

# Top three strength exercises for young players

It's that time of year again, when sales are easy to find, holiday music takes over the adult rock stations, and every organization starts releasing it's "Best (\_\_\_) of the Year" list. To keep in the spirit of things, we are going to offer our own "Best of" list: the top three strength training movements for young hockey players. If you follow our work, you know we value athletic strength over "how much do you bench" strength. With that in mind, we recommend exercises that have the highest athletic demand: body awareness, three-dimensional control and core strength.

**Single Leg Squat:** One of the best ways to develop youth leg strength is the single leg squat. This is a true three-dimensional exercise because, even though you are only moving up and down, your hips have to work to keep your body from rotation or flexing side to side. This is much more demanding than a traditional squat with two feet on the ground for a couple of reasons. First, and most obviously, you only have 1 leg to move you up and down rather than two, so the load is effectively doubled on that leg before you even pick up a weight. Second, in a single-leg stance, many of the small muscles that work to rotate and hold up your hip have to work much harder than they do when you have two feet on the ground. This means you are involving more muscles in the movement, making it more demanding for your body to coordinate. Finally, in a single leg squat, you learn proper alignment that will make you a healthier, more efficient athlete. If your arch collapses or your knee caves in, you will not be able to keep your balance in the squat and will work to make the correction.

To perform a single leg squat, stand on one leg and lower yourself to a depth you are able to do well (you can mark that depth by reaching your butt back to a bench, couch, etc). Keep your chest up, weight spread evenly over your foot and your heel pressed through the floor. As you squat up and down, avoid bracing your knees together and focus more on keeping your knee outside over your pinky toe. When you can squat down to 90 degrees on both the left and right side, start to add a little resistance (weight) to challenge the movement more.

**Pull-Ups:** A simple way to develop upper-body strength in youth athletes is simply to have them handle their own body weight in the form of a pull-up. Pulling strength is extremely important in hockey when shooting,

checking, and skating. Pulling movements are also essential to counteract the "slouching" forces people go through each day. In addition to hockey being played in a forward flexed position (causing many players' shoulders to round forward), kids also spend a lot of time rounded forward during screen time and in seated postures. By



strengthening the muscles of the back, people are able to keep better and more efficient posture.

There is a lot of work going on in this one movement. Just by hanging from the bar, the hands and forearms gain strength and the small muscles in the shoulder have to work to keep the shoulders snug in the sockets. During the pull up, virtually all major muscle groups of the upper body are used, including the core. Given all that is happening here, the pull up and its variations are great bang-for-your-buck training exercise to develop upper body pulling strength.

To do a pull-up, hang from a sturdy bar with hands a little bit wider than shoulder width apart and with palms facing away from you. Now pull on the bar as though you

are trying to get your elbows down to the ground. Finish the movement by getting your chin above the bar and then lower yourself back to the starting position.

**Suitcase Carry:** Good news - making the kids carry (not roll!) their heavy suitcase through the airport is actually training them to shoot harder and deliver better checks. We recreate this exercise in the gym by walking with a heavy kettlebell or dumbbell in one hand. This may seem strange, but learning to stabilize the core against this kind of force is the key to transferring power from the legs to the upper body, like you would in a slap shot or body check.

Core training these days is all about "anti" - anti-extension, anti-flexion and anti-rotation. The days of doing crunches and other spine bending contractions are over, now replaced by core training where the goal is to keep the spine stable. This makes a lot of sense when you think of a movement like a slap shot. The power is created in the hips and legs, not by swinging the arms. The trick is making all that force that was generated in powerful hips and legs travel all the way through the body and eventually end up flexing the stick. The ability to stiffen the core is essential to get that power through the midsection and to the upper extremities. If the core is not strong, all that power from the hips will dissipate, or leak by the time it gets to the arms, causing players to lose power on the shot.

Back to the suitcase carry - by walking with a heavy weight in one hand, the core has to work to keep from tipping over sideways. This is essentially a more functional walking version of a side plank, but the ability to lock down that one side is the same pattern that will allow players to quickly flex the stick and release a shot. To do a suitcase carry, pick a weight you can walk with and still keep good posture.

These three exercises should be standards in any young hockey player's training. In terms of improving strength and performance, you would be hard pressed to find movements that are more effective than these. If you have any questions regarding when or how to start with your young athletes, feel free to email me at [bsipotz@advantagestrength.com](mailto:bsipotz@advantagestrength.com).

Happy Holidays, everyone.

**- BRIAN SIPOTZ**