

Special off-ice exercises can be difference-makers

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As the new judging system evolves, skaters will continue to push the envelope with innovative jumps, spins, lifts and footwork. Proper conditioning can help reduce the risk of developing debilitating injuries.

Off-ice conditioning has become a standard part of training for most successful competitors. Unfortunately, many skaters still do not include off-ice conditioning in their training routine because they are unable to find the time or are unsure of what to do or where to start. Ideally, a skater works individually with a personal trainer or conditioning specialist who is familiar with the needs of figure skating, and who is qualified to work with children. This person conducts a physical evaluation, and then sets up a training program based on the needs of the skater and the short- and long-term goals for the year.

Figure skating is a “whole body” sport, requiring coordination of many precise movements while responding to changes in speed, position and rotational forces. This is not easy. Conditioning exercises that integrate the whole body better simulate the athletic demands of skating when compared to exercises that isolate muscles, such as the seated chest press or supine (lying on your back) leg press machines. Standing exercises encourage the athlete to use the core muscles in a functional manner to connect the upper and lower body in a way that is similar to what is needed on the ice.

Exercises in this article can be used as a starting point for the skater not doing any off-ice conditioning, or they can

be added to an existing workout for variety. The following exercises use body weight or bands, making the workout portable, inexpensive and appropriate for athletes of all ages and levels. Exercises start with a stable two-foot where both arms work together for symmetric muscle activation. As the athlete’s strength and balance improves, the basic exercises are made more difficult by balancing one foot while doing alternating or single-arm movements. These variations add a twisting element to the exercise, which recreates the rotation felt when holding an edge on the ice. A skilled skater controls this rotation through core strength and coordination. A strong core connects the upper and lower body, allowing the whole body to work in unison.

For more information on how to choose a qualified trainer, visit the U.S. Figure Skating web site at www.usfigureskating.org. To locate a trainer in your area, contact U.S. Figure Skating coaching programs coordinator Juliet Newcomer at jnewcomer@usfigureskating.org or visit the web sites of the National Strength and Conditioning Association (www.nasca-lift.org) or the National Academy of Sports Medicine (www.nasm.org).

a - Rotating Bridge

Works the abdominal obliques

1. Start in prone bridge.
2. Lift one hand up and place it on the opposite shoulder, across the chest.
3. Balance here, maintaining level shoulders and pelvis. Do not twist

or drop one side of the torso.

4. Keeping both feet on the ground, rotate 90 degrees to side bridge.
5. Now return to prone bridge without touching the arm down.
6. Hold the prone position for three seconds. Repeat the exercise to the same side.

Core Exercises Using Bands

b - Horizontal Obliques

Arms stay in front of mid-line throughout exercise.

1. Stand facing bands. Bands are anchored at chest height by door or partner.
2. Turn 90 degrees to right by pivoting the left foot and turning the hips, not by twisting the spine.
3. Hold for one second.
4. Quickly move to the left, pivoting the right foot. Hold for one second.
5. As strength, skill and control increase, hop through the half turn and hold the landings for one second. (Hop from all-the-way-left to all-the-way-right.)
6. This is an excellent exercise to do with a partner holding the opposite end of the band. Both partners turn to their own left, then right, at the same time.

c - Horizontal Obliques for Core (“007”)

Arms stay in front of midline throughout exercise.

1. Stand with back to bands. Bands are anchored at chest height and slightly off to the side. Arms reach straight ahead of midline, just below chest height.
2. Turn 90 degrees to left into the pull of the band by pivoting the right foot in and turning the hips

to the left, not by twisting the spine. ("007" position)

3. Hold for one second.
4. Return to start position and square off feet. Repeat to the same side.
5. As strength, skill and control increase, hop through the half turn. Hold landing for one second.

d - Jumps with Rotational Pull

1. Band is anchored at chest height by a door or partner.
2. Stand with back to band and place the handle in the left hand with the band anchored further to the left.
3. The band is pulling the athlete in a CCW direction. The athlete must use the core and hip muscles to hold a square position.
4. Now jump straight up and maintain the square position in the torso and hips, keeping back tall and abs tight. (This teaches the athlete how to use the core muscles to stand tall and resist rotation, as in landing a jump. The action is similar to the rotational forces of landing a jump or coming out of a rotating lift.)
5. Repeat the exercise on the opposite side with the opposite hand.

e - Hip Flexor/Hip Adductor

1. Anchor band under closed door and stand facing away from it at a slight angle.
2. The band is looped around the free leg.
3. Start with the free leg back and draw it straight forward with the knee bent (shown) or straight (not shown).
4. Because of the angle of pull with the band, this exercise works to strengthen the groin and hip flexor muscle groups.

f - Step Forward/Back Lunge (inside leg stays anchored)

Emphasizes core and inner thigh on near leg

1. Anchor two bands under door. Stand at 90 degrees to bands, holding handles in front of stomach.
2. Step forward into forward lunge with outside foot, then step directly to back lunge with same foot.
3. Keep back tall and don't touch down for balance between lunges.
4. Do "Step Forward/Step Back

Lunge" five times with the outside foot, then turn around and repeat on the opposite side.

g - Step Forward/Back Lunge (outside leg stays anchored)

Emphasizes core and outer hip on far leg

1. Anchor two bands under door. Standing 90 degrees to bands, hold handles in front of stomach.
2. Step into forward lunge with the inside foot, then step directly to back lunge with same foot.
3. Keep back tall and don't touch down in between for balance.
4. Do "Step Forward/Back Lunge" five times with the inside foot, then turn around and repeat on the opposite side.

h - Shoulder Extension

1. Anchor two bands at chest height and stand facing them with arms out straight.
2. Pull arms straight down and back next to hips and draw shoulder blades down the back.
3. Maintain a firm core to avoid arching the low back when the arms pull down.

i - Shoulder Flexion/Axel Take-Off

1. Anchor two bands at chest height and stand facing away from them.
2. Stand on one leg with free leg back. Arms start down and back.
3. Pull arms straight forward and up, moving next to hips. Keep shoulders down.
4. Maintain a firm core to avoid leaning back when the arms pull through.

j - Diagonal Obliques I (closed PNF)

Arms stay in front of midline throughout exercise.

1. Anchor two bands under door. Stand at 90 degrees to bands, holding handles in front of stomach.
2. Turn and bend down to floor. Outside foot pivots to assist with turn of torso. Abs and low back are firm.
3. Stand up and rotate through a square position, then continue on to lift up and out.
4. Rotation comes from feet but is felt in the core due to the torque from the bands.

