



### **Train Movements, Not Muscles**

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A well rounded performance training program for lacrosse should include many different components to help you improve your game. There should be exercises or drills that focus on your speed, agility, flexibility, power, and conditioning. However the most common area that all athletes will focus on is strength training. Improving your strength can help you run faster by improving your ability to produce force, make your body more resilient to injuries, and help you win those one-on-one battles during the game. As a strength coach it is my job to know the best ways to improve strength, how to properly plan out an entire offseason program so that an athlete peaks at the proper time, and how to illicit the maximum benefits in the shortest amount of time possible from all my athletes. The amount of information is endless and beyond this article, so I am going to propose and explain one basic tip and concept for you to help improve your strength training program and get better results: train movements, not muscles.

Strength training became popular and mainstream due mainly to one person: Arnold Schwarzenegger. Although he wasn't the original bodybuilder, he is the one that made lifting weights popular. Soon after he gained popularity magazines began to pop up on shelves with all the tips and routines that bodybuilders were using. Then commercial gyms started to appear all over the place, full of people following the same routines that were being described in these 'health' magazines. To this day, the same philosophy of training is the most prevalent. Pick a muscle or muscle group, find exercises that isolate those muscles and perform them, end of workout. Whenever I begin to work with new athletes I always ask if they have any training experience and always find out that if they do they were doing a 3 day body part split workout like this: Day 1-Chest and Arms, Day 2-Back and Shoulders, Day 3-Legs. This is an example of a typical bodybuilding split. While a program like this may make the athlete stronger, its primary design is purely for muscle growth. It isolates the muscles and trains them to work individually. The flaw in this is that never in our daily lives and especially not during a lacrosse game do our muscles work isolated from each other. Our muscles work together to perform every action we do. To shoot the ball the hardest you step into it with your legs, rotate forcefully at the hips, and then use your arms to follow through and direct the ball. This is a highly coordinated effort from the ground up using almost all of the muscles in your body together. Training your muscles by isolating them is counterintuitive due to how the body functions.

The question then becomes how do we train if we don't want to train specific muscles? We want to train movements. We want to see the body as a whole and understand that all our muscles work together to perform tasks. A basic example of this is to think of what muscles are working just to stand upright. Our calves, quadriceps, hamstrings, gluteals, spinal erectors, and abdominals all work together just so that we don't fall to the ground due to the forces of gravity. If that many muscles are working just to stand still you can imagine how many have to work together to shoot the ball or cross check your opponent. World Famous strength coach Mike Boyle created a list of all the major movements the body uses to function, and as such created a template for how we should train our muscles to perform. The list is:



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- Knee-dominant hip and leg pushing exercises-*squats, leg press*
- Single leg knee-dominant hip and leg pushing-*single leg squats, split squats, lunges*
- Straight-leg hip extension-*romanian deadlifts and single leg variations of it*
- Bent-leg hip extension-*hip lifts, stability ball hip raises*
- Horizontal Presses-*pushups, bench press*
- Vertical Presses-*shoulder/military presses*
- Horizontal Pulls-*seated rows, bent over rows, hanging rows*
- Vertical Pulls-*chinups, pulldowns*

When designing your training program you want to make sure to balance each of these movements. If you do two horizontal presses then you should do two horizontal pulls. In fact to have a completely balanced body you want to be able to do the same amount of weight with each opposing movement. An example of how to design a program like this would be to include upper body pressing exercises and lower body hip extension exercises one day, then the next training day do upper body pulling exercises combined with lower body pushing exercises.

There is a saying that if you train muscles you might forget movements, but if you train movements you will never forget a muscle. A well balanced strength training program will include equal amounts of the previously mentioned movements. Add to that some torso or core work and some power training (Olympic lifts or plyometrics) and you have an extremely well rounded program that will still promote gains in muscle mass, but also make that extra muscle functional and increase the performance of it. While the bodybuilding method will yield results in getting bigger, the muscle it produces will not be able to perform the way you want it to when you are playing lacrosse. Just look at how poorly bodybuilders move around and then ask yourself if you want to look like that while playing lacrosse. An athlete should train their body to move and that is best achieved by training movements, not muscles.

