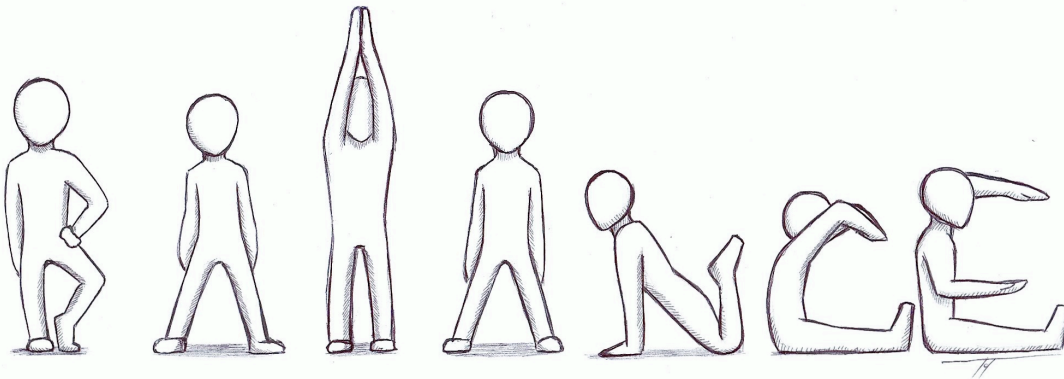


# BALANCE TRAINING PROGRAM



Prepared for:

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Kennedy Krieger Institute  
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Baltimore, MD  
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This booklet prepared as an example of the one used in the study:

*Original Article*

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**A Home Balance Exercise Program Improves Walking in People With Cerebellar Ataxia**

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1-9  
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This booklet is intended as a lay summary of the methods presented in the article regarding a home balance exercise program for people with cerebellar ataxia.

Exercises presented are only examples of exercises used in the study and are not intended as a prescription for all individuals with ataxia.

We recommend people with ataxia see a local physical therapist for evaluation. The PT can determine if such a program would be appropriate and can prescribe optimal exercises for the individual.

One way to find a local PT is through the American Physical Therapy Association's link for Find a PT: <http://aptaapps.apta.org/findapt>  
You can search by zip code and we recommend, neurological practice area as a filter.

## **GENERAL EXERCISE RECOMMENDATIONS**

- 1. Perform your exercises at least once a day if possible.**
2. Wear loose, comfortable clothing and shoes with good support.
3. Keep a record of your progress.
4. Try to make your exercise part of your daily routine.
5. Start slowly and increase the amount of exercise gradually based on how you feel.
- 6. Be sure to exercise. Even small amounts of exercise are helpful. It all adds up.**
7. You should be able to breathe and talk comfortably while exercising. If you are short of breath during exercise, you may be working too hard.

*Before beginning any exercise program please consult with your personal health care provider to ensure the appropriateness and safety of the program based on your needs.*

## Balance exercise safety considerations

1. Wear supportive shoes and comfortable clothing.
2. Choose a location in which you will have adequate space to move and which will provide a firm non-skid surface.
3. Equipment you will need may include: foam square, exercise ball or tilt disc and three sturdy chairs.
4. **Always use as much support (i.e. hold on to a stable surface with one or both hands) as needed:**
  - a. Place the three chairs so that when seated in one the backs of the other two are within a comfortable reach to hold on to.
  - b. Hold on initially with one or both hands when learning a new exercise.
  - c. Gradually reduce your use of the support as you gain confidence with the exercises. For example: grip with both hands, lighten your grip, use an open hand, use a few fingers, use one finger and keep hand just off the support.
5. Follow the specific instructions for each exercise.
6. If unsure, ask for recommendations on how to modify an exercise to improve your confidence with it.
7. Changing the support surface (i.e. chair to therapy ball, floor to foam square) or your use of vision (i.e. looking at your feet to looking straight head, holding your head still to moving your head while doing an exercise, eyes opened to eyes closed) increases the difficulty of a specific exercise. Always use caution when modifying your program.



Example of safe position for standing exercises

## Balance Exercise Progression

1. Follow the handouts and/or video for the specific exercises identified at the time of your visit.
2. Perform the group of exercises in 20-30 minute intervals.
3. Perform the group of exercises 4-6 days per week.
4. To determine how to progress your exercises ask yourself this question:

**How confident were you that you would NOT lose your balance or become unsteady when you performed those exercises?**

Rate the exercise based on the amount of support you used at the time.

**How challenged was your balance by the exercise?**

**0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%**  
**Very steady** **Very unsteady**  
**Not challenged** **Very, Very Challenging**

Use these terms as a guide for your rating:

10 Very Easy	60	
20 Easy	70	Very Challenging
30 Fairly Easy	80	
40 Somewhat Challenging	90	
50 Challenging	100	Very, Very Challenging

Another way to consider at rating of a “5” may be that 50% of the time you can perform the exercise very steadily but 50% of the time you are struggling, i.e. have to use more hand support to prevent yourself from losing your balance.

Record on the log sheet the challenge of the exercise when you first attempted it that day and after 3 minutes of practice.

## Sample log

<b>Photo/title</b>	<b>Date</b>				
	Duration (min)				
	Challenge (0-100%) Start				
	Challenge (0-100%) End				
<b>Photo/title</b>	<b>Date</b>				
	Duration (min)				
	Challenge (0-100%) Start				
	Challenge (0-100%) End				
<b>Photo/ title</b>	<b>Date</b>				
	Duration (min)				
	Challenge (0-100%) Start				
	Challenge (0-100%) End				

## EXAMPLE EXERCISES FOR YOU

## **Are You Challenging Yourself: Too Little or Too Much?**

Consider the following points when doing your exercise program:

- Is the exercise effortful? Am I working at a 4-6 out of 10 effort i.e. somewhat strenuously - strenuous?
- Am I challenging my balance? Am I able to maintain my balance ~40-60% of the time without needing additional support by stepping out of place, holding on or pausing?

Ways to make an exercise a little easier or safer:

- Try holding your head still and focusing on a stable point while doing an exercise.
- Slowing down the speed of an exercise to let your heart rate recover.
- Spread the width of your feet when standing to have a more stable base.
- Hold onto a stable surface as needed for balancing.

Ways to make an exercise more challenging:

- Slowing down an exercise – this can challenge your balance if it means standing on one foot for a little more time.
- Looking with your eyes and/or turning your head in different directions (up, down, left, and right) will also add balance challenge.
- Speeding up the rate of your exercise: this can help keep your heart rate elevated.
- Bringing your feet closer together in standing challenges your balance more.
- Add arm movements to a lower body exercise program.

Remember to always use caution when modifying your program.



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