

Shouldering The Load

Has it ever been said that bowlers should exercise as seriously as runners, swimmers, or even tennis players? I doubt it. In fact, most athletic trainers scoff at the notion of bowlers exercising, period. Our societies' interpretation of bowling is a low-level activity and non-contact in nature. This may be true, but why are we any different from the rest of the sporting community? I generally find most amateur athletes competing in non-contact sports still either do not truly understand the value of physical training or are reluctant to begin. I do have compassion for those who fear physical activity. Many individuals are apprehensive to try something new or outside one's comfort zone. This fear is again understandable, but at the same time I do not want to hear anyone crying about our sport's perception if we, the athletes, don't even act in the athletic manner. What's the athletic manner you ask? Accepting ourselves as bowler-athletes only signifies that we must eat, think, sleep, exercise, train, mentally prepare, and rehabilitate as athletes, not recreationists.

Great Scott, what have we here! The Surgeon General most recently released a report, mid-July, on physical activity and health. I just received my copy. Leaders in the sectors of the medical, health & fitness, and wellness fields concur that this very report is a historical advance to our cause. Well let's have it. OK, but its 300 page contents may cause reader disengagement. So, in a nutshell, according to the Surgeon General's report and my interpretation:

1. Bowlers who are usually inactive can improve their health and well being by becoming even moderately active annually.
2. Physical activity need not be strenuous to achieve health benefits.
3. Bowlers can achieve greater health benefits by increasing the amount (duration, frequency, or intensity) of physical activity.

What else did they report you ask? They found the very things we promote in BTM every month. They determined that bowlers who regularly exercise reduce their risk of:

premature death heart disease diabetes hypertension

colon cancer depression anxiety obesity

and especially developing bowler injuries such as tendonitis and arthritis. This very report has the potential to catalyze a new physical activity and fitness movement throughout the United States and the global bowling community. Today we have some clear-cut evidence indicating that regular physical activity will provide substantial health gains to bowlers. The importance of exercise is increasingly being acknowledged as a means to preserve and enhance strength and endurance. So why are we waiting? Let's get active.

This month I have provided three simple and easy shoulder exercises to get you started on an activity program. They are all beginner/intermediate movements that will produce practical results if done properly. For those who have never physically trained for sport or wellness, these three movements will be an excellent challenge for your new activity routine. Follow along and learn about the shoulder joint as we begin to strengthen the muscles while enhance our bowling performance.

The Shoulder Region

The shoulder is a ball-n-socket joint maneuvering in all movement planes. The deltoid and rotator cuff are the two primary muscles that comprise the shoulder region. The deltoid and rotator cuff work together to move the shoulder through four specific motions: abduction & adduction, flexion & extension, medial & lateral rotation, and horizontal flexion and extension. The deltoid is the larger of the two covering the shoulder joint while the rotator cuff is a group of four small muscles that serve to hold the humerus bone securely in place. Ultimately, both are used extensively in all throwing sports, especially bowling. Therefore, each of us must exercise and strengthen this area of the body in order to maximize our potential and minimize the risk of the Rick Steelesmith injury.

Shoulder Stretching

Stretching can be done in the confines of the home, while traveling on tour, or even on a work break. Stretching a muscle increases muscular and joint specific flexibility reducing the risk of sprains and strains, soreness and tensions, and improves overall joint integrity. Flexibility training enhances physical fitness by optimizing learning, practice, and performance of skilled movements. So, what better reason to stretch the shoulder than enhancing our bowling.

Static Stretching is probably my favorite stretching technique. Though other types of stretching exist, they are not tops on my bowling specific list. Research on flexibility improvement has shown that static stretching is safe resulting in minimal muscle soreness. Static stretching allows us to hold a muscle in a stretched position for a set time creating semi-permanent changes in muscular length inducing muscular relaxation. Static stretching, which can be done either alone or partner assisted, is properly executed in the following manner:

1. Position the body on a flat surface such as a cushioned table, bed, or floor.
2. Calm yourself closing the eyes inducing some relaxation breathing.
3. Using self-assistance, stretch the specific muscle to the furthest pain free point.
4. Hold the stretch for 15 seconds, then slowly return to the starting position.
5. Repeat steps one through four two additional times.

The Deltoid Stretch

The first of three shoulder exercises is a simple static stretch. Once completed, progress to the resistance exercise. Begin by lying supine (on back), arms and legs fully relaxed. Raise one arm in front of the body to shoulder height. Cross the arm in front of the body just under the chin. Place the opposite arm over the first arm and grasp behind the elbow joint. Slowly pull the arm across the body stretching the rear deltoid (*figure 1*). Hold the stretched position for 15 seconds before relaxing the arm. Repeat the stretch two additional times, then switch arms.

Rotator Cuff Exercise

To my knowledge there is only one true exercise machine designed specifically for the rotator cuff. It is the seated upright internal and external rotator. If you have it in your gym or exercise facility, I encourage you to have an employee demonstrate it. Since most of us do not have its availability, using another means of resistance is required. Let's do it manually. I suggest obtaining some surgical tubing or elastic banding such as a dynaband or theraband. The theraband that is often used in therapeutic settings such as a physical therapy clinic comes in different colors depicting variances in tension. We only need about one or two feet of resistance band for this movement. Once you have acquired the elastic stretch band, tie both ends together forming a complete circle if not already.

The first exercise is medial rotation and the second is lateral rotation. Medial rotation (*figure 2*) trains the rotator cuff muscles (subscapularis & teres minor), along with the anterior deltoid, latissimus dorsi, and pectoralis major. Lateral rotation (*figure 3*) trains the rotator cuff muscles (infraspinatus & teres minor) and the posterior deltoid. Perform each rotation movement 10 repetitions in a slow and deliberate manner. Once or twice a week will be sufficient allowing a day or two of rest between each instance. As the exercise begins to become easier, add one or two more repetitions or an additional set. Do not go beyond two sets of 15 repetitions at any one time.

Medial Rotation - tie or wrap the stretch band to a doorknob. Stand at arms length away from the knob so the band is stretched loosely to the outside of the body. Using the right hand, tuck the elbow at the side of the body maintaining a 90-degree joint angle. Begin by slowly rotating the shoulder medially or toward the naval and stomach region. Move the arm very slowly pulling on the stretch band creating resistance. Hold at the furthest position, then slowly relax back. Use figure 2 as a guide.

Lateral Rotation - tie or wrap the stretch band to a doorknob. Stand at arms length away from the knob so the band is stretched loosely across the front of the body. Using the right hand, tuck the elbow at the side of the body maintaining a 90-degree joint angle. Begin by slowly rotating the shoulder laterally away from the center of the body. Move the arm very slowly pulling on the stretch band creating resistance. Hold at the furthest position, then slowly relax back. Use figure 2 as a guide.

Getting started on an activity program is a simple and noteworthy endeavor. I encourage everyone to take a step toward improving your health and bowling by adopting these shoulder exercises into your weekly routine. Begin practicing the static stretching with one of your bowling teammates, then progress to the shoulder strengthening exercises using elastic stretch band. Let us begin to change societies' perception and embrace a bowler-athlete lifestyle through exercise and diet.

Always consult your doctor or physician before beginning this or any other exercise program.