

A Low Back Approach and Mental Madness

Bowling's Low Back Scare

I've seen lots of back injuries in bowling. I've worked with many of you who've experienced some form of lumbar disorder. I need to work with the rest of you who have lumbar issues and are doing nothing about it. Don't wait before it's too late; let's do something about it!!!!!!!

Your low back, also referred to as the lumbar spine, is one of the most often-injured body parts (DIAGRAM 1). No kidding, it seems like everyday now I meet someone with low back pain. I'll bet you know someone with these same symptoms. In fact, low back injuries occur more often in the workforce than any other injury. Why is that you ask? Well... it (low back) is difficult to condition, considered delicate my many, doesn't have the sex appeal as arms or abs resulting in neglect by the owner, and due to its awkward position on the body...you simply can't see it. No visual acuity there. Because of where it is located, it is often overlooked by even the most dedicated of exercisers.

Open An Account – Lumbar Wellness

Start making consistent deposits, and build your account. Want to avoid a lumbar issue, start conditioning your low back now, to save yourself the hassle of dealing with it later. Trust me, having worked with enough bowlers and even athletes with low back pain, you'll want to avoid it. Start investing your time in a little low back conditioning, and you'll reap a return on your investment far greater than you could imagine.

The low back can only be conditioned through proper exercise, which stabilizes the hips, legs, and spinal column. In sport science, we teach the low back extension to all beginner and intermediate exercisers who want to train their lumbar spine. Although hyperextensions, twists, therapy ball training, yoga, pilates, aquaerobics, and a few low back exercise machines all do the trick, nothing is more convenient for you, the armchair bowler-athlete, than doing stuff at home. If you happen to be motivated enough to look for a specific program as mentioned in the previous sentence, start with your local wellness centers, medical fitness center, or YMCA.

Doing It

I suggest performing 1-2 sets (8-12 reps each) of lumbar extensions 2-3 times a week. Anything more than that, and you're most likely over-training. Anything less than that, and you simply won't see the benefit. So let's get started.

Lie prone on the floor (face down) and place your chin in your hands (DIAGRAM 2). Clasp the hands under the chin as a base of support; however, avoid pulling with the hands on the chin.

To begin this exercise, contract the low back and slowly raise the upper torso upward to your peak or highest point while keeping the lower abdominals and your legs in contact with the floor (DIAGRAM 3). Relax the legs and concentrate on the low back doing all the work. This isn't a big or large movement, so don't expect but to raise up a few inches off the floor. Hold the peak range of your motion, or your highest point possible, for 1-2 seconds, and then return to the starting position.

This exercise requires direct contraction of the quadratus lumborum (low back muscle), hip extensors, glutes, and the hamstrings, all of which support and assist the low back.

I Want More - Add Reps or Weight?

There are several training philosophies and training principles that abound in sport science. A training philosophy, differing from a training principle, is the driving force behind your actions. Training principles are the specifics of training, such as sets, repetitions, target training range, time on task, rest between sets, speed of repetitions, and a host of other items.

If you are a beginner or even a slightly intermediate exerciser attempting to condition your low back using the lumbar extension as a starting point, stick to performing the sets and repetitions with slow and methodical precision, while increasing the number of repetitions and sets up to about 15 reps per set and 3 sets. Anything beyond these will most likely encourage over-training.

As a beginner or intermediate exerciser, I suggest you start rather subtly with this exercise, before you really dive into it with intensity and motivation. Start slowly, cautiously, and methodically to avoid the risk of injury and more importantly to learn the biomechanics of the movement and even the feeling of the lumbar spine working. Furthermore, to avoid Delayed Onset Muscle Soreness (DOMS) as much as possible, which is one of the leading causes of disengagement during the first six months of a training program. So, I would suggest NOT pushing yourself no matter what you do for the first 6-8 weeks.

You need to allow your body to acclimate to the training, to the new movement. That acclimation period and process will reduce your risk of injury, properly prepare your body and mind for more serious training, greatly reduce any DOMS you may experience, and provide subtle increases in your physical and functional fitness. Jumping into a program or even one specific movement like this, will only fatigue you and greatly reduce your chances of maintaining your frequency of engagement over the long haul.

Sport Psychology and Sport Science???????

Exercise and an athlete's physiological development are highly regarded in sport science, which includes several areas of sport psychology. Psychologists claim that sport psychology is a subdiscipline of psychology, while physical educators claim it as a part of sport science. We practitioners think that its principles, which describe the links between athletic performance and psychology, can be applied to help athletes improve their performance, whether it is in the gym or on the playing field. We researchers argue that those principles must be more thoroughly studied before they can be widely used and so freely manipulated. If psychology is a science dealing with the mind and its connections to the body, and those accompanying mental and emotional processes; and sport is a competitive or leisure activity requiring human bodily exertion, then sport psychology may be roughly described as a part of sport science that deals with the mental and emotional aspects of physical performance.

Research began to gather momentum in the 1970's as the sports and fitness boom emerged, but not until the mid-1980's did the country's major organization of psychologists, the American Psychological Association (APA), formally recognize sport psychology with its own division (Exercise and Sport Psychology). So, we could say that it is a fairly new and exciting field of study. For the most part though, sport psychology is a trend of the current decade.

Bowler BeWARE

But not all practitioners of sport psychology are psychologists. Just because some bowler or coach reads about breathing exercise or mental imagery, do they by any stretch of the means know anything about sport, psychology, or the application of sport psychology. Bowlers beware, and coaches be careful.

In Sport Science, some self-proclaimed sport psychologists are physical educators; others are coaches, instructors, or athletic trainers, and yet a few may merely be just writers. It's a common fear of those of us who work in sport science (sport instructors claiming to be sport psychologists or to understand sport psychology). Many psychologists fear that these self-appointed sport professionals may be tempted to move beyond the boundaries of their knowledge and skill in applying psychological principles. That's a NO-NO.

The Self-Aware Bowler

Every beginning bowler has felt the sting of self-consciousness after tossing a gutter ball, or tossing a 3 count on the first ball in front of teammates and opponents. All people hold certain cognitions or beliefs about themselves; these beliefs are not simply self-view (self-image), or how we look, but are rather intricate sets of interactive perceptions. The most complete theory describing the self-concept suggests that people have more than just self-images of themselves (ways in which we view ourselves), more than just images of how we would like to be viewed (desired or ideal self), and more than just images of how we interact with important reference groups (reference-group selves). All of these selves comprise the self-concept, a fundamental part of motivation to bowl or not bowl.

For some time, psychologists have known that a positive self-concept spurs greater involvement and commitment. A hint for center managers, proprietors, pro shop operators, and bowling instructors; if you want to increase your customer commitment, then work on creating a positive self-concept in relation to your center, pro shop, or instruction. Back to you the bowler. This is why the best coaching manuals of other sports stress positive and constructive reinforcement, especially for children and teens. Positive self-concepts of your bowling and bowling ability will enhance your involvement and commitment.

For example, children and teens build and protect their self-image as they make decisions about their sport involvement, or any involvement for that matter. Research suggests that those who are "inner-directed", those who seek to fulfill personal needs and self-image – are nearly twice as likely to exercise as "outer-directed" people, who are more concerned with what others think. Whether you are concerned with conditioning your lumbar spine or concerned about what others think of you, training your body and mind to become a highly prepared bowler-athlete will propel you toward the level of competitiveness you seek. Check back with me next month and learn more about sport science to improve your bowling success.