

MW: Home Exercise Program – 3rd edition

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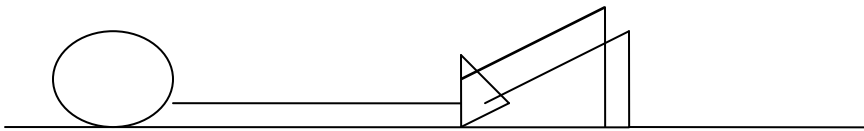
Knee Rolling: *reduce leg spasticity and strengthen hips and abdominals*

Lie on your back with hips & knees bent and feet flat on the bed

- Keeping your knees close together, roll them to the Left as far as is comfortably possible
- Tighten your abdominal muscles and roll knees back to midline
- Roll them to the Right as far as is comfortably possible
- Tighten your abdominal muscles and roll knees back to midline
- Repeat 5 times

After 1 week of practice, attempt to increase number by 1 repetition each week, until performing a total of 10 repetitions. Rest as needed while completing the activity.

Note: discontinue exercise if back pain develops.

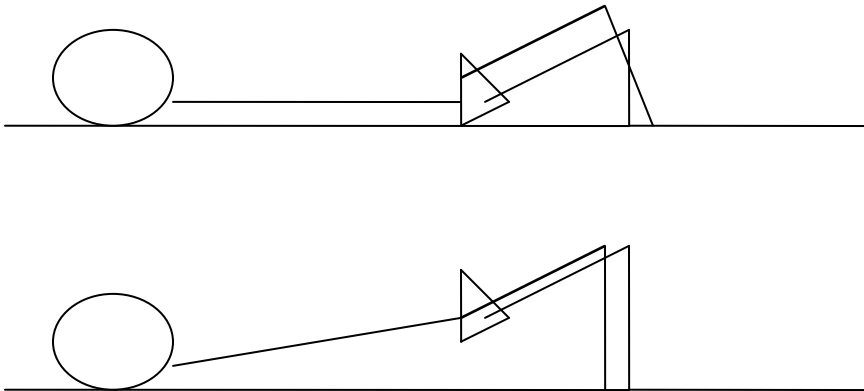


Bridging with Theraband: for strength and control of hips & pelvis

Lie on your back with hips and knees bent, feet flat on the bed and with theraband tied around the knees

- Lift your bottom off the bed until hips are straight (bridge position)
- Hold bridge position and push knees apart against resistance of theraband.
- Hold for a slow count of 3 (1001, 1002, 1003)
- Let knees come back together and lower hips slowly to surface
- Repeat 5 times

Note: to reduce the amount that the Left leg compensates for the Right leg, position the Left foot slightly further down the bed (i.e., away from the hip)



Single Leg Bridging: a progression in difficulty

Lie on your back with the Right hip and knee bent, foot flat on the bed

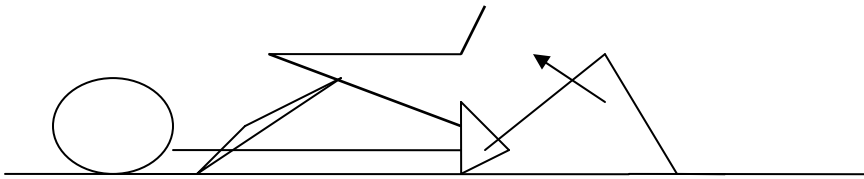
- Left leg is straight and resting on the bed
- Lift your bottom off the bed until hips are straight (bridge position)
- Hold bridge position for a slow count of 3 (1001, 1002, 1003)
- Lower hips slowly to surface.
- Repeat 5 times

After 1 week of practice, attempt to increase number by 1 repetition each week, until performing a total of 10 repetitions. Rest as needed while completing the activity.

Hip & Knee Flexion: *strengthen hip flexors, reduce spasticity*

Lie on your back with hips and knees bent, feet flat on the bed

- Tighten abdominal muscles; bend Right knee up toward chest
- Hug the Right leg to your body using both hands for a slow count of 5
- Lower foot slowly back to surface
- Repeat 3-5 times.



After 1 week of practice, attempt to increase number by 1 repetition each week, until performing a total of 10 repetitions. Rest as needed while completing the activity.

Hip Adduction: *strengthen muscles of inner thigh*

Lie on your Left side; top leg is bent up toward chest, bottom Left leg is straight:

- Lift the Left leg off the bed; lower slowly.
- Repeat 3 times.

Lie on your Right side: top leg is bent up toward chest, bottom Right leg is straight

- Lift the Right leg off the bed; lower slowly.
- Repeat 3-5 times.

After 1 week of practice, attempt to increase number by 1 repetition each week, until performing a total of 10 repetitions. Rest as needed while completing the activity.

Partial Push-up: *low back mobility, abdominal stretch and arm strength*

Lie on your stomach with both hands (palms down) near the shoulders.

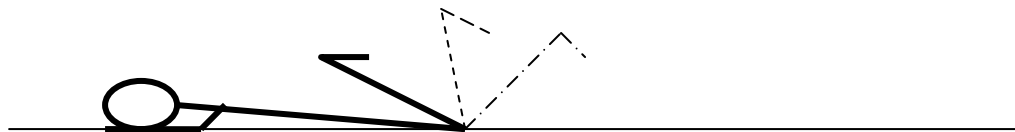
- Tuck chin in
- Press hands into bed, and complete a partial push up (i.e., elbows will remain slightly bent and hips will remain on the bed)
- Hold position for a slow count of 3 (1001, 1002, 1003)
- Repeat 3-5 times



Knee Flexion Control: *strengthen hamstrings*

Lie on your stomach with both hands (palms down) near the shoulders.

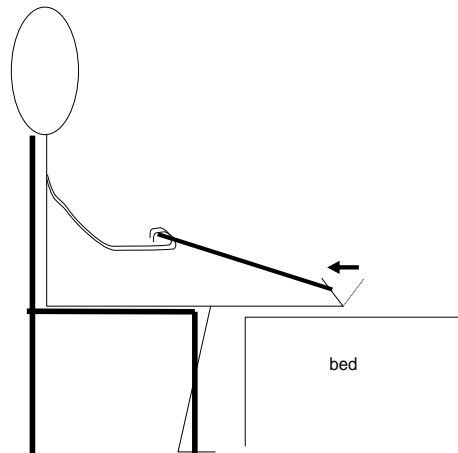
- Slip Left foot under Right ankle so that ankles are crossed
- Use the Left leg to help bend Right knee, bringing the Right heel toward the hip. Hold this stretch position for a slow count of 5.
- Uncross ankles
- Lower the Right foot slowly back to surface
- Repeat 3 times



After 1 week of practice, attempt to increase number by 1 repetition each week, until performing a total of 10 repetitions. Rest as needed while completing the activity.

Lower Leg Muscle Stretch:

- Sit tall with Right leg on the bed as shown in diagram.
- Keep the knee straight.
- Loop a soft belt (e.g., from a bathrobe) around the forefoot, holding both ends of the belt in your hands.
- Slowly pull the forefoot up with the belt, while keeping the knee straight. You should feel a definite, but not painful stretch in the calf muscles of the leg, especially just below the knee.
- Hold position for slow count of 5 (i.e., 1001, 1002, etc.).
- Recheck posture while holding stretch.
- Release tension on belt and relax.
- Repeat 5 times.
- Repeat for other leg.

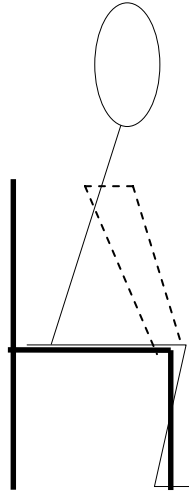


Lower Leg Relaxation:

Sitting with Right foot flat on floor and hands resting on Right knee:

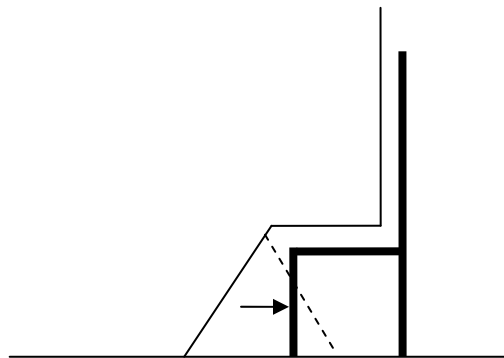
Use hands to press Right heel firmly into the floor and roll the Right knee in and out.

Movement of knee in and out should be slow and rhythmical
Complete 5-10 inward and outward movements



Foot Slides: *strengthens knee flexors*

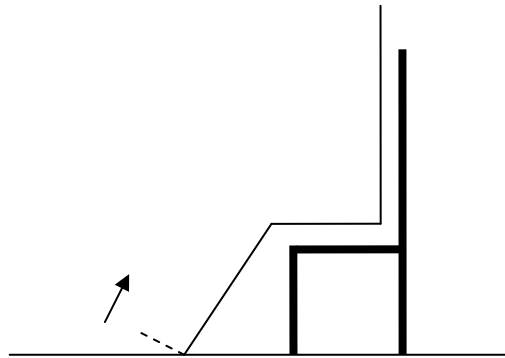
- Keeping the heel flat on the floor, slide the Right foot back, until the tips of Right toes are slightly behind the knee.
- Slide the foot forward to position shown in diagram
- Repeat 5 times.



Heel-Toe: *strengthen shin muscles*

Sitting in a chair with both feet on the floor:

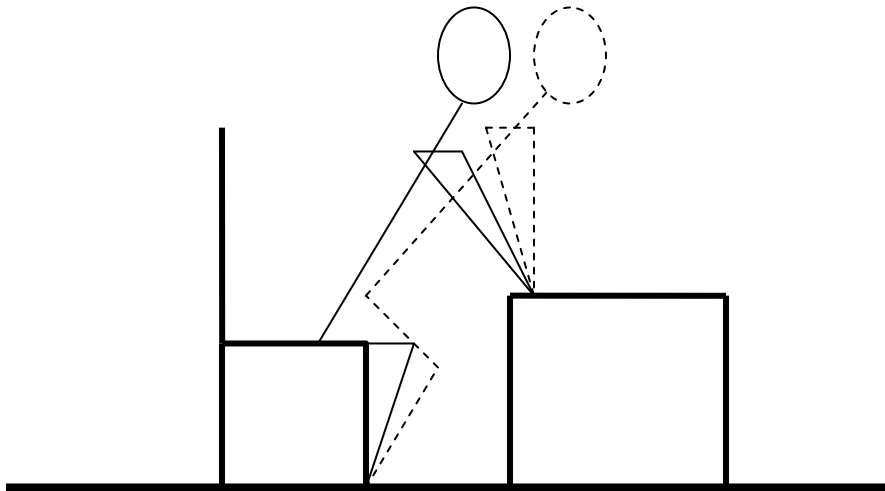
- Slide feet forward along the floor to position shown in diagram.
- Keeping heels on floor, pull toes and forefeet up towards your knees
- Repeat 3 times.



Lift Off: Strengthening of Muscles at the Knee and Ankle

Chair with arm rests is positioned facing bed. Sitting forward in chair with tips of large toes directly under knees. Bare feet.

- Shift weight forward over feet and lift hips 3-6 inches off the chair seat. Use hands positioned on the bed to help maintain balance as needed.
- Shift hips slightly back and forward 2-3 times in this position to activate ankle muscles
- Lower hips slowly to chair seat
- Repeat 3-5 times.



Wrist and Hand Exercises

Thumb Circles:

- clasp fingers together loosely
- make large circles with Right thumb around Left thumb
- 10 circles, 5 in each direction

Finger Squeeze:

- interlock fingers keeping both the fingers and the wrists straight
- squeeze the fingers of the Right hand together against the resistance of the fingers of the Left hand
- spread the fingers of the Right hand apart against the resistance of the fingers of the Left hand
- Repeat sequence 5 times

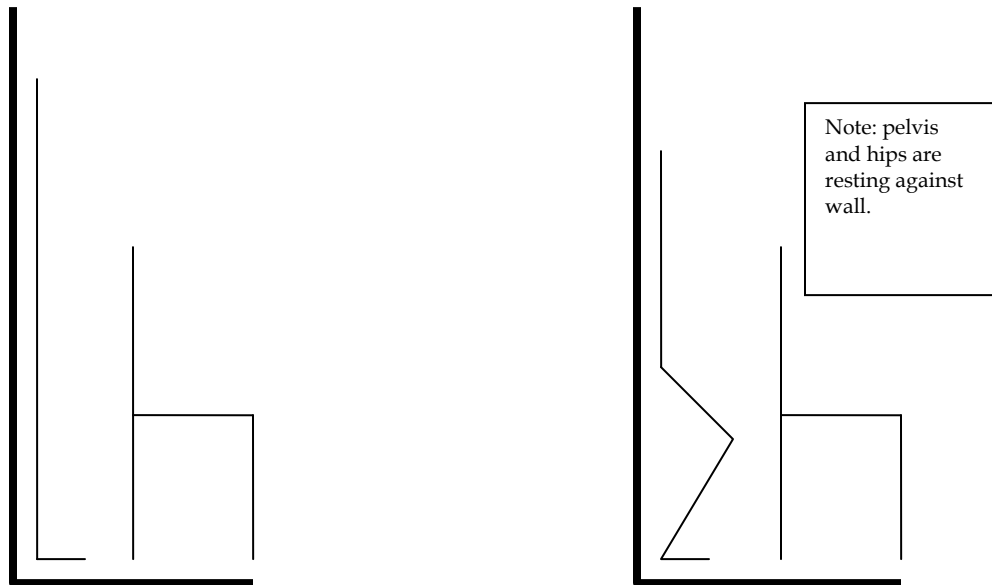
Finger Extension:

- hang the fingers of the R hand over the edge of a table
- straighten the fingers without letting the wrist lift from the table
- Repeat 5 times.

Semi Squats: *leg strength*

Stand with your back against a wall, heels 6-8 inches from the wall, and a sturdy chair in front of you (chair back turned toward you). Use back of chair for support as needed

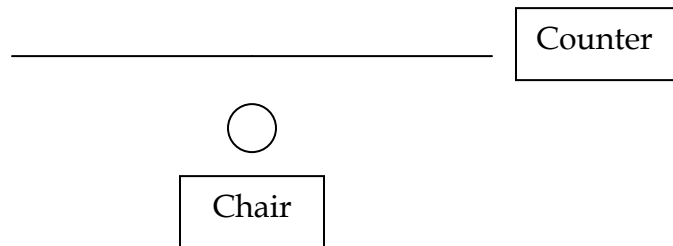
- Place hands lightly on the chair back for stability.
- Press both shoulder blades back into the wall, while keeping the chin tucked.
- Allow hips and knees to bend so that hips and trunk slide down the wall. Do not slide more than 6-8 inches. Hold position for a slow count of 2 (1001, 1002)
- Slide hips and trunk back up the wall, straightening the hips and knees.
- Repeat 5 times.
- Rest by standing against the wall with legs straight or by sitting.



After 1 week of practice, attempt to increase number by 1 repetition each week, until performing a total of 10 repetitions. Rest as needed while completing the activity.

Tandem Standing: *balance*

Standing facing the kitchen counter and with a sturdy chair positioned behind you. Stand with feet 3-4 inches apart and with finger tips resting lightly on kitchen counter top to assist in maintaining balance.



Place the R foot one foot length ahead of the Left foot, as shown in diagram 1:

- Gain your balance
- When you feel steady, drop your arms to your sides
- Hold position for a slow count of 5

Place the L foot one foot length ahead of the Right foot as shown in diagram 1:

- Gain your balance
- When you feel steady, drop your arms to your sides
- Hold position for a slow count of 5

Repeat the whole sequence 5 times.

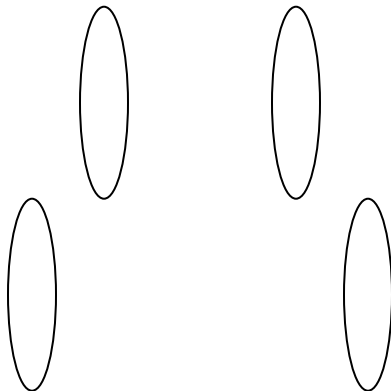


Diagram 1



Diagram 2

First Progression: increase the challenge by placing one foot directly in front of the other (Diagram 2)

Second Progression: increase the challenge by reaching Left arm to Left side, Right arm to Right side

Forward & Backward Reach: *balance*

Standing facing the kitchen counter with a sturdy chair positioned behind.
Place feet together; ankles touching

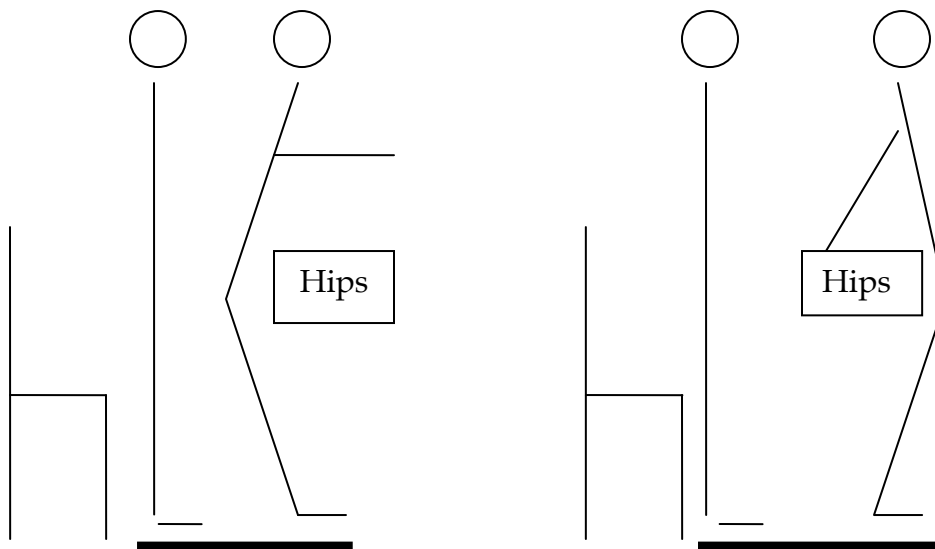
Reach both hands forward as far as you can without losing your balance.
Knees should remain straight, but hips can move

Repeat 5 times. Each time you reach, attempt to reach a bit further than the
previous time.

Take a short rest break by sitting down.

Reach both hands backward as far as you can without losing your balance.
Knees should remain straight.

Repeat 5 times. Each time you reach, attempt to reach a bit further than the
previous time.

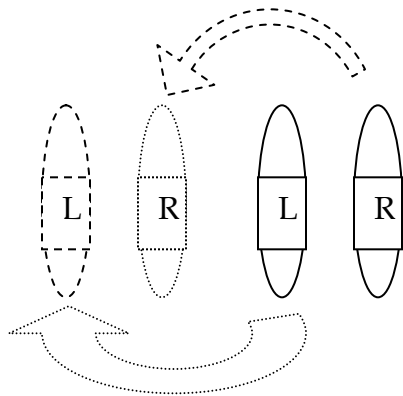


Braiding: *balance and coordination*

Stand facing a wall in the hallway, with hands resting 'lightly' on the wall

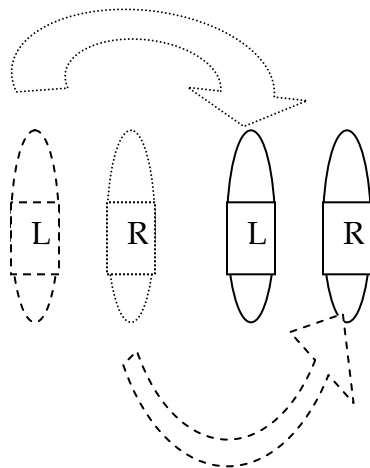
Moving sideways toward the Left:

- Lift the Right foot and step across & in front of the Left foot
- Lift the Left foot and step across & behind the Right foot
- Repeat 5 times



Moving sideways toward the Right:

- Lift the Left leg and step across & in front of the Right foot
- Lift the Right foot and step across & behind the Left foot.
- Repeat 5 times.



Exercise Guidelines/Precautions

Stretching and Strengthening

Perform stretching exercises and balance activity daily.

Perform strengthening exercises every other day, or perform half the strengthening exercises one day, and the remainder the next.

Schedule a ½ hour rest period to follow completion of your strengthening exercise program each day.

Take brief rests between exercises or at intervals (e.g. after 2-3 exercises)

Prevent an excessive rise in body temperature while exercising:

- Cool environment and/or use a fan to improve air circulation
- Drink water before, during and after the exercise session
- Wear loose fitting, light clothing

Watch for signs and symptoms of localized muscle fatigue. Stop an exercise for the day if any of these develop when completing it:

- Sensation of fatigue from the muscle
- Change in quality of the movement, e.g., movement becomes jerky
- Perceived increase in the effort needed to perform the movement
- Commencement of compensatory movement in another body part, e.g., the trunk.

If localized muscle fatigue commonly occurs during, or after, you complete a strengthening exercise, decrease the number of repetitions.

When walking, be alert for signs/symptoms of localized muscle fatigue and well as generalized fatigue. Stop if any are experienced. The most common signs of generalized fatigue are slurring of speech, blurring of vision and double vision.

Aerobic Exercise:

Choose low impact activities (i.e., activities that do not jar the joints)

Choose aerobic activities that work muscle groups that are not affected by paresis, e.g. an activity that works the upper extremities such as an arm cycle, or an activity that can be performed primarily with the arms such as swimming.

Recognize early signs/symptoms of generalized fatigue. Stop if any are experienced. Most common are: slurring of speech, blurring of vision, double vision

To prevent episodes of generalized fatigue:

- Consider interval training, e.g., complete two 5 minute sessions (one in the morning and one in the afternoon) rather than one 10 minute session.
- Commence with total duration of as low as 10 minutes; increase duration gradually to a maximum of 30-45 minutes.
- Commence with a low exercise intensity and progress gradually:
 - First 2-3 weeks: light perceived exertion or fairly light perceived exertion (10-11 on the Borg Rate of Perceived Exertion Scale)
 - Progress gradually up to somewhat hard perceived exertion: 13 on Borg Rate of Perceived Exertion Scale)