

Train Like The US Ski Team Using Competitive Core Training

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Performing physical conditioning sessions away from the snow, known as 'dry-land' sessions, is a critical component of the preparation of US Ski Team members. The sport scientists at the USSA currently recommend that you complete a program of at least 6-8 weeks of dry-land training in preparation for the upcoming ski season.

In particular, why not try one of the latest techniques used by the USSA to enhance the performance of team members known as 'Competitive Core Training'. There are five types of competitive core training exercises that you can do: (i) Flexion, (ii) Extension, (iii) Rotation, (iv) Balance and (v) Stabilization exercises.

These types of movements are essential components of body function and movement during skiing. Strong torso or core muscles provide a stable base from which to generate strength and power during skiing. For example turning in skiing involves flexion, extension and rotation of the spine during the various phases of the movement, as well as balance and stabilization.

Listed below are explanations and examples of how the US Ski Team trains each of the different types of Competitive Core Training exercises.

(i) **Flexion** is a type of exercise that involves a decreasing of a joint angle such as the 'up' phase in a sit up. For example, the simple sit up pictured below involves flexion of the spine during the 'up' phase.



(ii) **Extension** is a straightening exercise, such as standing up from a crouched or bent position. For example, the back extension exercise below involves straightening or extension of the spine.



(iii) **Rotation** is a twisting exercise. For example, the stabilization rotation exercise below involves rotation of the spine.



(iv) **Balance** is the ability to maintain the body in a stable position during an activity. Similar to skiing, hopping sideways onto a bosu® ball involves considerable balance and activation of the neurological system.



(v) **Stabilization** exercises involve the ability to hold a particular body position while performing an exercise. For example, the side-prone stabilization exercise below involves contracting the torso muscles in order to hold a strong body position.



When performing these exercises, technique is paramount. Take your time and control the movements and teach your body to perform each exercise correctly.

As part of a thorough training session, don't forget to warm up adequately with at least 20 minutes of aerobic activity and stretching prior to exercise.

It is important to note that performing exercises incorrectly poses a risk to your health. Visit your local medical practitioner to get a clearance before starting a new exercise program.

For more exercises and sample programs, refer to the latest DVD and CD-Roms available from the US Ski Team, including our latest title, "Competitive Core Training" at <http://educationship.ussa.org> ■