

# Are you ready for winter sports?

Dreaming of snow? Dreaming of the cold weather? Skiing, snowshoeing and skating are great ways to get out and enjoy the winter. Whether you love to ski, shoe or skate, there are common exercises you can do to prepare for the season. It is important to train and prepare your body for winter activities to avoid injuries. There are four types of training: cardiovascular fitness, strength training, flexibility and balance/agility. For the best preparation, plan on including all four types of exercise into your program.

Below are suggestions to include in your winter preparation exercise program. These exercises should not cause discomfort or pain. As with any exercises, you can make adjustments based on your needs and fitness level. Be sure to see a physical therapist or your doctor if you have questions.

## Cardiovascular Training:

The CDC (Centers for Disease Control) recommends that adults should engage in 150 minutes weekly of "moderate-intensity aerobic activity," such as brisk walking, or 75 minutes of "vigorous-intensity aerobic activity" like running (3-5 times per week for 30-50 minutes). To train for winter sports, stationary biking, swimming, walking or running are good choices.

## Strength Training:

Strengthening the legs is important to get ready for wintertime activities. However, don't forget to strengthen your core and upper body too. Here are some suggested exercises:

### Wall slides:

Lean on a wall, feet approximately 12 inches from the wall, shoulder distance apart and about 6-8 inches away from wall. Bend both knees, keeping your back against the wall. Lower yourself slowly to about 45 degrees (1/3 of the way down). Return to standing slowly. To increase the challenge of this exercise hold the lowered position for up to 10 seconds.

Repeat 10 times, 2 sets.



### Walking lunge with a twist:

Stand straight, holding your arms out straight with basketball. While walking forward, lunge forward with one leg, bending both knees and keep your trunk upright. Twist your upper body to the opposite side of the front leg. Return to standing and repeat on the opposite leg with twist to the opposite side. Make sure your knee is stable during the lunge – keep the knee over the foot – don't let the knee fall inward. Keep your arms elevated to chest height.

Complete 10-15 times each side.



### Step ups:

Stand with the leg on a step. Shift your weight over the knee and step up slowly. Step back down leaving your healing leg on the step.

Repeat 10 times, 2 sets.



### Plank:

Begin lying face down, partially kneeling. Place forearms on floor with elbows bent and directly under shoulders as shown. Lift up hips and knees, keeping only toes on floor. Keep back and knees straight. Work up to holding for up to 60 seconds. Lower and repeat.

To reduce the challenge: Bend knees.

To increase the challenge: Place rocker board with rocker bottom perpendicular to body. Place forearms on the board. Keep board parallel to ground.



Regular position



Revised position

### Under the fence:

Stand straight, with your arms at chest level. Complete a sidelunge while holding hands out in front of you. Repeat with a side lunge to the opposite side. Keep your knee over your toe (do not let the knee fall inward) and do not let your knee bend beyond your foot. Return to standing.

Complete 10-15 times each side.



## Flexibility:

It is best to focus on your lower body and back region. You can do either dynamic or static stretching. For both types of stretching, move through your available range of motion.

### Calf stretch:

Stand with hands on a chair. Step forward with involved heel on floor, toes against the chair leg. Move hips towards the chair. This stretches the back of the lower leg.

TIP: If you do not feel much stretch in your calf, try putting more of your foot on the chair leg (bring heel closer to chair).

Repeat 2-3 times, holding each repetition for 30 seconds.



### Hip flexor stretch:

Place one knee on the seat of a chair and hold on to the back of the chair. Keep body upright and move hip forward by tightening your buttocks until you feel a stretch on the front of the thigh. Hold 30 seconds.

Repeat 2-3 times.



### Lunge pose:

Step forward and bend your knee. Your legs should be hip width apart. Keep your knee aligned over your foot. Keep weight on your heel. The weight on your back leg should be on the ball of your foot. Try to straighten your back knee. Keep equal weight on both feet. If you are able, place your hands on the wall in front of you, or up overhead and keep your back straight.

Repeat 3 times, alternating each repetition, holding each for 15-30 seconds.



### Standing hip swings

Stand with hands on your ski poles. Swing the right leg forward and in front of you. While swinging your leg, turn your foot inward. Then swing your foot behind you and to the side while turning your foot outward. Keep your back as straight as possible and try not to turn your body.

Complete 10-15 times each side.



## Balance/Agility:

Winter sports involve quick movements and working on agility will help prepare you for these activities. By targeting each leg individually you will help to strengthen both legs. If you only train with both legs, sometimes the stronger leg does most of the work.

### Single leg stance:

Stand in a corner with no furniture. To ensure a safe environment, you may place a firm chair in front of you to hold in case you lose your balance. When standing on one leg, keep your hips level, your trunk upright and your knee slightly flexed. When you practice this task, stand on each leg for approximately 2 minutes (this includes rest times as needed).



### Jump rope:

Hold the jump rope handles lightly and turn the rope by rotating your wrists (not your whole arms). When you jump, keep your elbows relaxed and close to your sides and your knees slightly bent. You do not have to jump high (an inch or two is okay). Land gently on the balls of your feet with your knees slightly bent. Start slowly and gradually increase the speed as you get used to the motion.

Work up to two minutes of jumping or aim for a jumping count: 25 jumps or 50 jumps.



### Side to side hopping:

Start in a shallow squat with your weight on your right foot, and leap sideways to the left, landing on your left foot and bringing the right foot to the left. Reverse directions and jump to the right. Continue jumping side to side. Land softly on the toes and roll to the heels. Avoid any twisting or sideways motion at the knee and make sure your knee stays in line with your second toe during landing.

Repeat 10 times to each side and increase number of reps as it starts to become easier.



If you would like to set up a personalized consultation with a physical therapist, please contact Dartmouth-Hitchcock Rehabilitation Medicine at (603) 650-3600.