

Shane Seroyer, MD Sports Medicine / Arthroscopy Joint Replacement

BASEBALL STRENGTH AND CONDITIONING PROGRAM

The primary goal is balanced development of the muscles that are used in baseball. We are not interested in turning you into body builders but to develop functional strength that will apply to the game. It is broken down into two categories, an off-season and in-season program. The off-season is dedicated to gaining strength and power while the in-season is for maintaining functional strength throughout the season. Start with 3-5 minutes of a cardio warm-up to break a sweat. Next, perform self-myofascial foam rolling to improve muscle length, mobility, and flexibility prior to working out. After working out, complete static stretches to assist with cooldown and decreasing muscle soreness.

The off-season lifts should be completed four times per week. Mondays and Thursdays are dedicated to upper body lifts while Tuesday and Fridays are dedicated to lower body lifts. The off-season is broken down into three phases in order to get you ready for the season. During phase one, the goal is to build muscle bulk lost from the previous season. The focus of the first phase is higher volume of work with higher number of sets and reps with moderate weights. It also consists of shorter recovery between sets. Phase two is for getting stronger by teaching the nervous system to recruit as many muscle fibers as quickly as possible. It consists of quality training with fewer sets, reps, and heavier weights. There is longer rest between sets. In this phase, you will see the largest improvements in your neuromuscular strength gains. Phase three is for transferring your strength towards explosive movements. During this phase, you want to be as explosive as you can to develop power.

The in-season workouts are aimed for maintaining the strength you built prior to the start



of the baseball season. Plan to lift three times a week and complete a total body lift. Be smart about when you are lifting during the season. Time your weight room workouts to be completed after baseball practice or games or several hours prior to playing. You want to find a routine that works for you and are able to maintain during the season. This will greatly improve your chances for staying healthy.

OFF-SEASON (12 WEEK PROGRAM)

PHASE 1 Muscle Hypertrophy: Week 1 - 4

UPPER BODY (Monday/Thursday)

- Dumbbell Rows
 - 3-5 Sets; 10 Reps
- Lat Pull-Downs
 - 3-5 Sets; 10 Reps
- Straight Arm Pull-Downs
 - 3-5 Sets; 10 Reps
- Hammer Curls
 - 3 Sets; 10 Reps
- Tricep Kick Back
 - 3 Sets; 10 Reps
- Forearm Set
 - 3 Sets; 10 Each
- -Shoulder/Scapular Routine
 - 2 Sets; 15 Each
- -Core (pick 2)
 - 2 Sets; 15 Each

LOWER BODY (Tuesday/Friday)

- Tube Walk
 - 3 minutes each direction
- Front Squats
 - 3-5 Sets; 10 Reps each
- Forward Lunges
 - 3 Sets; 10 Reps
- Double Leg Press
 - 3 Sets; 10 Reps
- Double Leg RDL
 - 3-5 Sets; 10 Reps
- Double Leg Swiss Ball Curl
 - 3 sets; 10 Reps
- -Core (pick different 2)
 - 2 Sets; 15 Each

PHASE 2 Muscle Strength: Week 5 - 8

UPPER BODY (Monday/Thursday)

- Dumbbell Rows
 - 3 Sets; 6-8 Reps
- Pull Ups or Lat Pull Downs
 - 3 Sets; 6-10 Reps
- Straight Arm Pull-Downs
 - 3-5 Sets; 8 Reps
- Hammer Curls
 - 3 Sets; 6-8 Reps
- Tricep Kick Backs
 - 3 Sets; 6-8 Reps
- Forearm Set
 - 3 Sets; 10 Each
- Shoulder/Scapular Routine
 - 2 Sets; 15 Each
- Core (pick2)
 - 2 Sets; 15 Each

LOWER BODY (Tuesday/Friday)

- Tube Walk
 - 3 minutes each direction
- Front Squats
 - 4-6 Sets; 4-6 Reps
- 1 Leg Elevated Lunge
 - 3-5 Sets; 6-8 Reps
- Single Leg Press
 - 3 Sets; 6 Reps
- 1 Legged RDL
 - 3-5 Sets; 6-8 Reps
- Single Leg Swiss Ball Curls
 - 3-5 Sets; 8 Reps
- Core (pick different 2)
 - 2 Sets; 15 Each

PHASE 3 Muscular Power: Week 9 - Start of Season

UPPER BODY (Monday/Thursday)

- Dumbbell Rows
 - 3-5 Sets; 6 Reps
- Pull Ups or Lat Pull Downs
 - 3 Sets; 10 Reps
- Forearm Set
 - 3 Sets; 10 Each
- Medicine Ball Side Pass
 - 3-5 Sets; 6 Throws each side
- Medicine Ball Overhead Throw-Down
 - 3-5 Sets; 6 Throws
- Medicine Ball Side Throw-Down
 - 3-5 Sets; 6 Throws each side
- Shoulder/Scapular Routine
 - 2 Sets; 15 Each
- Core (pick 2)
 - 2 sets; 15 Each

LOWER BODY (Tuesday/Friday)

- Front Squats
 - 3-5 Sets; 4 Reps
- Split Squat Jumps
 - 3-5 Sets; 6 Jumps
- Forward Box Jumps
 - 3-5 Sets; 5 Jumps
- Lateral Box Jumps
 - 3 Sets; 10 Jumps
- Single Leg RDL w/ Band Rows
 - 3 Sets; 8 Reps each
- Tube Walk
 - 3 minutes each direction
- Core (pick different 2)
 - -2 Sets; 15 Each

In-Season Maintenance Strength Program (total body)

UPPER BODY

- Dumbbell Rows
 - 2 Sets; 15 Reps
- Lat Pull-Downs
 - 2 Sets; 15 Reps
- Pull-Aparts
 - 2 Sets; 15 Reps
- Shoulder/Scapular Program
 - 2 Sets; 15 Reps
- Forearm Set
 - 2 Sets; 15 Reps
- Core (pick 2 and alternate)
 - 2 Sets; 15 Reps

LOWER BODY

- Front Squats
 - 3 Sets; 10 Reps
- Forward Lunges
 - 2 Sets; 10 Reps each
- Single Leg RDL
 - 2 Sets; 10 Reps
- Single Leg Press
 - 2 Sets; 10 Reps
- Tube Walk
 - 3 minutes each direction

Upper Body Strengthening Exercise Descriptions





Forearm Set: Pronation, Supination, Extension, Radial Deviation, Flexion, and Ulnar Deviation.

Keep elbow supported so that movement is only at the wrist.



<u>**Dumbbell Row:**</u> Pull the weight with your upper back and focus on pinching your shoulder blades together.



Tricep Kick-Back: Extend hand back keeping back flat and elbow still.



Hammer Curl: Keep hand in the neutral position and go through full range of motion.



Pull Aparts: With T-band, start with hands shoulder width and pull with your back so that the band hits your chest around the sternum.



Pull Up/Chin Up: Use an underhand grip. Go through the full range of motion.



Straight Arm Pull Down: Hands a little wider than shoulder width apart, keep arms straight throughout the motion. Pinch shoulder blades together as you pull down.



<u>Pull Down:</u> Hands a little wider than shoulder width, make sure and squeeze with your upper back as you pull the bar down to the front chest.

Upper Extremity Medicine Ball Exercise Descriptions



Medicine Ball Front Throwdown: Feet shoulder width apart, bring the ball back behind your head, and then throw it down in front of you. As the medicine ball bounces back up to you, rapidly repeat the prescribed number of reps.



Medicine Ball Side Throwdown: With your feet shoulder width apart and facing forward. Bring the ball back behind your head turning your shoulders to the side. Throw the ball down to the outside of your feet, catch it then rapidly throw it to the other side for the prescribed number of

reps.



Medicine Ball Side Toss: Feet shoulder width apart and pointing straight ahead, bring the ball around waist high to the side opposite the wall. Throw the ball forcefully to the side driving from your hips. As soon as you catch the medicine ball, rapidly repeat for the prescribed number of reps. Complete on the other side.



Medicine Ball Twists: Keeping your feet off the ground, start with the medicine ball in front of you and then rotate toward the ground on one of your sides. Touch the ground and bring the ball to the other side, touch that side and go back. Keep repeating this as many times as prescribed.

Lower Body Strengthening Exercise Descriptions



<u>Tube Walk:</u> With T-band around your ankles. Keep toes and pelvis pointed forward and a slight bend in your knees. Keep your shoulders level during the movement.



Front Squat: Keep elbows parallel with the ground. Bar will rest on the front of the shoulders. Keep back straight throughout lift and heels on the ground. Stand up with weight going through your heels. Have a strength training expert show you proper form before you start with the lift.



Leg Press: Keep neck in a neutral position and don't let your knees go passed your toes. Start with 2 legs and progress to 1 leg isolation.



Forward Lunge: Keep back upright throughout lift. Don't let knee go over toes. Return to starting position.



One Leg Elevated Lunge: One foot forward with other foot stretched behind on a bench. Lunge down dropping back knee toward the ground. Keep front knee behind toes. Back knee should not hit the ground.



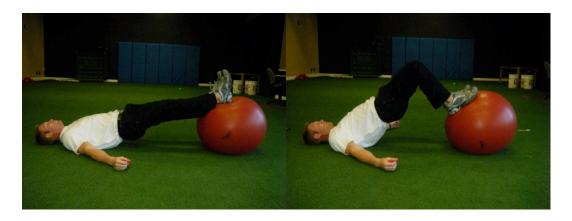
Double Leg RDL: Keep a slight bend in the knees. Hinge at the hips while keeping your low back straight. This exercise can be used with a barbell as well.



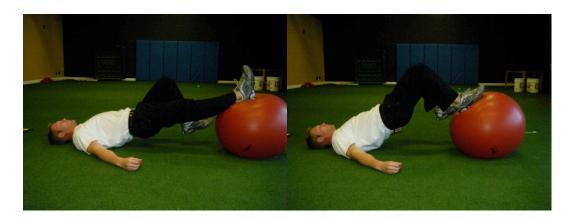
One Legged RDL: For right leg, keep a slight bend in right knee. Hinge at the waist keeping your low back straight and reaching back with the left leg. Maintain a steady pelvis during the movement as you lower and return to starting position.



Single Leg RDL's with Band Rows: To work out the right leg, band is in your left hand and right foot stays on the ground. Reach forward with your left hand and back with your left foot while keeping a slight bend in the right knee. Straighten up, pulling with your hamstrings, and at the same time bring your left hand to your hip. Squeeze and repeat.



Double Leg Swiss Ball Curl: Place heels on the swiss ball and keep a straight line from your shoulders to feet. Pull swiss ball back using feet and bending at the knees. Keep a straight line from your shoulders to your knees throughout the movement.



One Leg Swiss Ball Curl: Place one heel on the swiss ball. At the start, keep a straight line from your shoulders to your heel. Pull the swiss ball back while bending the knee. Throughout the movement keep a straight line from your shoulders to you knee.

Lower Extremity Plyometric Exercise Descriptions



Lateral Box Jumps: Start with right foot on an 8-12 inch box and left on the ground. Push right foot into box, elevate, and replace the right foot with the left foot on the box while the right foot goes on the ground on the other side. Rapidly try to change direction for prescribed number of reps.



Forward Box Jumps: Use an 8-12 inch box/bench. Face forward toward the box and jump up and land with a slight bend in the knees and back down to the ground. Rapidly try to repeat for prescribed number of reps.

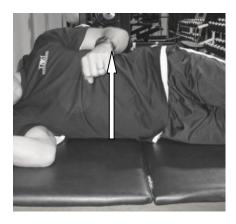


Split Squat Jump: Start in the lunge position. Jump up as high as possible and switch your feet.

As soon as you land, rapidly try to jump off the ground and repeat for prescribed number of reps.

Be sure to not allow your front knee go over your toes. Also be sure that your knee doesn't collapse past the midline.

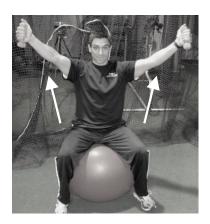
Thrower's Shoulder/Scapular Program



Side Lying External Rotation: Lay on side with a towel under the active arm. Keeping the shoulders back, bring the hand from the belly button up so that it is parallel to the table. Weight can be added up to 3 pounds. 2 x 15 reps.



Scapula Push Up: In a push up position on your elbows, sink your chest to the table then lift your chest as far away from the table as you can while keeping your elbows down. 2 x 15 reps.



Scaption: Can be done on a swiss ball or standing. Bring your arms up at about a 45° angle. During the motion, keep your shoulders back and down while maintaining a straight elbow. To make it more challenging to engage your core, complete this exercises with 1 foot off the ground. 2×15 reps.



Lower Trap Swiss Ball Lift: Starting with your shoulders off the table, raise the swiss ball up using your shoulders only. Do not use your lower back to lift the ball up. Remember to keep your arms straight during the movement. 2 x 15 reps.



YTWL: (Pictures) Start; Y; T; W; L; Keep your thumbs up during each "letter." Also try and keep your shoulder blades together and down. May work up to 1-3 lbs maximum. 3 x 5 reps with each letter.



D-2 Shoulder: Sitting on a swiss ball and pulling from the low pulley position, cross your hands in front of you. Your right hand will grab the left cable and your left hand will grab the right cable. Pinch you shoulder blades back and pull the cables up and to each side. 2 x 15 reps.

Core Program Exercise Descriptions



Tandem Kneeling Chops: Have your knee closest to the cable machine up. In the example above, the right knee is down and left knee is up. Try to have your front foot directly in line with your back knee. Place your hands in an overhand grip. As you complete the chop, maintain a stable quiet pelvis. 2 x 15 reps.



Tandem Kneeling Lifts: Have your knee closest to the cable machine down. In the example above, the right knee is up and left knee is down. Try to have your front foot directly in line with your back knee. Place your hands in an overhand grip. As you complete the lift, maintain a stable quiet pelvis. 2 x 15 reps.



Swiss Ball Cable Rotation: Feet shoulder width apart and hips facing forward. Grab the cable and rotate so that the cable goes around the swiss ball. 2 x 15 reps



Planks, Front and Side: For the front, keep your back flat as you rest with your elbows on the ground. For the side, stay straight from your feet to your shoulders while supporting yourself on one elbow. Hold 1 minute each direction for 3 sets each.



Upper Trunk Unilateral Core Rotation: Place your feet shoulder width apart and balance your hands on two 5-10 lb dumbbells that are also in a shoulder width position. In a controlled manner, raise one dumbbell up toward an imaginary vertical line with your trunk and other arm.

Be sure not to go past that line. Lower and repeat on the other side. 2 x 15 reps.