

Specific Strength, Power, Endurance – Part 2 – Straightaway Jumps

By Susan Ellis

This article is the second in a 4 part series focusing on specific strength, power, and endurance for the straightaways, corners, and starts. We will begin this series with straightaways.

As mentioned in previous articles specificity in training is crucial to getting full bang for your buck in training, and having that specific training translate into gains on ice.

Traditional training such as inlining, slide boards, skating imitations, and jumps are all very specific forms of training, but are they specific enough? All are excellent for improving muscular endurance and power in the skating position and should not be neglected or overlooked. They are a big part of your summer program, especially when ice is not available. But the one component they lack is in improving max strength and max power. To improve these two components you need to do specific resistance training. Traditional strength and power training such as squats, lunges, steps up, and Olympic lifts give you an overall base of strength but lack specificity in movement.

This article explains some of the specific imitations and jumps used for endurance and power as well as how to use Techni-Cords for strength, power, and endurance to make your workout even more specific.

Straightaway Jumps

Jumping is an excellent way to develop power as well as specific muscular endurance. There are an infinite number of jumps that can be done to simulate the skating motion and which ones you choose is not as important as HOW you do them.

One of the goals in skating is to ensure all the power that is available for a movement is accessible and is used. That means putting your body in the ideal position to 'lock' in that power. Traditionally, skating imitations and jumps have emphasized being low by bending the knees. Although bending the knees is important, the knee bend is really a function of having your chest compact (close to your thigh), as well as having your cheek bones ALWAYS pointed toward the ground. It is also crucial to drive the recovery knee STRAIGHT through under your chest rather than allowing your thigh to turn outward on take off. This ensures that your hip and glute muscles are 'locked' in a position to deliver max power. Once your knee (thigh) has driven up under your chest during take off, leave it there until you land. That is, do not allow your knee to drop back down for landing, rather let the ground come to you rather than your foot going down to reach for the ground. You will feel an amazing difference in power in doing the jumps this way rather than the traditional reaching out with the thigh and reaching for the ground. I will warn you though, these hurt your butt like the dickens, and you may walk like a penguin for a few days after you do them. Oddly though, they seem easier on the knees than traditional reaching jumps.

If you are doing jumps with the goal of developing power, keep the reps low – under 10, but the intensity and velocity high. Sets range from 2-5. As the number of reps increases the number of sets decreases.

E.g.: 2 x 10 jumps, rest 1-2'
 4 x 6 jumps, rest 2'
 5 x 3 jumps, rest 2'

Endurance jumps are done at a lower intensity and velocity than power jumps. It takes time to develop this kind of power endurance so you may want to start with 20" intervals and work your way up to 2' or 3'.

E.g.: 2 x 3 x 20" rest 1', set rest 5'
 2 x 2 x 2' rest 2', set rest 5-6'
 2 x 3 x 3' rest 3', set rest 6'
 5 x 3' rest 2-4'

Some samples of straightaway jumps are shown in the video links below:

Forward jump with a small hop – allows a small recovery in between bigger jumps by adding a small hop. Good to warm up with.

[Forward jumps video](#)

Forward jump – Andrew Astalos of Detroit is the victim in these jumps. Notice that his chest never leaves its plane (doesn't rise) and his driving knee stays in position under his chest right through to the landing (no reaching for the ground). Nice job Andrew!

[Andrew forward jumps video](#)

Forward / side jumps – Same as forward jump with some movement to the side. Notice how his driving knee comes straight up under his chest. There is NO rotation outward of the thigh. Notice as well the 'air' time Andrew gets in these jumps. This 'air' time is not a result of trying to jump higher, but a result of making sure his joints (hips and glutes) are 'locked' during the entire movement.

[Andrew to side jumps video](#) [Andrew to side jumps side view video](#)

Knee to heel – On landing, make your knee touch your heel and pause for a brief second. Notice no rise in chest, cheeks stay to the ground, ankle bend. Can also be done with no pause for higher intensity.

[Knee to heel video](#)

Knee to heel and up to skating position – Pause for a second at knee to heel, raise slightly to skating position, pause, jump forward.

[Knee to heel forward](#)

Side / up jumps [Jump side then up](#)

Side jumps [One leg jump side](#)

Extension and up jumps [Extension and up](#)