



Plyometrics for young players

Plyometric exercises over the last number of years have gained much exposure as the next great exercise for athletes, especially hockey players. Although plyometric exercises will help hockey players with speed and power they are not the end all be all.

I want to address a couple of concerns as to why you would be asking me this specific question and then go ahead and give you a few ideas for a good plyometric program.

For those not familiar with the term it is used to describe the method of training, which seeks to enhance the explosive reaction of the individual through powerful muscular contractions as a result of rapid eccentric contractions. For example when a person jumps off a bench on to the ground certain muscles in the leg need to contract so that your body does not fall to the ground. These muscles are actually in an eccentric contraction to slow the movement down. Now if we were to take it one step further we could now force this person to jump up into the air. This would then force the player to perform an eccentric contraction to slow down the landing of the jump and then a concentric contraction to force the body to jump up in the air. This would be considered an advanced plyometric exercise.

One of the concerns many parents and coaches and some of those even in the medical profession have is that plyometric exercises can cause too much stress on the joints and therefore cause joint issues and in some extreme cases in younger athletes below the age of 10 or 11 can even cause damage to growth plates. I have even had one "expert" state that he did not recommend kids under the age 10 perform jump rope. I think this is a little extreme but I do agree that some caution needs to be used.

Most in the strength and conditioning industry agree that in order to perform advanced plyometric exercises you need to be an experienced, trained athlete. Many set a rule of being able to perform a body weight squat equivalent to two times your body weight.

Again I think this is a bit extreme but as I stated earlier you do need to be cautious, especially with younger athletes and with athletes who are new to training for strength and power.

The second reason I think you might be asking this question is your concern that in- season plyometric training may be too much for hockey players that are already on the ice 5-6 times a week. If this is your concern then you are not too far off the mark. There is a chance that you can train too much and if the body does not have enough chance to rest then yes plyometric training during the season would cause a problem. This is the case with any type of training but maybe more so of plyometric training due to the extra stress this type of training can have on the body.

The following are some general guidelines I would recommend for anyone considering an off ice training program that does include plyometric exercises.

- 1) Athletes under the age of 10-12 should only perform low force plyometric exercises. These are simple plyometric exercises that might require small jumps like jumping rope or jumping up onto a box. (as opposed to jumping off a box).
- 2) Always work into more moderate and advanced drills by first training with low force exercises for a number of weeks. For example if your training program is designed for 12 weeks then take the first 4 to work on strength and develop a good base. At this time if you want to use plyometrics then use low force exercises. The second 4 weeks you can start to advance into more moderate exercises.
- 3) Make sure to always follow good form.
- 4) Make sure you allow your body enough time to recuperate and heal.
- 5) You will find that most if not all plyometric exercises for the lower body are to do with jumping. ALWAYS make sure that athletes control their landing by landing with "soft" feet.

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Dr. Steele is president and founder of Better Hockey. He has trained hundreds of athletes from all over the world from youth level players up to NHL players and has served as the strength coach to several teams. Better Hockey.com is the worlds largest on line hockey development website with thousands of pages of articles, video clips, audio interviews, training programs, pictures, expert advice and more for ALL areas of hockey development. Please visit www.betterhockey.com for more information.