

The complete “Five-Tool” Player

Modern day baseball players are superb athletes. They tend to be lean, quick and powerful. For generations, they have relied on generic weight training programs to enhance their performance.

While strength conditioning can help to prevent injuries, traditional weight lifting exercises may not be suitable in targeting the correct muscles or the correct movement patterns for baseball. Recent studies have shown that a well developed baseball-specific program can significantly increase batting speed, striking power, throwing velocity and most importantly, prevent shoulder injuries.

At POTENTRx, we understand the specific demands required for baseball and how to help you maximize your athletic potential. This is why we have created the Baseball Combine. The Baseball Combine is designed to determine where you are, where you need to be and how to get there by using the latest technology and scientific methodology. The POTENTRx Baseball Combine includes the following services, spread across two separate sessions:

Day One | Testing Session

- 1-hour musculoskeletal exam with our physical therapist to determine any limitations with your mechanics
- 1-hour 3-D motion capture analysis of your pitching, throwing or hitting mechanics with our biomechanist
- 1-hour testing session with our exercise physiologist to assess your baseball fitness and performance potential

Day Two | Follow-up Session

- 1-hour consultation with our biomechanist who provides a written and video summary of your pitching, throwing, or hitting technique with recommendations, tips, and drills for the necessary modifications that will help you 1) acquire consistent and efficient pitching, hitting or throwing mechanics; 2) increase pitching, hitting, or throwing accuracy; and 3) improve pitching, hitting, or throwing power.
- 1-hour consultation with our exercise physiologist who provides written and illustrated results of your musculoskeletal exam and baseball fitness with training recommendations to help you develop 1) endurance, 2) speed, 3) acceleration, 4) flexibility, 5) strength, and 6) power for optimum baseball performance and to reduce the risk of injury associated with poor pitching, hitting, or throwing mechanics and/or poor fitness.

Baseball-Specific Services | Available through our combine or on an individual basis

Physiological Fitness

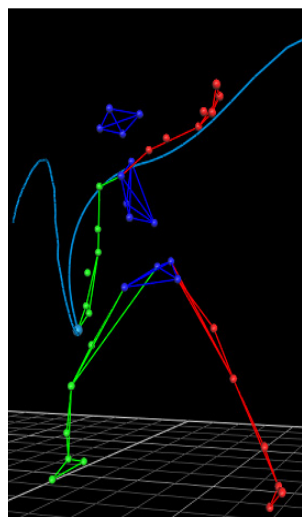
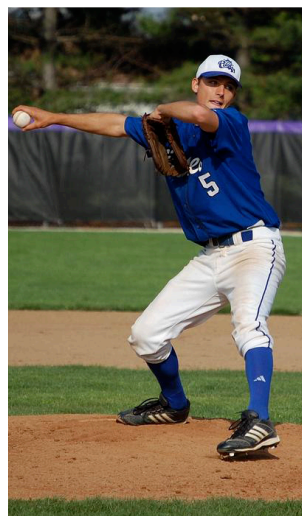
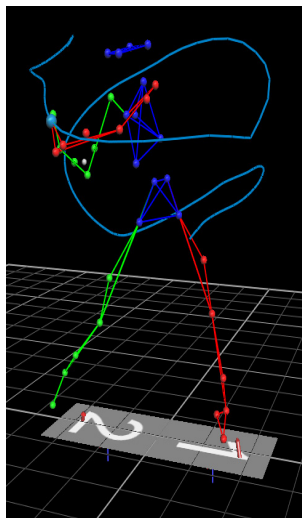
• AEROBIC CAPACITY

Is the maximum capacity of your body to transport and utilize oxygen during incremental training, which reflects your level of physical fitness. This is important in determining your capacity to perform sustained training and when correlated to heart rate, it can be used to develop training zones. Having a high aerobic capacity can help reduce the effect of fatigue throughout multiple innings or games.

• BODY COMPOSITION

Provides an accurate measure of fat and lean mass, both of which are vital aspects of baseball performance. To ensure accuracy and reliability, the staff calculates body composition through three different methods – girth and proportionality, a four-site skin fold measurement with calipers, and bioimpedance.

(continued)



- **HAND DYNAMOMETRY**

A hand dynamometer is used to determine overall grip strength and muscle fatigue which is critical to overall performance for baseball players, especially catchers.

- **MUSCULAR STRENGTH TESTING**

Maximal muscle strength (or 1RM) is a valid indicator for performance potential and serves as the baseline for designing resistance training programs. Using computer monitored strength training equipment, our staff can determine a 1RM for each baseball-specific exercise, assess muscle strength imbalances and proportionality, compute maximal power and decay of maximal power (fatigue profile) and thus determine the precise number of repetitions that can be performed without significant fatigue to the desired metabolic system. For baseball, the lifts will be determined by position.

- **SPEED TESTING**

Involves running a single maximum sprint over a 60-yard distance, with time recorded. The purpose of this test is to determine explosiveness, acceleration and speed. The data will be compared to baseball population norms for age and gender.

Biomechanical Optimization

- **3-D MOTION ANALYSIS**

A computerized six-camera system is used to analyze pitching, throwing, or hitting mechanics. By placing reflective markers on the joints, the cameras provide the computer with the data to set up a 3-D model. When combined with force, pressure, acceleration and muscle activation technologies, staff can track joint positioning, velocity, acceleration and trajectories, calculate bat speed, track the center of mass distribution and determine the muscle sequencing and frequency. This data gives our staff precise information to make finite but critical adjustments to reduce injury and improve performance.

- **2-D ANALYSIS**

Using a 2-D video camera and specialized editing software, our staff will film you from several different angles while you pitch, throw or hit and review your movements, looking for abnormalities that are creating problems or are caused by a problem. Our staff then creates an illustrated and annotated video file that outlines modifications that can help you reduce pain and improve your pitching, throwing or hitting technique.

- **MUSCULOSKELETAL EXAM**

Musculoskeletal function is concerned with bones, joints and muscles and is associated with range of motion and the flexibility of muscles allowing for freedom of movement without pain or restraint. Using observation, palpation, and selected functional tests, a physical therapist conducts a 65-point assessment of posture, balance, reflex mechanisms, muscular strength symmetry, range of motion (flexibility) in all three planes, dynamic capacity and kinetic chain stability that result in a clear understanding of your musculoskeletal integrity.

For more details about the services listed in this flyer, please call (206) 432-9436



POTENTRx Affiliates

American Council on Exercise (ACE) • Bainbridge Fire Department • Club ZUM • Cosmed • Pockock Rowing Foundation • Precor • Rainier Vista Boys & Girls Club • Seattle Fire Department • Seattle Sockeye • Seattle Thunderbirds • Seattle University Athletic Department • Skillshow • Snohomish Fire Department • Technogym USA • USA Rowing • USA Rugby • Vicon • Washington Athletic Club • Waypoint Outdoor • YMCA of Greater Seattle