



PERFORMANCE BASEBALL/SOFTBALL CONDITIONING

A NEWSLETTER DEDICATED TO IMPROVING BASEBALL AND SOFTBALL PLAYERS

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Coming to Grips-

Pre-habilitation Techniques to Avoid Hand, Wrist and Forearm Injury in Baseball/Softball

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My role as an athletic trainer is to prevent and rehabilitate injuries and to keep athletes on the field. The prevention process can be called pre-habilitation—preventing the rehabilitation process from ever happening.

Loading Considerations in Pre-habilitation of the Forearm, Wrist and Hand

Loading the hand to perform simple exercises can best be accomplished by using weighted gloves. Before their advent, we used rubber bands as overload which is effective. However, using gloves has simplified the training process and offers a great deal of flexibility in what we can do. As with any type of program, the individual needs of the athlete dictate the exercises used, loading considerations, etc. There are some basic things any baseball/softball athlete can do to strengthen and prevent injury in this area.

Basic Exercises

The following exercises can be done in the weight room, training room or at home:

- Squeeze each digit with the thumb. This allows for work on all fingers and/or to focus on one that might need a little more attention, such as the middle finger. With weight gloves, the player can isolate without moving the other fingers. This provides simple flexor strength.
- Another simple exercise that can be done is ball squeezes or hand squeezes (Figure 1). This progresses into squeezing individual fingers against the thumb.
- Supination and Pronation—The athlete starts with the palms up at shoulder height. Roll the thumb straight to the ground, back up and then roll the little finger to the ground, back and forth. From there, the athlete makes a fist with elbows bent at 90 degrees (as in a double biceps pose that a bodybuilder might do), does wrist rolls in one direction, reverses and then rolls in the other direction. All movement is done at the wrist.
- From a standing athletic position and with weighted gloves, the athlete brings their



Figure 1

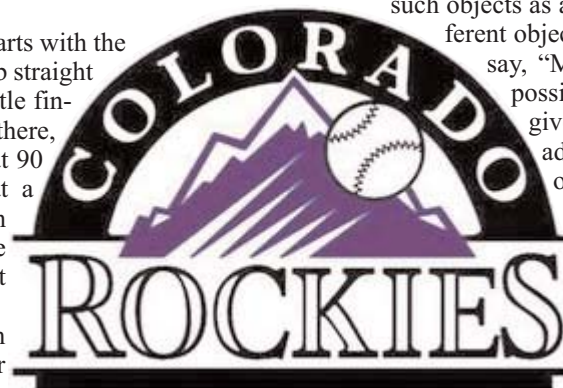
hands up (as in doing a biceps curl) to make a fist, then turns the hands in to face each other and extends their fingers and palms toward the ground coming down. The athlete can do this with elbows on a table if there are shoulder issues, but the standing position is recommended.

- Wall Pumpers—Palms are placed on the wall and the athlete lifts each digit up individually followed by lifting all the fingers as a group. The players really like this exercise because it gives them a good quick pump.

These exercises can be done as part of the rehabilitation process as long as there's no pain involved.

Progression Exercise—Intrinsic Pickups

Once the athlete has mastered these movements and has gained strength, I introduce "intrinsic pickups." I might start with such objects as a marble or a piece of paper—a total of five different objects spread out on a table. On command, I might say, "Marble." The athlete picks it up as quickly as possible, controls and then releases it. I would then give another command for a different object. To add to the progression, I might tell them which object and which finger to use (the index finger, for example). Their task is to pick up the object with only the index finger and thumb and we always involve the thumb. The thumb is the critical factor in determining grip strength. In wrist wrestling, the person who gets control of the thumb is usually the winner.




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Many athletes coming out of high school do not have the grip strength to handle 300 swings that are required at this level. They are used to playing with aluminum bats, which are a little lighter and adds to the lack of strength.

Training Considerations

These exercise are best done at the end of the day and not before the player throws due to the fatigue created by doing them. We do these starting with 30-second intervals and work up to a minute. We also start with two sets and work up to three, resting one minute between sets. We do these two to three times a week. The whole program should take 15 minutes maximum.

We use these exercises with the weighted gloves two to three days a week for pitchers. The days that they throw (when they break down their muscles) are strengthening days. The day the player pitches, we do a flush out workout that night. Day two is a rest day. The bullpen day will be the strengthening day. The wrist-forearm-shoulder will be worked after s/he has thrown.

The use of weight gloves is an option, one that we have found to be effective for our day-to-day use. 

More Information Please! Contact Keith at duggerk@coloradorockies.com. For information on weighted gloves go to www.drazathletics.com.