squats safely with no support.

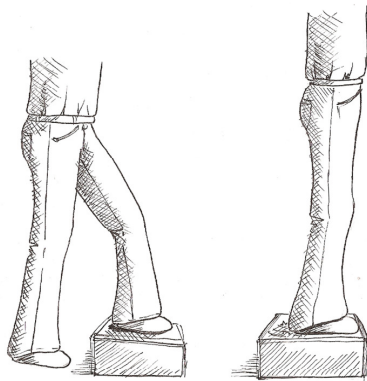
3. Calf Raises

Support – Participants may initially need bilateral support, this can be decreased to unilateral support and then to independent calf raises as participant progresses.

Other options – If participants are able they may perform single leg calf raises or if they can perform 3 sets of 12 independent calf raises weights can be added as further progression.



4. Step ups

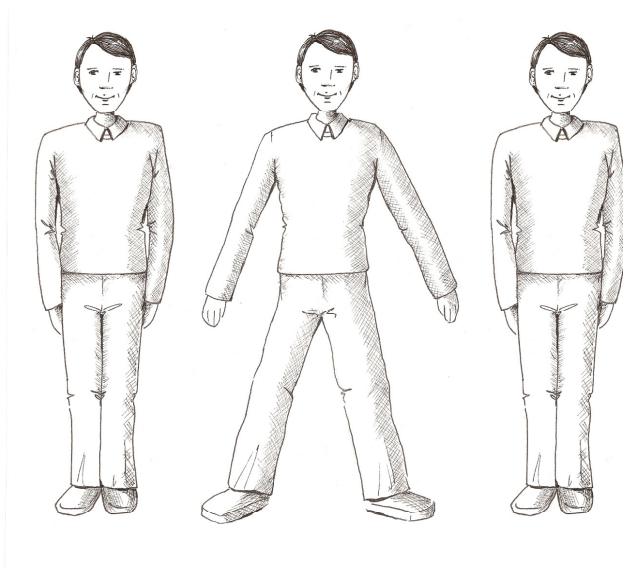


Support – Participants may begin with bilateral support, and then decrease to unilateral support, then to no support.

Stepping – Initially participants may step onto step and back to starting position, then step onto step and over, and then onto step, over and backwards to starting position.

Step Height – When participants are comfortable with all directions of stepping step height may be increased.

5. Side Stepping



If a participant is unable to take a step to the side, weight shifting from side to side in standing may be performed and progressed to stepping when the participant is able.

Support – Participants may begin with bilateral support, and then decrease to unilateral support, then to no support.

Number of steps – Initially participants may only take one step in each direction. This can be increased as participants' ability increases.

6. Tandem Stepping/Walking

Support – Participants may begin bilateral support, and then decrease to unilateral support, then to no support.

Stepping – Participants may initially just place one foot in front of the other and hold this position. The number of steps can then be increased as the participant progresses.

Crossover – Participants may become competent at tandem walking. This can then be progressed to one foot crossing over in front of the other.

