

Spend this winter conditioning for softball

By Peter Twist



Partner Rotary Throw using a Medicine Ball

Over the past 20 years I have had the opportunity to communicate with hundreds of professional and collegiate coaches, strength coaches and their athletes, providing first-hand accounts of the status of North American training programs. Staples for softball success include throwing and pitching mechanics, rotary power at the plate, and the speed to run down balls and steal bases. Ultimately, players, and their coaches, desire softball skill and athleticism, two large goals you can capture with attention to the secondary fitness characteristics.

College coaches are looking for the best athletes for scholarships – top athleticism permits players to be versatile and play more than one position, and players who display top athleticism are destined to continue dramatic improvement year by year. Young players are highly motivated to fast-track their development and veteran players well versed on softball tactics train to maintain the physical tools that draw out their best. In coach-speak, the secondary fitness characteristics describe the ingredients top level players possess – speed, quickness, agility, movement skills, reaction skills, balance, coordination, deceleration and whole body power. Along with basic fitness and strength, these together make up the softball training recipe. A focus on the secondary fitness characteristics is called Smart Muscle™ training, a player development philosophy and exercise style geared towards developing bigger, faster, stronger smarter muscles that perform best on the field.

SMART Muscle™ Training creates a precise mind to muscle connection whereby the mind reads the demands of the environment, commands the muscles to move and the body responds quickly and accurately. The training stimulus focuses on the development of dynamic balance, multidirectional movement and whole body strength to overload the body physiologically and neurologically. The goal is to make the muscles more compliant to the brains commands.

Running down a ball is precipitated by fielding reaction time plus the movement skill for first step quickness to accelerate the body into action. The resulting ball pick up off a high speed grounder or fielding a fly ball involves

footwork and eye hand and eye body coordination, then a rapid transition to throw mechanics. Softball is a very skillful sport and likewise training must not only build the body's hard drive (muscles, heart, lungs) but also the software that controls the body (brain and nervous system feeding the muscles).

An athletic machine

There is only one machine I work with – the human machine. Smart Muscle™ training that exercises the secondary fitness characteristics, places priority on developing well rounded athleticism. I do not recommend isolating certain muscles like a

body builder which builds muscles size without integration to the entire human machine; nor do I recommend relying on loading precise sport actions like throwing or swinging a bat, as I observe some do by attaching tubing to a bat or ball. Fitness made a mistake going too "sport-specific," the end result was designing exercises that simply mimicked sport movement patterns such as throwing. This can potentially throw off motor programs for softball skills.

The goal in training is to develop a strong, functional body from toe to fingertip so the entire human chain of muscles crossing joints works best together. The purpose of training is to build a better human machine that is stronger during movement, that possesses improved athleticism, and hand the sport coaches this improved player. The player would have a new level of physical tools to permit the sport coach to take their skills to a higher level.

At the Plate

Hitting power is a highly technical skill. For the athlete in training and the fitness professional delivering the coaching, we focus on rotary core power that links hips and shoulders. The formula begins with a base of core strength through supine and prone positions before applying isometric and slow rep standing strength exercises. Next, rotation through the transverse plane picks up in tempo until players are ready for explosive standing core rotation actions similar to plyometrics for the legs.

Catch-Throw Footwork

After fielding balls, players need to be able to make strong and accurate throws to various positions on the diamond. Dependent on whether they need to make a throw towards their glove side or back towards their throwing side, players will incorporate open steps, drop steps, and 180 degree outside turns to get in position to catch the ball and reset for the throw. Varied quickness footwork drills and effective movement skills are rehearsed to net the balance and body control required to be in position to field the ball and transition

to efficient power production on the throw response.



Partner Open Step Drill using a Lateral Stepper

Whole Body Throwing

I recommend a large variety of upper body multi joint lifts. A muscle group – such as the shoulders – is defined as the prime mover, yet the exercise is designed so the legs initiate the action, transfer power through the torso and onwards to the upper body. Teaching lift mechanics from ground contact through to upper body finish enhances muscle sequencing to extract the most power out of the body.

Balanced Strength

Many softball skills require the shifting of body weight through the human chain. Whole body power production with skillful mechanics needs balanced strength throughout the body. Similarly, to assume an optimal athletic ready stance – with potential to steal bases or run down ground balls – the player requires equal strength and weight loading on both sides of the body. As such, part of our strength formula includes balance push-ups, balance squats, and upper body lifts atop the Smart Balance Board – designed to expose weak links in the human chain. Ultimately, all muscles are activated and must contribute for the exercise to be successful. This achieves balanced strength and both physical and neural overload to develop a strong and smart softball athlete.



Smart Board Balance Push Ups

Peter Twist, MSc BPE CSCS TSCC-L3 is President of Twist Conditioning's 3 divisions: franchised Sport Conditioning Centers, Smart Muscle™ product wholesale and home study coach education. To learn more about the Twist Smart Muscle™ training methodologies, education and equipment available in USA go to www.twistconditioning.com. This will be the first article in a series on training methodologies.