

Pre-Season Training



Jordan Harder

Overview

Introduction

I put together a series of a micro-cycle of workouts that will focus on getting us ready for the season. This weight room workouts should sync with speed and agility sessions done with Jordan Harder. When done in combination, we will maximize our potential. This section will cover the scientific fundamentals of why we are doing what we are doing. On top of focusing on speed, our upper body lifts are set in place to increase strength, and increase pack on a little bit of size in the process. This focus will help in an array of areas of team sports, but specifically taking and giving hits, rotational power, as well as our quest for Freak Speed. Let's Break things down.

First let's clear some of our terminology out of the way. In sports you will hear the phrase "Speed is King" over and over again. I agree. But if we can pair speed with agility we will have a powerful on-field/court combination. Speed is referred to the ability to achieve high velocities in a linear direction (straight line speed). We can move in linear patterns (track athletes) but also in multidirectional patterns that are prevalent in team sports. Agility is a little different. To be an agile athlete you have to have the ability to achieve high velocities, but also have the physical ability of change of direction combined with perceptual-cognitive skills to respond to a reactive stimuli. s. Our workout sessions as previously stated will be used to help us increase strength, as well as increase lean muscle mass in the body. For us to be successful in explosive movement and speed, we need to increase our strength combined with the ability to use strength in the various movements of sport.

Programming

Running/Sprinting speed is determined by stride length, stride frequency and rapid amount of force (musculature of body). We will work on these techniques and as well as different phases of sprint (Starting, acceleration, top end) during our training sessions. As further covered, our lifting program is done to help increase the amount of force our body is capable of producing. Similarly we will work on improving our change of direction ability by technique in sessions particularly ground contact time, and the amount of force that is rapidly displayed in our lifting program. Since agility is a combination of speed and change of direction ability, we plan to program this into our in-person sessions.

Methods for Increasing Speed and Agility in Lifting program

Speed is the result of the body exerting forces against gravity and the ground. I will go into the setup and patterns of our lifting schedule later, our programming to work on our max strength squat patterns over various ranges of repetitions. Because of the briefness of ground contact time in sprinting, we are only able to display a fraction of the maximal force over a period of time. Increasing our maximal strength will increase our capacity to display force as well as increase length of top-end speed, and decrease injury risk. Our lifting program works uses a lot of eccentric movements as well. This is again for a multitude of reasons, that are all important in our process of success. Eccentric movements help mimic braking need in high end speed, as well in agility movements. Eccentric movements will benefit us also by their ability to reduce injury not only in the weightroom but also in sports. A eccentric movement is often also called a negative motion, or if a sample tempo for the squat would be 6s down - 0s hold - 1 second explode up. Meaning we would lower in the exercise at a lower speed. These

ideologies are all programmed into our lifting program, and accompany the speed and agility work done in our sessions.

Program Design

Our lifting program is designed with a framework seen and popularized by the Westside Barbell Club. This style has been proven to increase strength as well as lean muscle mass, both factors involving Freak Speed. Other important factors in our lifting program come from the National Strength and Conditioning Association (NSCA), *Essentials of Strength and Conditioning* (2006). We will have two upper body days and two lower body days. If you are only able to do three workouts a week I would suggest doing the three week cycle in four weeks, keeping in line with the workouts. The first two days are max-effort lifting days (Upper and Lower), followed by dynamic effort days (upper and lower) with specific focus during each microcycle of the program.

This lesson took me awhile to get down, but it is very important. Don't let your ego get in the way when lifting. Doing more reps with a lower weight is a lot safer than, stretching your limits and doing a weight that is too heavy to do with good/great form. Form is king in all the exercises listed. I've talked about this throughout the summer, being the strongest kid on the bench press or squat won't matter if you aren't able to be on the field. We are lifting weights to increase our whole as a lacrosse player, not to be the biggest baddest lifter ever.

Just as in warmups for sport we need to warmups for our workout. Another popular phrase "the best ability is availability". We want to control what we can control and reduce our risk for injury AT ALL TIMES. For a long time people believed static stretching was good before a workout, but science shows that this is WRONG. We want to get a good dynamic stretch in before doing our lifting. I like to program warmups by starting with some kind of foam rolling, such as rolling on a foam roller or lacrosse ball, followed by mobility work, then various ways to get the heart pumping. I will give two sample warmups below, one for upper body workouts as well as one one for the lower body. If you have questions on a proper lifting warm up looks like or any other questions throughout the program send me a message.

Upper Body Warmup:

WARM-UP

GENERAL MOVEMENT/DYNAMIC MOBILITY/
CNS STIMULATION

- 1 **SMR on Chest & Shoulders (various movement patterns)** x 2-3 min
- 2 **Side-to-Side Pec Stretch** x 10 reps/side
- 3 **Push-up Pluses (on Knees)** x 10 reps
- 4 **Push-up Pluses** x 10 reps
- 5 **Rotator Cuff Series - Iso-Holds - Y,W,T,I**
x 15 sec hold each
- 6 **Rotator Cuff Y into Blackburns** x 10 reps
- 7 **Push-ups** x 10 reps
- 8 **Overhand Band Pull Aparts into Dislocates** x 10 reps
- 9 **Underhand Band Pull Aparts into Dislocates** x 10 reps
- 10 **Band Resisted External Rotations**
x 10 reps each arm
- 11 **Med Ball Slams to Partner** x 2-3 min
- 12 **Med Ball Chest Passes to Partner**
x 2-3 min

Lower Body Warmup:

WARM-UP

GENERAL MOVEMENT/DYNAMIC MOBILITY/
CNS STIMULATION

- 1 **Dynamic SMR on Lower Body**
x 1 min each leg
- 2 **Double Band Traction Bear Squats**
x 10-20 reps
- 3 **Goblet Squats** x 10 reps
- 4 **Goblet Squats with Prying** x 10 reps
- 5 **Rear Foot Elevated Hip Flexor Stretch**
x 1 minute each leg
- 6 **Strider Stretch on Bench**
x 1 minute each leg
- 7 **Hip External Rotator Stretch on Bench**
x 1 minute each leg
- 8 **RKC Planks**
x Max Tension x 3 x 10 sec holds
- 9 **Face Pulls** x 2 sets x 10-15 reps
- 10 **Flow: Squat > Inch Worm > Push-up > Striders** x 3-5 runs
- 11 **Glute Bridges** x 10 reps
- 12 **Glute Bridges (with feet together)**
x 10 reps
- 13 **Single-Leg Glute Bridges**
x 10 reps each leg

WEEK ONE-THREE

Monday (Max-Effort Upper Body)		Tuesday (Max-Effort Lower Body)	
1	Bench Press	Week 1 - workup to a heavy set of 7 Week 2 - workup to a heavy set of 6 Week 3 - work up to a heavy set of 5	1 Squat Week 1/2 work up to a heavy set of 6 Week 3 work up to a heavy set of 5
2	Dumbbell Floor Press	Week 1 - 3 Sets of 12 Week 2 - 3 Sets of 10 Week 3 - 4 sets of 10	2 Bulgarian Split Squat Week 1 - 3 sets of 10 Week 2 - 4 sets of 10 Week 3 - 4 sets of 12
3A	Dumbbell Row	Week 1-3 3 sets of 12 Good form-try to increase weight each week	3 Romanian Deadlift 3 sets of 12
3B	Iso Hold YWT's	3 sets of 15 seconds each look up online	4 Plank Variations
4A	Lateral Raises	3 x 20	
4B	Curl variation	3 x 12	

Mount St. Lacrosse

Thursday (Repetition/Dynamic Upper Body)		Friday (Repetition/Dynamic Lower Body)	
1	Eccentric incline db press	Week 1 - 3 x 12 6 seconds down Week 2 - 3 x 10 Week 3 - 3 x 8	1 Reverse Lunge week 1 - 3x8 Eccentric 6 second lowering week 2 - 3 x6 week 3 - 4 x 6
2	Timed 75 pushups	As fast as possible	2 Barbell hip thrust 3 x 15 or all weeks Back extensions
3A	Pull Ups	Week 1 - 3 x10 *Max amount if not possible Week 2 - 3 x10 *if can do more add weight Week 3 - 3 x12	3 Cossack squats 2 x10 reps
3B	Rear Delt-Flyes	3 sets of 15 all weeks	4 Band alphabets or stir the pot on ball 2 x 45 seconds
4	Shrugs	4 x 15	5 Farmers Carries 1 x as far as possible in 2 minutes
5A	Empty Barbell Curls	50 reps as many sets as needed as fast as possible	
5B	Tricep extension machine or band	75 reps as many sets as needed as fast as possible	

If anyone has any questions about our lifting program please feel free to contact me. I also want to repeat that form is one of the most important factors when lifting to reduce injury. We must focus on having exact form before we can increase the load of the movement. This is the first three weeks of our pre-season lifting, I will send out the the next cycle of workout following completion.

Enjoy!

-Jordan