



Centers for
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Experience in Motion

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THE JUMP

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Jumping principles

It is important that the athlete learns how to shock absorb through the entire body. In order to accomplish this, take-off and landing positions should be similar. The knees should be flexed greater than 40°, the hips should be centered over the heels, the knees should not be past the front of the toes, and the chest should be over the knees.

The back should be straight in alignment from the head to the hips. This DOES NOT mean that it needs to be vertically straight, in fact, just the opposite. The trunk should be in a forwardly flexed position at the hips to about 45°, not rounded forward in a slouch.

The knees should stay in direct alignment with the second toe at all times when performing. This includes take offs and landings. DO NOT let the knee go inward.

Take-offs should be heel-to-toe and landings should be toe- or midfoot-to-heel or a combination. You should feel like you sink into your heels upon completion of the task.

Women have a tendency to participate in sports in more of an upright position. This contributes to weakness of the back, abdominals and hip muscles. If not addressed at an early age, this can develop into a habit that is harder to break later in life.

When starting out, it is more effective to perform jumping exercises with hands behind the back to isolate the lower extremities and concentrate on mechanics. They should also be performed in front of a mirror whenever able.

“Soft knees”, “light as a feather”, and “straight as an arrow” should be key phrases to keep saying in your head to remind you how to take off, land, or plant properly.

Jumping requires the body to be able to move the extremities in a coordinated fashion independent of, but stemming from your core. The core is the center of gravity or body mass for an individual—most often centered somewhere between the bellybutton and the hips.

It can be helpful to have a piece of resistive tubing around both knees when performing bilateral jumping to recruit more hip and core muscles.

When performing jumping exercises, if the athlete is unable to feel stable on their landing, they should try to recover and not give up altogether. Do everything possible to “stick” each landing—even if the initial landing is not in a good position, do your best to try and recover to the correct position.