



**STRENGTHENING and STABILITY
exercises for your hips,
knees, and ankles
in STANDING**

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The knee loses strength and stability after an injury. Strengthening and stability exercises are recommended not only for people who have injured their knees, but also to prevent injury. The following exercises will challenge and improve your balance using your body or a variety of training aids. Please read the instructions carefully and follow the advice of your physical therapist or doctor when starting or progressing an exercise program. If your symptoms get worse while doing these exercises, please read the instructions again to be sure you are doing the exercises exactly as described. If your symptoms continue to worsen, talk to your health provider.

Equipment needed:

- ball
- BOSU® ball
- chair
- stick
- tape to make a star
- towel(s)
- Dynadisc® or cushion
- wobble board
- exercise band

4-WAY HIP STRENGTHENING EXERCISES

For the following exercises stand with your knees slightly bent on your ___affected___unaffected leg. Keep your stomach and buttock muscles tight and your pelvis level.

- Inner thigh:** Stand on one leg. Move your other leg across the front of your body.

FREQUENCY_____



- Outer thigh:** Stand on one leg. Lift your other leg out to the side. Avoid leaning to the side as you move your leg.

FREQUENCY_____



- Front of thigh:** Stand on one leg. Lift your other leg forward while keeping the knee straight. Avoid leaning forward or backward as you move your leg.

FREQUENCY_____



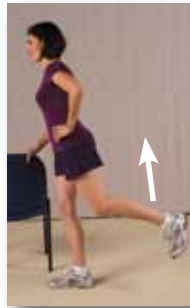
- Back of thigh, knee straight:** Stand on one leg. Move your other leg back keeping your leg straight. Avoid leaning forward or backward as you move your leg.

FREQUENCY _____



- Back of thigh, knee bent:** Stand on one leg. Bend the other knee up and down, lifting your heel toward your buttocks. Do not let the knee move forward or backward as you bend it.

FREQUENCY _____



4-WAY HIP EXERCISES WITH RESISTANCE BAND OR ANKLE WEIGHT

For the following exercises stand with your knee slightly bent on your ___affected___unaffected leg. Use an exercise band tied above your ankle. Attach the other end to a sturdy object such as the leg of a sofa or bed. You can also use weighted cables. Keep your stomach and buttock muscles tight and your pelvis level.

COLOR OF BAND: _____

- Inner thigh:** Stand on one leg. Move your other leg across the front of your body.

FREQUENCY _____



- Outer thigh:** Stand on one leg. Move your other leg out to the side. Avoid leaning to the side as you move your leg.

FREQUENCY _____



- Front of thigh:** Stand on one leg. Move your other leg forward while keeping the knee straight. Avoid leaning forward or backward as you move your leg.

FREQUENCY _____



- Back of thigh, knee straight:** Stand on one leg. Move the other leg back keeping your leg straight. Avoid leaning forward or backward as you move your leg.

FREQUENCY _____



Variation:

Move the other leg back, bending your knee as you go (lifting your heel toward your buttock).

SQUATS

For the following exercises stand with your feet shoulder width apart. While squatting, keep your knees over your toes and your weight evenly over your feet.

- Wall squat:** Stand with your back against the wall and feet 12-18 inches away from the wall. Slide down and hold the position for 5-15 seconds. Stand up and repeat.

FREQUENCY _____



- Wall squat with small ball:** Place a ball between your knees and squeeze the ball as you slide down. Hold the position for 5-15 seconds. Stand up and repeat.

FREQUENCY _____

- Wall squat with exercise band:**

Place an exercise band above your knees. Keep your knees apart as you slide down. Hold the position for 5-15 seconds. Stand up and repeat.

COLOR OF BAND: _____

FREQUENCY _____



- ❑ **Wall squat with exercise ball:** Place a ball between your low back and the wall with your feet about 12-18 inches away from the wall (farther if you are taller). Squat down and hold the position for 5-15 seconds. Stand up and repeat.

FREQUENCY _____



- ❑ **Partial chair squat:** Put 2-3 pillows on a chair behind you. Stand with your feet shoulder width apart. Keep your knees over your toes and stick your buttocks back as you squat to barely touch the pillows, then return to standing. Decrease the number of pillows to squat lower.

FREQUENCY _____



- **Standing squat:** Stand with your feet shoulder width apart. Squat keeping your knees over your toes and stick your buttocks back. Hold for two to three seconds, then return to standing. As you squat you may bring your arms forward for balance.

FREQUENCY _____



Variations:

- A. Place an exercise band above your knees and keep your knees apart as you squat.

FREQUENCY _____

- B. Place a ball between your knees and squeeze the ball as you squat.

FREQUENCY _____

STEP EXERCISES

- **Step up:** Stand with one foot on the step and one foot placed behind you on the floor. Raise yourself up on the step. Keep your stomach and buttock muscles tight and your pelvis level.

FREQUENCY _____



- ❑ **Step down to the side:** Stand on one leg on the step. Bend the knee of your standing leg and touch the toes of your other leg to the floor. Extend your knee to return to standing. Keep your stomach and buttock muscles tight and your pelvis level throughout the exercise.



FREQUENCY _____

- ❑ **Step down in front:** Stand with both feet near the front of the step. Keep your pelvis level and your knee pointing forward as you bend your knee and touch the toes of your other foot to the ground. Extend your knee to return to standing. Repeat.



FREQUENCY _____

LUNGES

- ❑ **Lunges in place:** Stand to the side of a chair, and hold onto the back of it with one hand. Stand with one foot forward and one back. As you drop your back knee toward the floor, keep the front knee over your ankle. Return to starting position.



FREQUENCY _____

Variation: Do not hold onto the chair; place your hands on your hips.

- ❑ **Forward lunges:** Stand with your feet shoulder width apart. Step forward with one foot. Drop your back knee toward the floor. Keep the forward knee over your ankle. Return to starting position.

FREQUENCY _____



- ❑ **Backward lunges:** Stand with your feet shoulder width apart. Step backward with one foot. Drop your back knee toward the floor. Keep the forward knee over your ankle. Return to starting position.

FREQUENCY _____



- ❑ **Star toe touch / Mini Lunge:** Stand in the center of the star with one foot. Bend the knee of your standing leg and reach to the outer points of the star with your other foot. Keep your body weight over your standing leg. Do not let your knee collapse inward as you bend your knee. Reach to those points of the star prescribed by your physical therapist.

FREQUENCY _____



BALANCE: STABLE SURFACE

□ Single leg balance:

- A. Stand with your knees slightly bent, hands on the hips, back straight, and chest up. Slowly lift one leg slightly off the floor, keeping it close to the other leg. Hold for 15-60 seconds and repeat 2-3 times. Repeat on the other leg.

FREQUENCY _____



- B. Maintain your balance on one leg while turning your head slowly left and right.

FREQUENCY _____

- C. Repeat steps above in B with eyes closed.

FREQUENCY _____



- D. Repeat exercises A, B, and C above on a soft surface (Dynadisc®, cushion, pillow).

FREQUENCY _____



BALANCE: UNSTABLE SURFACE

- ❑ **Square wobble board:** Stand on the board with your knees slightly bent and chest up. Tip the board from front to back without the sides touching the floor, and then tip it from side to side without the front and back of the board touching the floor.

FREQUENCY _____

Variation:

When you can do this exercise with good control, try it on one leg, or with eyes closed.



- ❑ **Round wobble board:** Stand on the round board and try to keep it level. Tip the round board to the floor and tap it down at different points around the circle. Return the board to a level position in between taps.

FREQUENCY _____

Variation:

When you can do this exercise with good control, try it on one leg, or with eyes closed.



1/2 BALL DOME (BOSU® BALANCE TRAINER, 1/2 BALL)

For the following exercises start with your knees slightly bent, hands on hips, back straight, and chest up.

□ Round Side Up:

A. Balance on both legs.

FREQUENCY _____



B. Balance in squat position. Make sure to keep the knees behind the toes, and your buttocks back. Keep your buttock muscles tight throughout the exercise to keep you stable.

FREQUENCY _____

Variation:

To make it harder:

- bend knees further
- close your eyes



C. Single leg position: Slowly lift one leg up, keeping it close to the other one.

FREQUENCY _____



❑ **Flat Side Up:**

- A. Stand up straight and try to keep the flat side of the dome level.

FREQUENCY _____



- B. Tip the edge of the dome and tap the floor at a specific point. Try touching the dome to different points around the circle.

FREQUENCY _____



Variation:

To make it harder

- bend knees further
- balance on one leg only
- close your eyes

FREQUENCY _____



USING AN EXERCISE BAND

For the following exercises, attach the exercise band to a sturdy object, such as the leg of a sofa or bed. Place the exercise band around the ankle of the affected leg so it is underneath the heel, and you feel some resistance. Start with your knees straight, back straight, and chest up.

- Inner Leg:** Face sideways so the affected leg is nearest the anchor. Slowly lift your heels off the ground, and back to the floor. Repeat. Progress this exercise by standing on the affected foot only.

FREQUENCY _____



- Outer Leg:** Face sideways so the affected leg is furthest away from the anchor. Slowly lift your heels off the ground and back to the floor. Repeat. Progress this exercise by standing on the affected foot only.

FREQUENCY _____



ADDITIONAL RESOURCES

- Connect to our Web site at kp.org to access your health information and drug encyclopedias, interactive programs, health classes, and much more.
- Contact your Kaiser Permanente Health Education Center or Department for health information, programs, and other resources.



Consult with your physical therapist or doctor if you experience an increase in your symptoms with recommended exercises, or if you develop new symptoms of numbness, tingling, or a spread of the pain. This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor.