Lower Body Strength/Balance Exercises

Hip Flexion
Strengthens thigh and hip muscles. Use ankle weights, if you are ready to. Stand to the side or behind a chair or table, holding it with one hand for balance. Take 3 seconds to bend your left knee and bring it as far toward your chest as possible. Stand straight throughout, without bending at the waist or hips. Hold position for 1 second, then take 3 seconds to lower your left leg all the way down. Repeat with right leg; alternate legs until you have done 8 to 15 repetitions on each side. Rest; then do another set of 8 to 15 alternating repetitions.

Summary:
1. Stand straight, holding tall, stable object for balance.
2. Slowly bend one knee toward chest, without bending waist or hips.
3. Hold position.
4. Slowly lower leg all the way down.
5. Repeat with other leg.

Hip Extension
Strengthens buttock and lower-back muscles. Use ankle weights, if you are ready to. Stand 12 to 18 inches away from a table or chair, feet slightly apart. Bend forward from the hips, at about a 45-degree angle, holding onto the table or chair for balance. In this position, take 3 seconds to lift your left leg straight behind you without bending your knee, pointing your toes, or bending your upper body any farther forward. Hold the position for 1 second. Take 3 seconds to lower your left leg back to the starting position. Repeat with right leg. Alternate legs, until you have repeated the exercise 8 to 15 times with each leg. Rest; then do another set of 8 to 15 alternating repetitions with each leg.

Summary:
1. Stand 12 to 18 inches from table.
2. Bend at hips; hold onto a table.
3. Slowly lift one leg straight backwards.
4. Hold position.
5. Slowly lower leg.
6. Repeat with other leg.
Lower Body Strength/Balance Exercises

Knee Flexion
Strengthens muscles in back of thigh. Use ankle weights, if you are ready to. Stand straight, very close to a table or chair, holding it for balance. Take 3 seconds to bend your left knee so that your calf comes as far up toward the back of your thigh as possible. Don’t move your upper leg at all; bend your knee only. Take 3 seconds to lower your left leg all the way back down. Repeat with right leg. Alternate legs until you have done 8 to 15 repetitions with each leg. Rest; then do another set of 8 to 15 alternating repetitions. Do knee flexion as part of your regularly scheduled strength exercises, and add these modifications as you progress: Hold table with one hand, then one fingertip, then no hands; then do exercise with eyes closed, if steady.

Summary:
1. Stand straight; hold onto table or chair for balance.
2. Slowly bend knee as far as possible so foot lifts up behind you.
3. Hold position.
4. Slowly lower foot all the way back down.
5. Repeat with other leg.

Knee Extension
Strengthens muscles in front of thigh and shin. Use ankle weights, if you are ready to. Sit in a chair, with your back resting against the back of the chair. If your feet are flat on the floor in this position, you should place a rolled-up towel under your knees to lift them up. Only the balls of your feet and your toes should be resting on the floor. Rest your hands on your thighs or on the sides of the chair. Take 3 seconds to extend your right leg in front of you, parallel to the floor, until your knee is straight. With your right leg in this position, flex your foot so that your toes are pointing toward your head; hold your foot in this position for 1 to 2 seconds. Take 3 seconds to lower your right leg back to the starting position, so that the ball of your foot rests on the floor again. Repeat with left leg. Alternate legs, until you have done the exercise 8 to 15 times with each leg. Rest; then do another set of 8 to 15 alternating repetitions.

Summary:
1. Sit in chair. Put rolled towel under knees, if needed.
2. Slowly extend one leg as straight as possible.
3. Hold position and flex foot to point toes toward head.
4. Slowly lower leg back down.
5. Repeat with other leg.
Side Leg Raise

Strengthens muscles at sides of hips and thighs. Use ankle weights, if you are ready to. Stand up straight, directly behind a table or chair, feet slightly apart. Hold onto the table to help keep your balance. Take 3 seconds to lift your right leg 6 to 12 inches out to the side. Keep your back and both legs straight. Don't point your toes outward; keep them facing forward. Hold the position for 1 second. Take 3 seconds to lower your leg back to the starting position. Repeat with left leg. Alternate legs, until you have repeated the exercise 8 to 15 times with each leg. Rest; do another set of 8 to 15 alternating repetitions.

**Summary:**
1. Stand straight, directly behind table, feet slightly apart.
3. Slowly lift one leg to side, 6-12 inches.
4. Hold position.
5. Slowly lower leg.
6. Repeat with other leg.
7. Back and both knees are straight throughout exercise.

Plantar Flexion

Strengthens ankle and calf muscles. Use ankle weights, if you are ready to. Stand straight, feet flat on the floor, holding onto the edge of a table or chair for balance. Take 3 seconds to stand as high up on tiptoe as you can; hold for 1 second, then take 3 seconds to slowly lower yourself back down. Do this exercise 8 to 15 times; rest a minute, then do another set of 8 to 15 repetitions. As you become stronger, do this exercise first on your right leg only, then on your left leg only, for a total of 8 to 15 times on each leg. Rest a minute, then do another set of 8 to 15 alternating repetitions.

**Summary:**
1. Stand straight, holding onto a table or chair for balance.
2. Slowly stand on tip toe, as high as possible.
3. Hold position.
4. Slowly lower heels all the way back down.

**Variation, as strength increases:**
Do the exercise standing on one leg only, alternating legs.
Anytime/Anywhere

These types of exercises also improve your balance. You can do them almost anytime, anywhere, and as often as you like, as long as you have something sturdy nearby to hold onto if you become unsteady.

**Examples:**

- Walk heel-to-toe. Position your heel just in front of the toes of the opposite foot each time you take a step. Your heel and toes should touch or almost touch. (See Illustration.)
- Stand on one foot (while waiting in line at the grocery store or at the bus stop, for example). Alternate feet.
- Stand up and sit down without using your hands.
Upper Body Strength Exercises

Arm Raise
Strengthens shoulder muscles. Sit in a chair, with your back straight. Your feet should be flat on the floor, spaced apart so that they are even with your shoulders. Hold hand weights straight down at your sides, with your palms facing inward. Take 3 seconds to lift your arms straight out, sideways, until they are parallel to the ground. Hold the position for 1 second. Take 3 seconds to lower your arms so that they are straight down by your sides again. Pause. Repeat 8 to 15 times. Rest; do another set of 8 to 15 repetitions.

Summary:
1. Sit in chair.
2. Feet flat on floor; keep feet even with shoulders.
3. Arms straight down at sides, palms inward.
4. Raise both arms to side, shoulder height.
5. Hold position.
6. Slowly lower arms to sides.

Chair Stand
Strengthens muscles in abdomen and thighs. Sit toward the middle or front of a chair and lean back so that you are in a half-reclining position, with back and shoulders straight, knees bent, and feet flat on the floor. Be sure to place pillows against the lower back of the chair first, to support your back and keep it straight. Using your hands as little as possible (or not at all, if you can), bring your back forward so that you are sitting upright. Your back should no longer be leaning against the pillows. Keep your back straight as you come up, so that you feel your abdominal muscles do the work; don’t lean forward with your shoulders as you rise. Next, with feet flat on the floor, take at least 3 seconds to stand up, using your hands as little as possible. As you bend slightly forward to stand up, keep your back and shoulders straight. Take at least 3 seconds to sit back down. Your goal is to do this exercise without using your hands as you become stronger. Repeat 8 to 15 times. Rest; then repeat 8 to 15 times more.

Summary:
1. Place pillows against back of chair.
2. Sit in middle or toward front of chair, knees bent, feet flat on floor.
3. Lean back on pillows, in half-reclining position, back and shoulders straight.
4. Raise upper body forward until sitting upright, using hands as little as possible.
5. Slowly stand up, using hands as little as possible.
7. Keep back and shoulders straight throughout exercise.
**Biceps Curl**

Strengthens upper-arm muscles. Sit in an armless chair, with your back supported by the back of the chair. Your feet should be flat on the floor, spaced apart so that they are even with your shoulders. Hold hand weights, with your arms straight down at your side, palms facing in toward your body. Take 3 seconds to lift your left hand weight toward your chest by bending your elbow. As you lift, turn your left hand so that your palm is facing your shoulder. Hold the position for 1 second. Take 3 seconds to lower your hand to the starting position. Pause, then repeat with right arm. Alternate until you have repeated the exercise 8 to 15 times on each side. Rest, then do another set of 8 to 15 alternating repetitions.

**Summary:**
1. Sit in armless chair, with your back supported by back of chair.
2. Feet flat on floor; keep feet even with shoulders.
3. Hold hand weights at sides, arms straight, palms in.
4. Slowly bend one elbow, lifting weight toward chest. (Rotate palm to face shoulder while lifting weight.)
5. Hold position.
6. Slowly lower arm to starting position.
7. Repeat with other arm.

**Triceps Extension**

*(If your shoulders aren't flexible enough to do this exercise, see alternative "Dip" exercise, on next page.)*

Strengthens muscles in back of upper arm. Sit in a chair, toward the front. Your feet should be flat on the floor, spaced apart so that they are even with your shoulders. Hold a weight in your left hand, and raise your left arm all the way up, so that it's pointing toward the ceiling, palm facing in. Support your left arm by holding it just below the elbow with your right hand. Slowly bend your left arm so that the weight in your left hand now rests behind your left shoulder. Take 3 seconds to straighten your left arm so that it's pointing toward the ceiling again. Hold the position for 1 second. Take 3 seconds to lower the weight back to your shoulder by bending your elbow. Keep supporting your left arm with your right hand throughout the exercise. Pause, then repeat the bending and straightening until you have done the exercise 8 to 15 times with your left arm. Reverse positions and repeat 8 to 15 times with your right arm. Rest; then repeat another set of 8 to 15 repetitions on each side.

**Summary:**
1. Sit in chair, near front edge.
2. Feet flat on floor; keep feet even with shoulders.
3. Raise one arm straight toward ceiling.
4. Support this arm, below elbow, with other hand.
5. Bend raised arm at elbow, bringing hand weight toward same shoulder.
6. Slowly re-straighten arm toward ceiling.
8. Slowly bend arm toward shoulder again.
Alternative "Dip" Exercise For Back of Upper Arm

Sit in a chair with armrests. Lean slightly forward, keeping your back and shoulders straight. Hold onto the arms of the chair. Your hands should be level with the trunk of your body, or slightly farther forward. Place your feet slightly under the chair, with your heels off the ground and the weight of your feet and legs resting on your toes and the balls of your feet. Slowly lift yourself up, using your arms, as high as you can. This pushing motion will strengthen your arm muscles even if you aren't yet able to lift yourself up off of the chair. Don't use your legs or feet for assistance, or use them as little as possible. Slowly lower yourself back down. Repeat 8 to 15 times. Rest; repeat another 8 to 15 times.

**Summary:**
1. Sit in chair with armrests.
2. Lean slightly forward, back and shoulders straight.
4. Tuck feet slightly under chair, weight on toes.
5. Slowly push body off of chair using arms, not legs.
6. Slowly lower down to starting position.

Shoulder Flexion

Strengthens shoulder muscles. Sit in a chair, with your back straight. Your feet should be flat on the floor, spaced apart so that they are even with your shoulders. Hold hand weights straight down at your sides, with your palms facing inward. Take 3 seconds to lift your arms in front of you, keeping them straight and rotating them so that your palms are facing upward, until your arms are parallel to the ground. Hold the position for 1 second. Take 3 seconds to lower your arms so that they are straight down by your sides again. Pause. Repeat 8 to 15 times. Rest; do another set of 8 to 15 repetitions.

**Summary:**
1. Sit in chair.
2. Feet flat on floor; keep feet even with shoulders.
3. Arms straight down at sides, palms inward.
4. Raise both arms in front of you (keep them straight and rotate so palms face upward) to shoulder height.
5. Hold position.
6. Slowly lower arms to sides.