I have been taking care of 150 of the world's top women golf professionals at Hunters Ridge Golf Course in Marion at the Ladies Titan Tire Challenge the past week. I was the Sports Medicine Chair for this event, and this allowed me to assemble a stout group of area sports medicine specialists (including Zach Johnson's dad, local chiropractor Dave Johnson) that took care of the golfers all week.

Let's take a closer look at common golf injuries to high school golfers and discuss some pearls of wisdom from the pros.

Golf injuries occur in 20 to 40 percent of high school golfers. Low back pain is the most common area of concern, followed by injuries to the hip, shoulder and wrist. There are many reasons that these injuries occur, including poor posture at setup, poor swing mechanics, improper grip, improper club fit, poor flexibility and poor core stability.

Golf professionals and golf coaches are experts in the area of the key components of the golf swing (proper swing mechanics, proper club fit and proper grip) and to some degree the golf posture at setup.

Using their professional expertise, sports medicine professionals focus on posture at setup, mobility and core stability. These are the basic but key components of "golf fitness." It is in the best interest of the high school golfer to have their sports medicine professionals and golf pro/coach share their insights and communicate openly. This is particularly true for the high school golfer who becomes injured and misses practice and/or matches.

The balance of proper golf fitness with proper grip, club fit, and swing mechanics is the best medicine to prevent golf injuries at any age. Scientists agree that our anatomy and the golf swing are a mismatch, leading to overuse injuries. Yet many golfers play lifetime careers without significant injury.

What can high school golfers do to prevent injury? Here are a few tips gleaned from the LPGA Future's tour professionals and from my experience working with men's PGA Tour professionals:

1. Maintain Good Posture at Setup. It is paramount to develop proper golf habits, especially your posture at setup. This sets the tone for providing your body with optimal balance to produce a repeatable swing, and more importantly protects your back and hips from injury. Take cues from your golf pro and coach, but pay close attention to your sports medicine/golf fitness experts for mobility exercises to get into the correct position and the core stability exercises to keep you there and balanced throughout your swing.

2. Maintain your mobility. This is especially true for the soft-tissues that span the hip, pelvis and spine. Learn and practice a pre-golf (practice and play) routine that addresses your spinal and hip flexibility. Asymmetries in your flexibility set you up for imbalance in your swing, and may prevent you from proper setup posture. You don't have to have gymnast flexibility, but pay attention to your experts to learn your deficits and work on them diligently.

3. Get more out of your core! Your core muscles (trunk, hip and abdominals) are the key to stabilizing your hips and spine, providing a stable base to provide power to your golf swing and insurance against injury to your spine, pelvis, and hips. Interestingly enough, a weak core can also contribute to injury to your upper body by preventing a balanced swing and transferring abnormal mechanical forces to your shoulders, elbows, and wrists. Find a sports medicine or golf-fitness professional to learn and practice a functional strengthening program for your core musculature.

4. Stay in good athletic shape. There is a tendency for young golfers to shun regular exercise and working out in the weight room or health club. Just take one look at the fitness levels of the LPGA Future's Tour golfers who just completed the Ladies Titan Tire Challenge in Marion and you will see how important general fitness is to their golf game.

5. Practice Proper Golf Grip. Check regularly with your golf coach and golf professional on your grip. An improper grip will rob you of accuracy, distance, and put you at risk for injury.

6. Get your clubs fitted by a professional. This will not only ensure you are practicing and playing at your highest potential, but will decrease your chances of compensating due to faulty club fit. You may be pleasantly surprised on how this makes a difference in your game.

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7. Get your swing analyzed by a professional. An invaluable piece of learning the game, facilitate your golf pro to communicate with your golf coach. If your golf coach is a professional, even better. Proper swing mechanics ensure the accuracy and distance you want, and provide insurance against injury, especially your low back. Video analysis of your posture at setup and your swing are fantastic learning tools for you and your pro (and golf coach).

8. Pay attention to fatigue. When you are tired, your swing mechanics will suffer. Make sure your practice does not push you so far into fatigue that your swing mechanics suffer because of it.

9. Try not to overswing. Yes, long drives are nice, but the old adage "drive for show, putt for dough " is what separates the golfers who learn to score and those who just try to hit long shots. Overswing regularly and you can be sure injuries are right around the corner.

10. Seek out your sports medicine professional when injured. Golf is not only a competitive sport but a satisfying (albeit sometimes frustrating) game of skill. Minor injuries can build into a major problem or become chronic in nature. Get the help you need to stay on the practice range and playing regularly.

Here are a few web-links to not only connect with the fundamentals of the game, but to learn more about improving your golf fitness to lower your scores, hit the ball farther, and prevent injuries:

1. Titleist Performance Institute – The leader in golf fitness and advice from professionals on your game. Visit the fitness site and/or the golf fitness academy sometime soon. http://www.mytpi.com/mytpi05/fitness/ and http://www.mytpi.com/gfa/default.asp

2. The Golf Channel – This is a nice site to learn more about health fitness tips and also tap into learning from the golf pros. Tab "instruction" and "health fitness links." http://www.golfchannel.com/

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Metro area since 1995. He was a four-sport athlete in high school and a high school coach for two years in Illinois. John has more than 25 years of experience working with athletes as a physical therapist and a certified strength and conditioning specialist. He has worked with professional athletes in the NFL, MLB, and on the PGA and LPGA tours. John also has worked with elite amateur athletes in alpine skiing, figure skating, and track and field.)