

EDITED BY KATARZYNA WANDYCZ

Golfer, spare that back!

Golfers who confine their exercise to swinging a club are asking for back trouble.

By Christopher Palmeri

CHICAGO ACCOUNTANT James Breen was having so much fun over a long weekend of golf in Tucson's Ventana Canyon that he ignored the soreness and stiffness in his back. By the third day Breen was in agony. He had herniated a disc. Swinging a club became torture. "It was like someone was taking a razor right down my leg," Breen recalls. "I never had such pain."

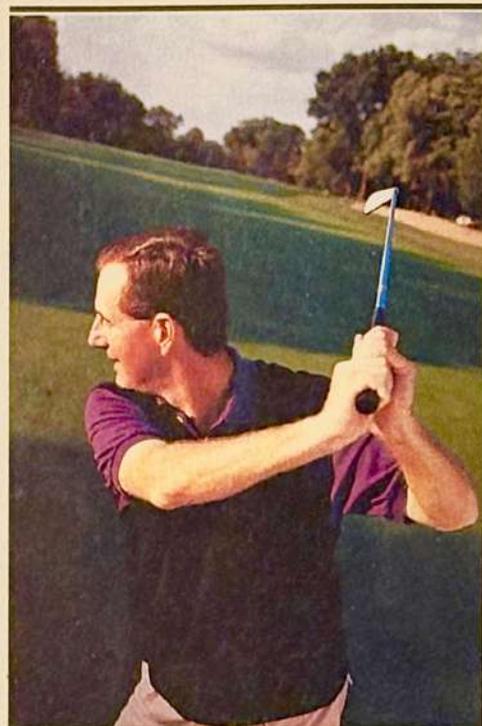
We hate to say this because we know you're tired of being told that things you like doing are bad for you, but facts are facts: Golf is tough on the back. The bending and twisting put a tremendous strain on your back muscles, ligaments and joints. As many as

one-third of all professional golfers experience serious back trouble.

It can happen anytime. When taking the clubs out of the trunk. Putting a tee in the ground. Retrieving a ball from the hole. Raking the sand trap: Golfers often forget how light a rake is and push on it too hard. All of these movements can damage a disc or strain a muscle.

Rule 1: Don't bend from the waist while making these routine movements. Use your legs. Squat. And get help pulling clubs out of the trunk.

The key to golf, of course, is the swing. People spend their lives trying to master this. Dr. Mark Doyne of the



Reformed golfer James Breen

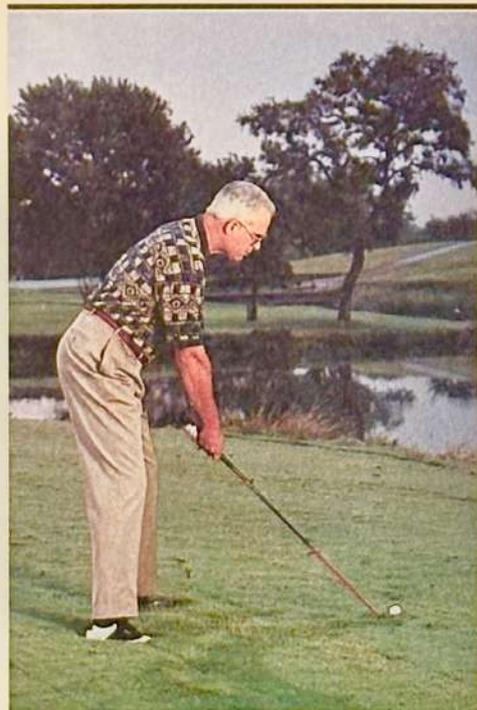
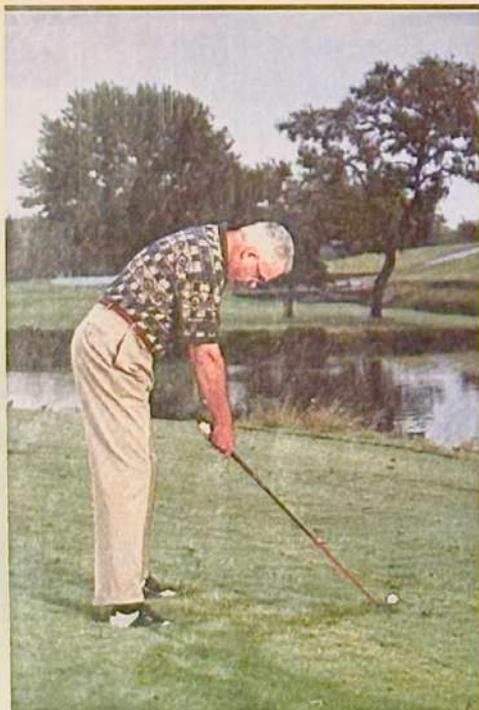
No more swinging without the proper pre-play stretching.

Plano-based Texas Back Institute, whose clients include Lee Trevino and Willie Nelson, says the key is to not slouch. Golfers should keep their backs straight and their rears stuck out (*see pictures, left*). If you are just learning the game, spend some time with a pro to get the basic posture correct.

Rule 2: Don't confine your exercise to swinging a club. Betsy Voyles, the physical therapist who coached Breen back to health, runs seminars for golfers with bad backs from her base at the Chicago Institute of Neurosurgery and Neuroresearch. She tells golfers to walk the course, using a caddy or pushing their clubs in front of them.

In short, swinging a club is an incomplete kind of exercise and won't keep you in shape. "Fitness separates the fumbler from the golfer," says golf great Gary Player. "Little Tarzan" they used to call Player because he would head to the gym after a game instead of to the 19th hole. Player says he even exercises in the middle of a game by tightening his back and pelvic muscles while waiting for his partners to shoot.

Golfer Lee Trevino makes stretching exercises and jogging a part of his daily routine. Trevino's back began hurting him after he got hit by lightning on the course. He's had two



The Texas Back Institute's Dr. Mark Doyne demonstrates the proper setup

in the left picture, Doyne bends at the waist, not the hips, thus curving the spine and putting stress on the back. On the right, bending correctly at the knees and hips. The spine remains straight.

Better Homes and Gardens®

<http://www.bhglive.com>
APRIL 1997

HIGH-RISE

Roses

How to coax climbing flowers
to dazzling heights p.125

**YOUR EVERYDAY
DECORATING
PROBLEMS SOLVED!** p.165

**A KITCHEN
WHERE
THE COOKING
IS EASY** p.100

Shade Gardens

**10 low-fuss plants that
love the shadows** p.157



Helping
families live
better lives for
75 years

\$2.49 U.S.

04>



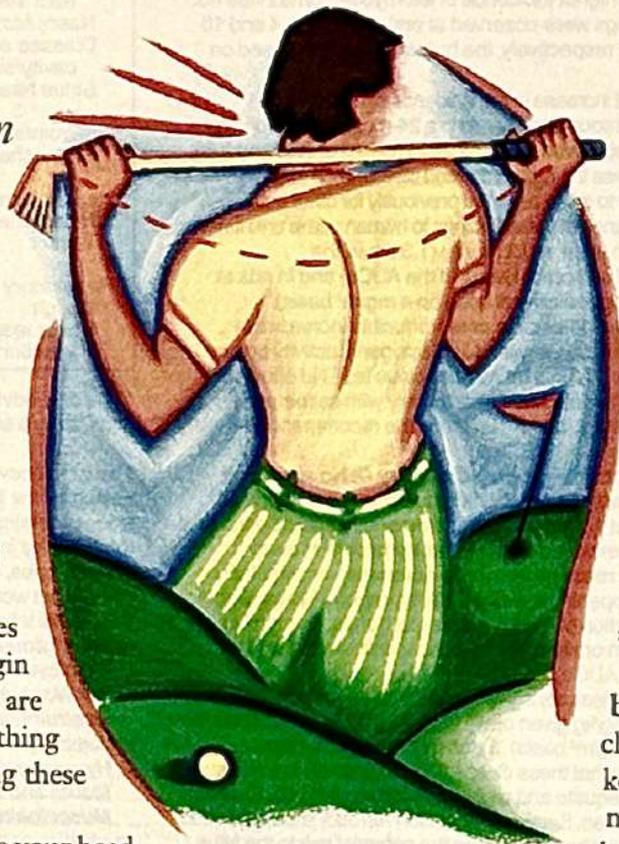
Break the Link Between Back Pain and Golf

This spring, give your golf game some respect, and your body may thank you.

"Recreational golfers usually don't consider golf a sport, and they don't condition and stretch for it," says Betsy Voyles, P.T., who teaches a golf wellness program in Chicago. Most injuries occur on holes 1 through 4 because golfers don't warm up properly, and on holes 15 through 18 because of fatigue.

Voyles advises arriving at least 20 minutes before tee time to stretch. "Most of us begin with a couple of bad rotations and then we are off. Full-body rotation should be the last thing we do." At the very least, she suggests doing these three stretches before the first tee.

Side stretch. Stand with your arms above your head, holding a golf club in your hands. Slowly bend to the right and take two deep breaths. Then bend to the left and hold for two deep breaths.



Calf stretch. Place both hands against a tree at chest level and stand arm's length away. Keeping your right foot on the ground and the leg slightly bent, move your left foot behind. Press the left heel to the ground until you feel a stretch in your left calf. Alternate legs and repeat.

Trunk and upper body stretch. Hold a club behind your neck, keeping your head and neck straight. Keep your knees slightly bent. Rotate

slowly to the right. Hold your position 10 to 20 seconds. Then rotate slowly to the left. Hold your position 10 to 20 seconds. Repeat two to three times.

A PITCH FOR FITNESS

It can't get much easier to start your fitness program this spring. Simply write for a free copy of the Nolan Ryan Fitness Guide.

This 28-page booklet does everything for you but lace up your sneakers. In short-but-thorough chapters, the baseball legend explains how to overcome barriers to regular exercise. The guide has practical solutions for people who don't know where to start or who are bored with their current workout.

An assessment chapter helps determine your fitness level and offers a checklist for exercising safely. There are sections on aerobics, weight training, stretching, and sports injuries. Write to: The Advil Forum on Health Education, Attn: Dept. SG, 1500 Broadway, 25th Floor, New York, NY 10036.

Do Wrist Guards Protect?

There's some troubling news for the in-line skater who has everything in protective gear. Those wrist guards you faithfully strap on may not prevent fractures after all.

Thomas Jefferson University researchers put wrist guards on one forearm of each of 20 cadavers; the other arm was guard-free. Then they applied bone-crushing force to all 40 arms to see if the wrist guards offered protection. The result: protection was minimal. The guarded forearms snapped under a force almost identical to the force needed to break the unguarded forearms. There also was no difference between the groups in fracture patterns.

"If you are wearing wrist guards to prevent scrapes and abrasions, fine, but the guards don't protect you from breaking your wrist," says Frank Giacobetti, M.D., who conducted the study.

Dr. Giacobetti is working with manufacturers to improve wrist-guard designs. He adds, however, that the best protection against injury is plenty of practice until you are agile and skilled on skates at all speeds. Learn the basics of the sport, especially how to stop properly. Avoid skating in crowded walkways. And if you feel you are going to fall, try falling on your side, not straight ahead on outstretched hands.

continued on page 86

Golf enthusiast

Jim Breen beats his
toughest opponent —
back pain

Par for the Course

Last spring, Jim Breen spent most of his long-awaited golf vacation in so much pain he could barely swing a club, let alone par a difficult hole. “My wife Nancy and I had planned a great four day trip to Arizona,” recalled Jim, a partner at KPMG Peat Marwick, a Chicago-based international accounting firm. “Unfortunately, I was miserable the whole time we were there. I had a terrible shooting pain in my lower back and down my leg.”

Although anxious to consult a physician about his back problem, Jim wasn't quite sure who to call. “I talked to innumerable people about my symptoms,” said Jim. “Some suggested I see

a chiropractor, others suggested an orthopedic surgeon and still others recommended a neurosurgeon. Frankly, I never would have considered going to a neurosurgeon. I thought it automatically meant signing up for surgery, but friends assured me I was wrong. So despite my misgivings, I made an appointment at CINN to see

Dr. Cerullo because he has a wonderful reputation.”

After conducting a comprehensive evaluation, Leonard Cerullo, M.D. determined that a herniated disc was causing Jim to suffer from a condition known as sciatica. “Discs are sponge-like pads located between the vertebrae of the spine,” explained Dr. Cerullo. “In Jim's case, one of these discs was bulging out from between the vertebrae and compressing the nearby sciatic nerve, which extends down the back of the thigh. The compressing or pinching of this nerve gave rise to his pain.”

When Dr. Cerullo proposed treating Jim's back with physical therapy rather than surgery, Jim was surprised and relieved. “I know people who have undergone back operations,” said Jim, “and I wanted to avoid that if at all possible. I really appreciated the fact that Dr. Cerullo was committed to taking a more conservative approach.”

“Many physicians use the symptoms Jim was experiencing to justify surgery,” Dr. Cerullo said. “We do not. Yes, sometimes surgery is necessary, but in most cases non-surgical treatments, such as an intensive physical therapy program, are preferable because the risks to the body are much lower, and the patient avoids a longer, and sometimes more painful recovery period.”

Jim's physical therapy regimen included traction, massage, exercise and reinjury prevention education. “We used traction to take pressure off the disc and relax the surrounding muscles; massage to relieve pain; and exercise to increase flexibility and build muscle strength, which is essential for back stability,” said CINN physical therapist Betsy Voyles, who worked with Jim three days a week for two months.

Betsy, along with CINN occupational therapist Monika Robinson, also taught Jim how to protect his back from reinjury by maintaining good posture and using proper body mechanics. The therapists evaluated all of Jim's activities, from how he sat in his office chair to how he bent over to tie his shoes. Step by step, they showed him how to perform these functions without putting undo pressure on his back.

When Jim was ready to play golf again, Betsy provided him with specific strategies that would safeguard his back, but not compromise his game.

“I really appreciated the fact that Dr. Cerullo was committed to taking a more conservative approach.”

Close, but no Cigar

By Betsy Voyles, MSPT

Most people do not smoke in public like they used to because it is no longer cool to smoke and there are more regulations. Many golfers report that they are nonsmokers but then say, "I only have a cigar or two when I play." The next question is, "So how many rounds of golf do you play?" In case you were wondering, if this is you; you are not a nonsmoker. A single full-sized cigar can contain nearly as much nicotine as a pack of cigarettes. If you inhale cigar smoke, you can get as much nicotine as if you smoked cigarettes. Even if you don't intentionally inhale, large amounts of nicotine can be absorbed through the lining of your mouth into the bloodstream.

Why don't more golfers look at themselves as athletes? What other sport would you see the athletes smoking? One of the main impacts of any smoking on athletic performance is a decrease in lung function. This means a decrease in stamina and performance, as muscles become fatigued more quickly due to the lack of oxygen. Smokers also tend to suffer from shortness of breath more often than nonsmokers which can negatively affect your ability to play your finesse shots with ease.

Another impact smoking has on athletes is its effect on heart health. Smoking causes the blood vessels to constrict and can increase blood pressure. Constricted blood vessels reduce blood flow to the muscles, further limiting the amount of oxygen the muscles receive. Loss of blood flow can significantly reduce muscular endurance, while the heart



itself may also tire more quickly, because it works harder than it should to pump blood through constricted vessels.

Another disadvantage of smoking for athletes is that it can lead to greater chance of injury. When the muscles, brain and heart do not receive enough oxygen, mental and physical acuity can drop. Smoking can also reduce the strength of bones and inhibit the body's ability to repair skin, ligaments, tendons and muscles. This means that any injuries a smoker does sustain may take longer to heal — which means less time on the course.

For golf health and fitness questions, or for more information about the FitGolf program, please contact us at 312-214-9079, bvoyles@fitgolf.com or visit fitgolfchicago.com.



lower-back operations, surgery for a torn ligament in his thumb and a titanium plate put in his neck. "Muscle is everything," he says. "I'm going to be 56 in December; I feel like I'm 30."

We can't guarantee that off-course exercises will take 26 years off your age, but they will improve your game and lessen your chances of back injury. Warm up before the game and include some stretching exercises in the warm-up routine to loosen the neck, shoulders and back. "So many golfers do nothing all week and then race to the course five minutes before tee time," says Dr. Lewis Yocum, whose Centinela Hospital Medical Center in Los Angeles is the official hospital of the PGA Tour.

Accountant James Breen got his herniated disc by doing what Dr. Yocum cautions against. Breen had to undergo extensive physical therapy, including time in a machine that stretched out his spine. Now Breen is back on the golf course, with new words of wisdom for fellow golfers: "If you're going to be a golfer, you have to do the proper stretching."

Dr. Yocum recommends a few preliminary minutes on the driving range, swinging everything from the shorter irons to the heavier woods. Hitting from natural grass is much better than from the rubber mats for shock absorption, he notes.

Golfers with a history of back trouble need a more serious set of exercises. Since his injury, Jim Breen has worked out four times a week for 20 minutes at a time. He lies on his back and performs stretches that include raising his legs, tilting his pelvis and bringing his knees to his chest. The focus with these exercises is on holding the positions for 10 or 20 seconds to strengthen muscles that don't often get a workout.

There are gadgets whose makers claim to protect golfers against injury, among them back braces, wrist braces and graphite clubs, which supposedly absorb some of the shock of hitting the ball. Try them if you like, but they are no substitute for exercise. A good source of stretching routines is Centinela Hospital's *Exercise Guide to Better Golf* (Human Kinetics, Champaign, Ill., available at book stores for \$9.95), or Gary Player's new book *Fit for Golf* (Simon & Schuster, \$15). ■

Cyrix takes on Intel

The happiness hucksters

Stocks pros neglect

Thermo Electron's magic spin-outs

In defense of technical analysis

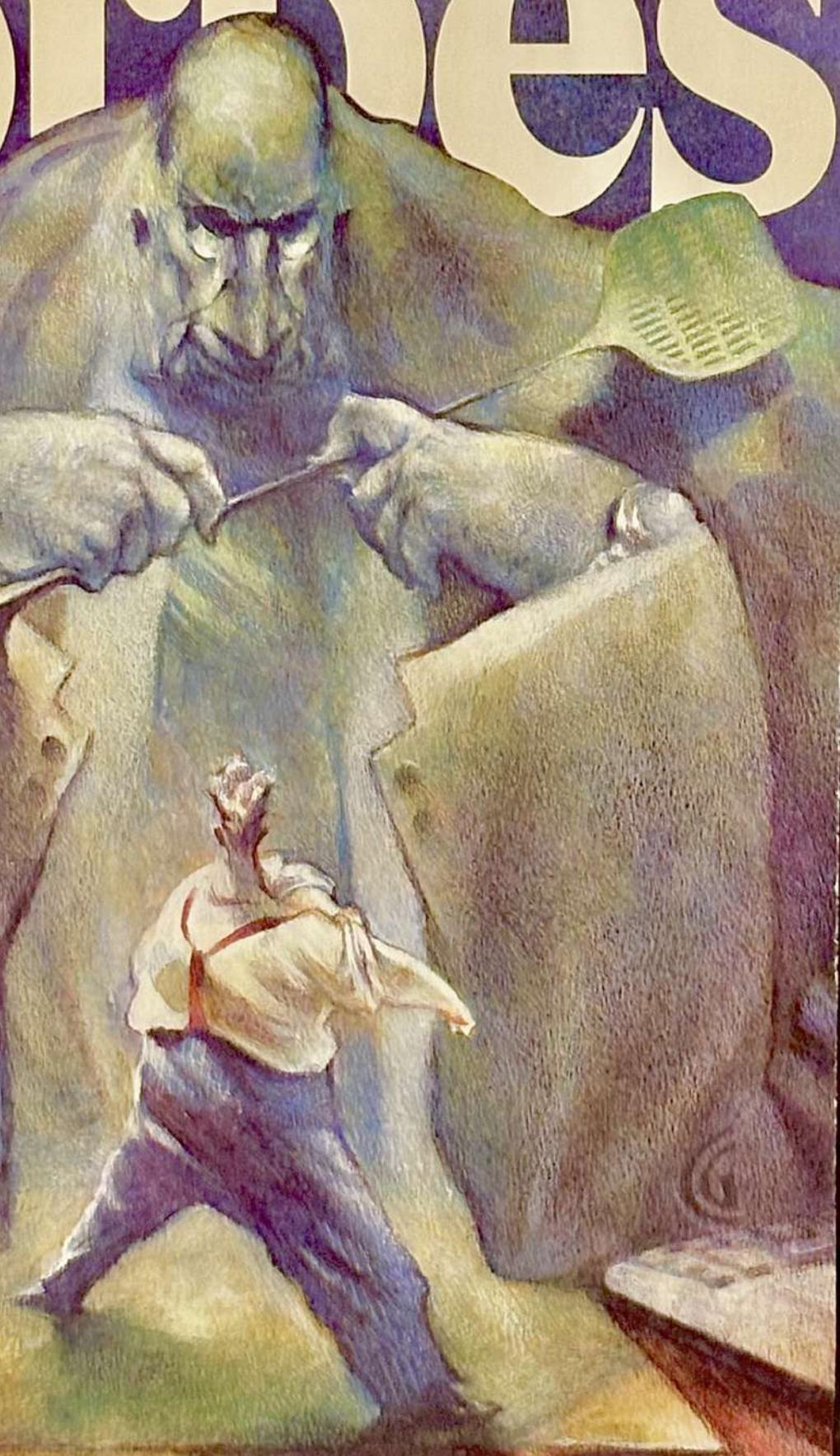
October 9, 1995

\$4.00 (Canada \$4.50)

Forbes

How to fight
back when

the
IRS
gets
nasty



0 439338 2

"There is a right way and a wrong way to perform all the routine actions involved in a golf game," said Betsy. "Most of us never think about our backs when we're carrying our bags, swinging our clubs or even picking up a ball, but all these movements done improperly put our backs at risk."

"Betsy let me know right from the start that I had an important part to play in my recovery," said Jim. "So I kept all my appointments, and I was absolutely religious about doing my exercises. I also worked hard at creating good habits, like stretching out before I exercise. It took about a month, but gradually my back pain began to ease as I became stronger and more flexible. A few months after I started therapy, I was playing golf without any discomfort at all."

With his patient firmly on the road to a sustained recovery, Dr. Cerullo requested an ergonomic evaluation of Jim's office. "Ergonomics is the study of an individual's relationship to his work environment," explained Monika who administered the evaluation. "We thought a work site analysis was important because we wanted to ensure that the arrangement of Jim's office did not jeopardize his back health. I surveyed the work space, identified problem areas that cause back strain and recommended solutions. For example, Jim's executive high back chair was great for kicking up your heels and reading the

paper, but it offered about as much support as a piano bench for his day to day job tasks. We helped him find an adjustable chair that fits his needs and supports his back."

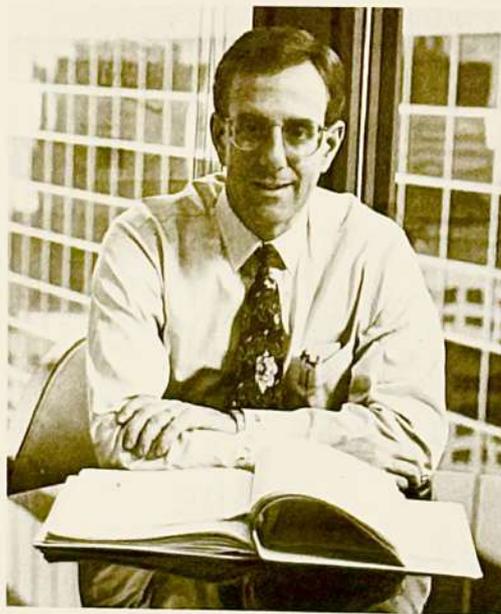
"Betsy helped relieve my pain and for that I am very grateful," said Jim. "I'm also thankful for the educational and ergonomic components of my care. Betsy and Monika gave me the knowledge and the tools I need to stay healthy and prevent another injury. To this day, I follow their guidelines for exercise, posture, body mechanics — everything, and I feel great."

"The success of a physical therapy treatment plan depends on a patient's determination to regain his health," said Betsy. "Jim was truly a model patient in this regard. His motivation and willingness to change his behavior contributed immensely to his recovery and continued health."

"Looking back, I realize that going to see Dr. Cerullo was one of the best decisions I ever made," said Jim. "Now when friends mention back trouble to

me, I tell them to go to CINN. They tend to think, like I did at first, that a neurosurgeon will be eager to solve their problem with surgery, but I tell them my story and assure them that nothing is farther from the truth."

This summer, Jim plans to hit the links whenever he has a moment to spare. "I can honestly say that the back problem I had no longer affects my game at all," said Jim. "I do wish my scores were a little better, but the way I see it, being able to play without pain is a victory." We couldn't agree more.



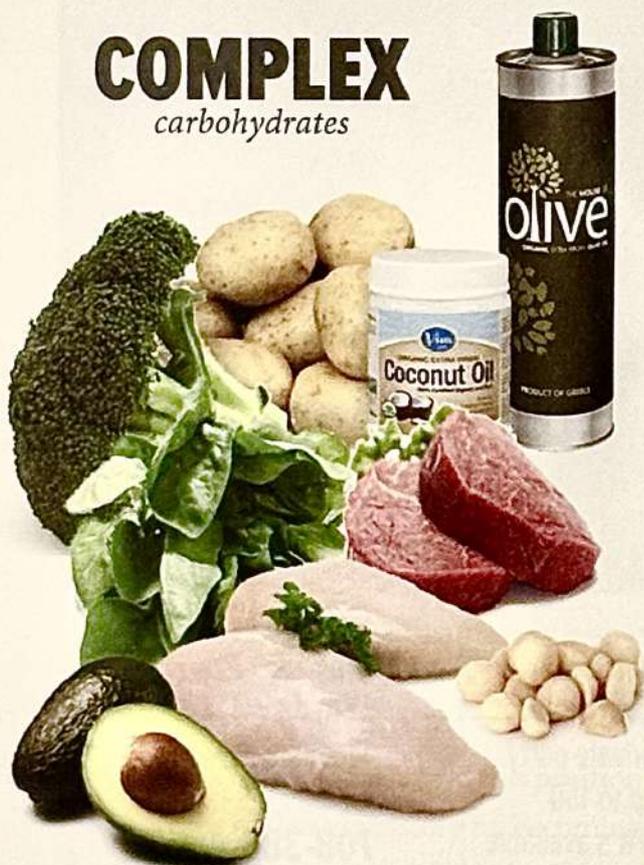
The therapists evaluated all of Jim's activities, from how he sat in his chair to how he bent over to tie his shoes.

- ◆
- ◆
- ◆
- ◆
- ◆

"A few months after I started therapy, I was playing golf without any discomfort at all."



COMPLEX carbohydrates



SIMPLE carbohydrates



Empty Calories, Empty Game?

By Betsy Voyles, MSPT

You've probably heard that eating simple carbohydrates—like those found in refined-flour processed foods and high sugar sports drinks—aren't that great for you. It goes beyond just being empty calories when your golf game is involved. In the simplest terms, eating these types of foods increases the neurotransmitter serotonin in the body. Serotonin reduces muscle function and alertness while increasing the feelings of lethargy and relaxation. It produces that sugar crash we all want to avoid, especially while we're playing.

On the other hand, the neurotransmitter dopamine improves cognition, memory, mood, and attention. After eating a meal of higher quality protein and fat and

lower carbs, the dopamine level increases in the body.

Eat quality protein (like nuts, eggs, or chicken), heart-healthy fats (like walnuts and avocados), and complex carbs (like fruit, veggies, or beans) before you play, so your body and your head can stay in the game. The message here is to keep your snacking complex, not simple. Improving your diet can improve your game.

For golf health and fitness questions, or for more information about the FitGolf program, please contact us at 312-214-9079, bvoyles@fitgolf.com or visit fitgolfchicago.com.



Is Golf Really a Sport?

By Betsy Voyles, Physical Therapist and Golf Performance Specialist

Is golf a sport? That has become a more compelling question since the decision to include golf in the 2016 Olympics. I have asked this question at every seminar and lecture I have given since 1993. It has been interesting to hear the answers over the years. I used to get one or two that said yes, now I get just one or two that say no. In my opinion, those out there who don't believe golf is a sport have either not played it, or haven't played it successfully.

"To fully benefit from the new technology players have to be in better shape"

When I embarked on this area of physical therapy, there was no golf performance and fitness industry. Luckily, for the few of us interested in this area, along came Tiger Woods in the 1990s. Whatever your opinion about him, it's hard to deny what he has done for the enthusiasm for the game and how he has elevated the level of play.

All you have to do is compare the Tour players of the 1970s and 80s to the players of today. The majority of today's players look like elite athletes. The overall fitness level today is remarkable, and many courses have had to increase their length to account for the increased distance the players are averaging. Equipment has also improved dramatically during this period,

but to fully benefit from the new technology players have to be in better shape.

This takes me back to the golf fitness industry. There was virtually no such industry 20 years ago; now hundreds of people attend World Golf Fitness Summits through the Titleist Performance Institute (TPI). The Golf Channel also allots several hours a week for golf health and fitness programming. Certified golf fitness and performance specialists are popping up all over the world.

For those of us passionate about this field it can be very rewarding. It is a very motivated clientele to work with. Most of us don't work with Tour players as our main focus, but we tend to focus on all levels of amateur players. I see our job as making the teaching professional's job much easier. When we can send their student back to them with the ability to maintain their posture, stay balanced, increase the flexibility of their turn, maximize their coil, and/or have any injuries handled; teaching becomes much easier.

For golf health and fitness questions, or for more information about the FitGolf program, please call 312-214-9079 or visit fitgolfchicago.com.



Champions are Made in the Off-Season

By Betsy Voyles, MSPT

**Body
Balance
for Performance**



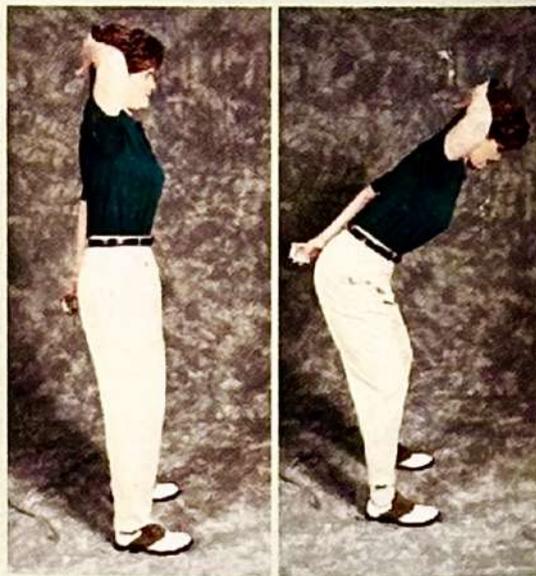
If you are a golfer who is serious about improving your game for the long-term, then it is time to dedicate yourself to a golf-specific fitness program... this winter. Athletes in every other sport train sport-specifically and golf should be viewed the same. Even if you don't consider yourself an athlete, golf requires very athletic moves.

Golf requires good posture, balance, flexibility, strength, and control. If you are lacking in any of these areas, your body's structure will force you to make a variety of compensations in your swing to strive for consistency. This is one reason why so many golfers become frustrated with the game. Addressing your own physical issues will help improve consistency, reduce your risk of injury, and decrease your frustration!

In terms of flexibility, for example, golfers must have adequate motion in the hamstrings and mid-spine to be able to assume and maintain the ideal address position.

Here is a quick test to check these two key areas:

Stand with your feet shoulder-width apart, holding a golf club behind your back. The club should be in contact with the back of your head, between your shoulder blades, and just below the belt-line. Keep all of these contact points and bend forward from your hip joints approximately 45 degrees keeping your knees straight. If you felt significant tightness in your hamstrings and/or difficulty maintaining the club in contact with your spine during the movement, there are flexibility deficits that can negatively impact your golf game.



Common areas of weakness in golfers are the muscles of the core; the lower shoulder blade and lower abdominal muscles. These are key areas to strengthen to add control and power to your swing. The posture you assume all day is also the same posture you will tend to assume during your golf swing. Strong lower abdominals not only add power to your swing, but also help to prevent low back problems.

Remember...champions are made in the off-season! For more information on customized golf-specific fitness training, please contact **Body Balance for Performance** at www.bodybalancegolf.com or 312-214-9079.

Pretzels, Anyone?

By Betsy Voyles, MSPT

– Physical Therapist
Body Balance for Performance

**Body
Balance
for Performance**



Three of the main backswing faults can stem from the same physical restriction: tight right hip internal rotation. This can lead to swaying, lifting, and/or a reverse weight shift.

Here's a test: Can you keep your right kneecap pointed straight ahead at the top of your backswing, with weight on your instep, and with the same amount of knee bend you had at address? If not, you may have a tight right hip issue.



Not being able to load into the right side with a proper coil is a significant power leak for any player. We build power by rotating onto and into the right leg. You should feel the coil from the outside of your right buttocks, across and down the front of the thigh, to the inside of the knee, down into the instep of the foot.

Gaining great hip rotation can lead to a much better and consistent game! Here is a simple stretch to help you on your journey: The Pretzel.

Cross your right ankle over your left knee, and slowly bring both knees toward your chest. You should feel a deep right buttocks stretch. Hold until you feel the intensity ease off a bit. (If the stretch is initially too intense, you can rest your left leg up on a chair or exercise ball. You can also use a towel wrapped around your left thigh to help you lift the legs.)

In an effort to keep your body balanced, stretch both hips. We didn't get into how a tight left hip limits your impact zone!

If you would like more information about a specific hip issue or any other aspect of golf health and fitness, please contact

Body Balance for Performance

at 312-214-9079 or visit
bodybalancegolf.com

Get In Step With Your Instep

By Betsy Voyles, MSPT

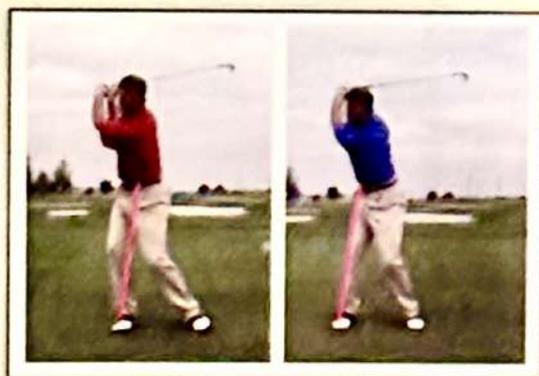


Power, power, power. There are a lot of power leaks in our golf swings. Finding and plugging those leaks is the subject of article after article out there. One of the quickest ways to plug a power leak is to **start** and **stay** on your instep throughout your backswing. Many players transfer their weight to the outside of their right foot (for right-handed players) and start on the outside as they transition into the downswing.

Try to move from your right foot to your left starting with your weight on the outside. It's a very weak move. Now try moving from your instep...instant power. Every athletic move begins with a transition from one instep to the other, and golf is no different.

There are several reasons why a player does not get to their instep:

- They don't know they're supposed to.
- Their right hip rotation is tight.
- Their iliotibial band, on the outside of the right thigh, is restricted.
- Their thoracic, or mid back, rotation is limited.
- They have foot pronation/supination problems.
- Combinations of the above.



The loading and coiling in the backswing should be felt through the right glute, around the outside of the hip, across and over the thigh to the inside of the knee, down to the instep of the foot. If you are unable to feel that coiling through the leg, see if you can find it. If not, in order to gain new or lost power, you'll need to find out why not.

Here are a couple of simple tests to check a couple of the above issues:



Seated Trunk Rotation Test Hip Internal Rotation Test

You do not necessarily need a professional to test these two restrictions on yourself. If you do feel tightness in your right trunk rotation or your right hip internal rotation yourself, then you might want to see a professional to help you improve your range of motion. There are a lot of power leaks to plug out there! Please feel free to contact **Body Balance for Performance** if you have any golf health or fitness questions at bodybalancegolf.com or 312-214-9079.

Seeing Isn't Always Believing

Perception isn't always reality, especially when it comes to putting problems

By Betsy Voyles, MSPT

Do you consistently leave your putts too short or too long? Do you ever feel certain that your targets are closer or farther than they actually are? This very issue is currently being studied on many of the top PGA Tour players. Identifying a “visual convergence insufficiency” (focusing problems), or a problem with depth perception, can be an important piece of the performance puzzle.



One simple depth perception test is called the Brock String Test. All you need is a 3-foot-long string and a bead. Attach one end of the string to something. Hold the other end of the string to your nose and focus on the bead. You should see two strings converging toward the bead. Do the two strings meet right on, before or after the bead? Right on the bead: depth perception is fine. Before the bead: things appear closer than they are to you. After the bead: things appear farther than they are to you.

It is difficult to actually change your depth perception, but it is easier to compensate for it. For example, if you have discovered that you see objects closer than they actually are, simply practice hitting your putts farther than you think you need to make them. Small changes in your putting can make big changes in your scoring.

For more information on visual testing, or have any other golf health and fitness question, please contact FitGolf Performance Center at 312.214.9079 or bvoyles@fitgolf.com.



A Hop, Skip and a Jump to the Next Level

By Betsy Voyles, MSPT

Skippping stones. Many of us have enjoyed an evening of skipping stones across a calm lake. Did you realize you were practicing your golf swing at the time? This is a great activity to perfect your swing; maintaining spine angle, transferring weight, loading, coiling and releasing.

Think of the position you naturally get into when you are getting ready to



really launch a stone. You load up on your back leg keeping your hip and

knee slightly bent, your spine is rotated away from the water and at a perfect side tilt, and your shoulder is loaded at a 90-degree angle ready to fire.

As you start to throw, you automatically transition and push off from your back instep, and rotate your pelvis toward the water keeping your torso and shoulder back. As you increase the external rotation of your shoulder for maximum acceleration, you then drop your elbow down to your side to keep the stone as low and parallel to the water as possible.

As you transfer your weight to your front leg, your pelvis is rotated toward the water, your spine is still at a great angle, and your lower abdominals engage

to really let that stone fly. In order to get a good, fast spin, your elbow, wrist and fingers fully release down and through toward the water.

We obviously don't think of any of these factors as we skip a stone; it's just what we do naturally. You cannot be a good stone skipper if you lift, slide, or don't load your shoulder on the backswing. You also won't get many skips if you come over the top, lose your spine angle, don't rotate your pelvis or release early.

Since calm lakes surrounded by perfect skipping stones are not that common, you can always practice this action with a small disc of some kind (hockey pucks work well) on a relatively smooth surface (parking lots work well) so you can see if your "stone" is actually spinning clockwise.

For golf health and fitness questions, or for more information about the FitGolf program, please call 312-214-9079 or visit fitgolfchicago.com.

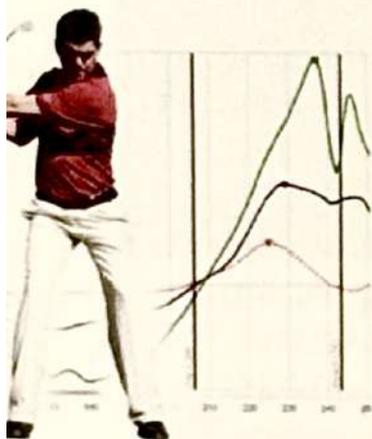


What is Your Most Important Piece of Equipment?

By Betsy Voyles, MSPT

Any guesses? Is it your putter, wedges, driver, your shoes ... ? Regardless of your equipment, if your body is not working properly, your equipment can't either. The offseason is the best time to get your body ready to get the most out of all of that equipment in your bag.

In the past few years there is a greater awareness of the relationship between your physical fitness and your performance. Continuing advancements in



research, technology, exercise and treatment techniques have been rapidly improving all aspects of golf health and fitness. There are more fitness and health professionals specializing

in golf as a result.

Getting a comprehensive golf fitness and performance evaluation is key to getting the best start to improving your game. The first component of any such evaluation should include a very thorough physical evaluation, preferably by a medical professional, who can also evaluate any injury issues.

Other components of the evaluation should ideally include a video swing analysis to fully evaluate how your body directly affects your golf swing. Other technologies that are very helpful are a computerized balance platform to assess

"The offseason is the best time to get your body ready to get the most out of all of that equipment in your bag. In the past few years there is a greater awareness of the relationship between your physical fitness and your performance."

your weight transfer during the swing. A 3D swing analysis system is also a valuable tool to fully evaluate the true efficiency of your swing.

Getting your most important piece of equipment working better is the best way to maximize your lesson and practice time in the off-season and all season long.

For golf health and fitness questions, or for more information about the FitGolf program, please call 312-214-9079 or visit fitgolfchicago.com.



Simply Improving Your Game

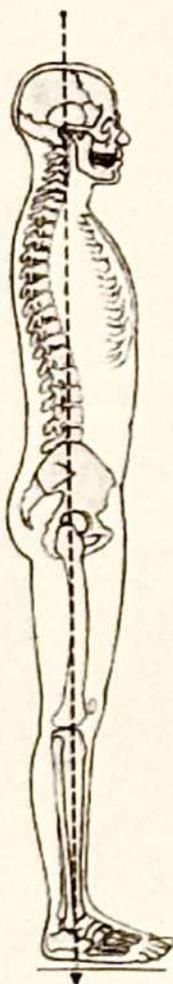
By Betsy Voyles, MSPT

The question from golfers is often asked, “If there was just one exercise to improve my game, what would it be?”

The answer is simple: Always try to be 1-inch taller — all day, every day.

We beg, we plead, we bribe everyone to improve their posture for many reasons. If you sit slouched over a desk all day, then you will not miraculously have perfect posture when you step up on the first teeing ground. That’s because daily life is taken to the golf course.

There are more articles written now about posture and the golf swing than ever before. And the most efficient golf swing cannot occur without the most efficient posture.



Benefits of improving posture include:

- spine aligned from the head to the pelvis
- decreased pressure on the discs and ligaments
- lower and upper core muscle strength
- hip joints that are allowed to rotate properly
- stronger shoulders just by their position
- improved breathing due to a widened diaphragm

Benefits of improving posture in the golf swing include:

- a more stable and balanced address posture
- maintaining proper spine angle throughout the swing
- more power and stability through impact
- better hand control
- the potential for a wider swing arc
- a decreased risk of injuries



Being 1-inch taller is a simple concept, but in reality can be challenging. A lot of work is necessary when using weakened muscles to realign joints and ligaments, but being diligent about the 1-inch concept for two weeks will become a habit. Your health — and your game will benefit.

For golf health and fitness questions or more information about the Body Balance for Performance program, contact us at 312.214.9079, bvoyles@sprynet.com or www.bodybalancegolf.com.

Putt for Dough?

By Betsy Voyles, MSPT

Should you get a professional fitting for putting? Is your poor posture costing you strokes on the dance floor?

Whether you are right- or left-hand low now, if you are struggling with your putting, strengthening your core muscles and improving your balance may be your answer. Improved posture and core stability will help produce a smoother, more stable pendular motion.

Test your stability on a practice green by casting a shadow in front of you. See if your shadow moves *at all* during a putting stroke. If it does, see if you can stabilize yourself by slightly contracting your lower abdominals and bending slightly more from your hips to straighten and lengthen your spine. You can also put pressure on both of your insteps to help stabilize your stroke.

If you have difficulty finding your lower abdominals, stand as tall as you possibly can with your stomach pulled in and shoulders down and back. Maintain that level of support as you assume your putting address position.

Anything you can do during the day to challenge your balance is another way to improve putting accuracy. Standing on one leg while brushing your teeth or waiting for an elevator, for example, can help your body learn to stabilize itself. Improved overall balance improves ball striking from driver to putter.

We often get asked about the use of belly and long putters vs. regular length putters. Putting, putters, and putting grips vary greatly, so try as many variations as you want to find what feels the best for you. Even Tour

players change these variables on a regular basis. The most important factor is how stable you are without compromising your body in the process.

It is amazing how many “just putting” injuries we treat a year. The worst thing you can do to your low back is load it (standing or sitting), bend forward (round or slouch), then

rotate. Many golfers feel they need to round way over the ball to get their eyes directly over the ball. This compromises their bodies and their putting accuracy. Yes, many outstanding players have this type of putting stance, but they have hit thousands of balls to groove the motion, and many have had a number of physical problems that still haunt them. Your body has fewer joints to control if it is strong, stable, and balanced.

And as you know, your body is the most important piece of equipment that you own.

For golf health and fitness questions, or for more information about the FitGolf program, please contact us at 312-214-9079, bvoyles@fitgolf.com or visit fitgolfchicago.com.



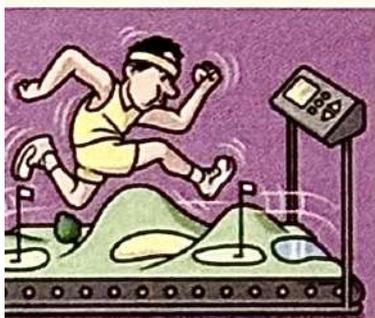
A Focus on Fitness Adds to Golf's Fun

Better shapes lead to better swings and fewer injuries

By Betsy Voyles, MSPT

There are more people playing golf than ever before. In fact, there are more people now starting to play golf than any other sport. There are also, however, more people quitting the game faster than any other sport. One reason that golfers are leaving the game is because they find golf to be too difficult to play well. Another reason is that many golfers get injured.

Many questions keep coming up: What can be done to help make the process of learning the golf swing easier and the enjoyment of the game better? Why does golf seem to be so difficult? Why is it so



physically stressful for so many people? Are there elements that every golfer should be evaluating to help determine their own playing

ability? What are the essential ingredients to maximum golf swing performance?

Five key factors to optimal and safe golf performance have been identified:

- Professional instruction and practice
- Properly fit equipment
- Physical training
- Mental training
- Natural ability

Of these five factors, physical training has been making great strides — especially

over the last decade. In order to keep up with the advancements in golf equipment technology and golf course redesigns, golfers themselves have needed to keep up.

Golf fitness is also being talked about more on tournament broadcasts, and many professional players travel with a team of fitness experts. The Golf Channel devotes entire shows to golf fitness, and golfers are simply talking about it more. For some it is simply trying to stay injury-free so they can keep playing for as long as possible.

But it's not just your swing that can benefit from better health. By improving your golf fitness level, you can actually improve your finances, as well. You will benefit more from what you spend on golf lessons, golf equipment, and practice time. In other words, if you improve your physical ability to play, you will have more fun and be motivated to keep playing, while decreasing your risk of injury.

For information on having more fun on the course or improving your golf health and fitness, please contact us at 312-214-9079, bvoyles@fitgolf.com, or www.fitgolfchicago.com.



SOME GOLF TIPS FOR AGING SWINGERS

Duffers who wouldn't know a mashie from a mashed potato, as well as plenty of scoffing spouses, are skeptical when golfers justify their hours on the course as "exercise." But the sport is more of a physical challenge than even some players realize.

According to the American Physical Therapy Association, the golf swing, with all its bending and twisting, can put a lot of stress on the spine, hips and shoulders. Recreational golfers from 35 to 50 years of age are especially vulnerable to injury, perhaps because they're still trying to swing like young men and women with bodies that aren't so swingable anymore. And many players don't stay active in the wintertime, so their muscles weaken and aren't ready to catch the birdies of spring.

Betsy Voyles, a physical therapist at the Chicago Institute of Neurosurgery and Neuroresearch, developed a program of education and exercise to help golfers

avoid muscle strains and disc injuries. "Back in the Swing" teaches them to stop viewing golf as just a "leisure activity," to keep themselves in condition and to understand how their bodies work during the swing.

The golf swing is "inherently a bad thing," she said. "One of the worst things that people can do is bend forward and rotate, [because of] the way the spine is put together. That's the way most disc injuries occur."

The key to protecting the spine is to keep the knees flexed. "As long as the legs are bent and you keep your spine in a neutral position or pretty much straight, that takes the pressure off the discs," she said.

A good way to get the idea is to imagine you're a shortstop about to catch a line drive. "Every other sport has a good 'ready' position," said Voyles, and since nothing is actually coming at the player in golf, it takes a bit more mental effort to prepare yourself. "What I basically am trying to teach people is to get the golf stance athletic, get the legs primed to work. Many people will bend forward and

use the arms too much, which then means using the back too much."

Another important lesson is to use the stomach muscles. "I want people to keep those tightened during the swing; that helps support the back," Voyles said. Here

again, the idea of a ready stance helps. In other sports "those muscles tighten up almost automatically when there is something coming toward you."

Amateur golfers aren't the only ones vulnerable to injury. "There's a lot of tour

players that are out with injuries to the back, most of them lower back, or rotator cuff of the shoulder," Voyles said. Using the legs correctly, she said, will reduce the strain on the shoulders. "With the legs bent, you're able to get more of a rotation so that the shoulders don't have to stretch as far."

The association recommends that golfers get to the first tee early and warm up for five to 10 minutes and then stretch for 10 to 15 minutes. And, unless you have a note from your doctor, walk the course rather than ride.

—Lawrence G. Proulx



BY BETHANN THORNBURGH FOR THE WASHINGTON POST

Health & science

Feeling good

Spinal dischord

Many suffer from back pain, and many bring the discomfort on themselves

By Bob Condor

TRIBUNE STAFF WRITER

One thing is sure about anyone who has back problems. That person possesses a knowledge that can only be gained from experience.

"There's really no explaining the pain to someone who has never had a bad back," said Mike Bentley, 55, of Winfield, who is mending from spinal surgery he had in December. "People are nice to show their concern, but when you talk to individuals who have been through it, they understand."

Research shows Bentley figures to get his share of empathy. Studies estimate more than 80 percent of American adults will suffer significant back pain at some point during their lives. According to the American Academy of Orthopaedic Surgeons, 6 million people in the U.S. will visit a doctor for back complaints this year.

"It begins with our prehistoric development as human beings," said Dr. Joel Press, director of the Center for Spine, Sports and Occupational Rehabilitation at the Rehabilitation Institute of Chicago. "We went from moving around on all fours to standing on our two feet. It puts pressure on the spine that wasn't part of the original design."

Of course, the human body has adapted to all sorts of changes over the centuries. Press said modern conveniences such as computers and remote controls actually have sabo-

tagged those physiological adjustments.

"Sitting for prolonged periods puts more pressure on the discs in the spine," he said. "Sedentary people have back pain in much higher proportions than their active counterparts."

Discs are just one part of a complex anatomical structure in the back, which can lead to "many different things that can go wrong," said Press. Bones, ligaments and muscles are other major components.

The spine has 33 bones, or vertebrae, that resemble small bricks. There are 7 in the neck, 12 in the upper and middle back, 5 in the lower back or lumbar area, 5 in the pelvic region and 4 in the tailbone. The biggest problems occur in the lower back, where the vertebrae are larger and heavier, because this is where more weight is supported.

The vertebrae are separated by flat, round discs of cartilage that serve as shock absorbers for the spine. The discs have fairly tough skins and soft middles. A bulging disc occurs when the disc is stretched from impact one too many times and sort of balloons out from its assigned position between two vertebrae. A herniated disk is a disk that protrudes in one specific spot, leading to excruciating pain.

Many studies have explored why a disc fails. The leading cause is not the popularly held notion of bending over without flexing the knees, though such an action certainly strains the spine and back muscles.



Photo for the Tribune by Molly Winkelman

Betsy Voyles (right), a physical therapist, works with Bill Purbaugh (left) and Mike Bentley on exercises for golfers who have back pain.

Nor is leaning too far behind you the primary cause.

Instead, it's bending and twisting at the same time that prompts so many doctor's visits. Over-reaching or stretching too far to lift something is a common mistake. The torque is too much in these cases, especially among patients without strong abdominal muscles to support the spine like a corset.

Press said numerous activities can tax the spine. He hears from several new patients on the day after a heavy snowfall. It seems too many people ignore the sound advice of bending the knees when scooping up snow, then worsen the situation by flipping their shovels in a twisting motion over the shoulder.

Certain recreational sports also raise red flags. Research shows softball, bowling and golf are potentially damaging to a sound back. Betsy Voyles, a physical therapist with the Chicago Institute of Neurosurgery and Neuroresearch, can vouch for that fact. After struggling with her own back troubles on the course, she

designed a special "Back in the Swing" seminar to help golfers prevent spine injuries.

"The spine feels better if you rotate it during a swing," said Voyles, who conducted a seminar at the Columbus Hospital Medical Pavilion last week that included Bentley. "But I see so many golfers who bend over from the waist without flexing their knees to address the ball. Then they twist around in their backswings and as they come through to hit the ball. It causes a lot of pain."

Voyles said a particular mistake is "side bending" in the swing, which causes even more twisting on the spine.

Golf Digest recommends the "Good Golf for Bad Backs" video, which is available at the Relax the Back Store on the city's North Side. It includes swing modifications, stretching exercises and muscle conditioning plans that are plentiful enough to cover most challenges faced by an ailing golfer.

Next week: Exercises to help ease back pain.

EXERCISE

Golf's twisting can make you shout

Program tees off on swing stress

By Lawrence G. Proulx
Washington Post

Duffers who wouldn't know a mashie from a mashed potato, as well as plenty of scoffing spouses, are skeptical when golfers justify their hours on the course as "exercise."

But the sport is more of a physical challenge than some players realize.

According to the American Physical Therapy Association, the golf swing, with all its bending and twisting, can put a lot of stress on the spine, hips and shoulders.

Recreational golfers from 35 to 50 years old are especially vulnerable to injury, perhaps because they're still

trying to swing like young men and women with bodies that aren't so swingable anymore. And many players don't stay active during cooler winter months, so their muscles weaken and aren't ready to catch the birdies of spring.

Betsy Voyles, a physical therapist at the Chicago Institute of Neurosurgery and Neuroresearch, developed a program of education and exercise to help golfers avoid muscle strains and disc injuries.

Voyles' "Back in the Swing" program teaches them to stop viewing golf as just a "leisure activity," to keep themselves in condition and to understand how their bodies work during the swing.

The golf swing is "inherently a bad thing," she said. "One of the worst things that people can do is bend forward and rotate, (because of) the way

the spine is put together. That's the way most disc injuries occur."

The key to protecting the spine is to keep the knees flexed. "As long as the legs are bent and you keep your spine in a neutral position or pretty much straight, that takes the pressure off the discs," she said.

A good way to get the idea is to imagine you're a shortstop about to catch a line drive.

"Every other sport has a good 'ready' position," said Voyles, and because nothing is actually coming at the player in golf, it takes a bit more mental effort to prepare yourself.

"What I basically am trying to teach people is to get the golf stance athletic, get the legs primed to work. Many people will bend forward and use the arms too much, which then means using the back too much," she said.

Another important lesson is to use the stomach muscles. "I want people to keep those tightened during the swing; that helps support the back," Voyles said.

Amateur golfers aren't the only ones vulnerable to injury.

"There's a lot of tour players that are out with injuries to the back, most of them lower back, or rotator cuff of the shoulder," Voyles said.

Using the legs correctly, she said, will reduce the strain on the shoulders. "With the legs bent, you're able to get more of a rotation so that the shoulders don't have to stretch as far."

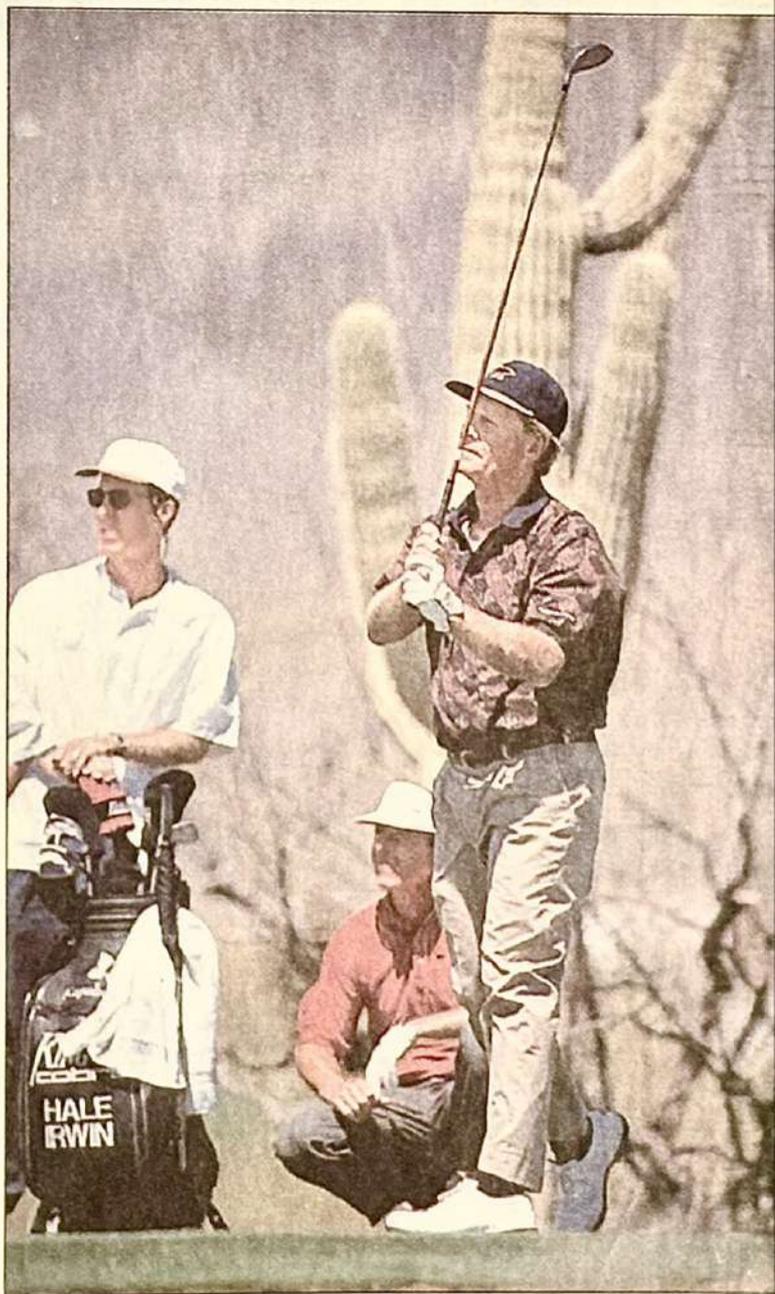
The association recommends golfers get to the first tee early and warm up for five to 10 minutes and then stretch for 10 to 15 minutes. And unless you have a note from your doctor, walk the course instead of riding in a golf cart.

“

What I basically am trying to teach people is to get the golf stance athletic, get the legs primed to work. Many people will bend forward and use the arms too much, which then means using the back too much.

BETSY VOYLES

PHYSICAL THERAPIST, CHICAGO INSTITUTE OF NEUROSURGERY AND NEURORESEARCH



James Garcia/The Arizona Republic

Seasoned golfers, such as Jack Nicklaus (right) and Hale Irwin (crouching) can find their swings to be a pain, physical therapist Betsy Voyles said.

Health & fitness

Even in winter, golfers can learn how to avoid

By **TERRY DUCHOW**
Staff Writer

"It don't mean a thing if it ain't got that swing."

The words from the old big-band favorite are surprisingly applicable when it comes to golf.

To drive a ball 100 to 116 miles per hour, the golf swing lasts 2 to 3 seconds and contains the keys to every golfer's downfall, as well as to success.

The golf swing requires a complex biomechanical move involving almost every part of the body, from the back of the head to the ankles and toes. Injuries from twisting torso and back muscles are common among golfers.

Betsy Voyles, a physical therapist at Columbus Hospital's Chicago Institute of Neurosurgery and Neuroresearch, 2520 N. Lakeview, teaches golfers everything they need to know to play safely, including how to put on shoes and how to carry the golf bag, as well as the mechanics of the swing itself.

Voyles started a therapy program as a golfer herself after she suf-

fered an accident on the course.

Stretching and warmup exercises are essential before teeing off, Voyles said, because they raise the temperature of the body tissues and reduce risk of injury.

"Joints that are warmed and stretched are loose and supple and should enhance body performance," she said.

Most injuries occur at about the third or fourth holes, Voyles said, because muscles are not adequately warmed up. Or else they occur at the end of the course because of fatigue, she said.

Golf is strenuous in subtle ways, and injuries happen to the unwary — even young golfers.

"Most of my patients are 30 to 40 years old," Voyles said. "Most people don't realize that golf really is a sport. The swing is an athletic position."

"I used to think I was 'Iron Man,'" said Andy Minyo, a golfer from the Northwest Side. "One little wrong move, and that's all it

Stay in the swing of things all year

Cold weather doesn't mean you have to put away your clubs. Here is a partial list of Chicago-area locations where avid golfers can keep up their games during the winter.

Indoor driving ranges

White Pines, indoor driving range, 500 W. Jefferson, Bensenville
Windy City Golf, indoor driving range, sand-trap putting green, 3727 N. Broadway, Chicago
Illinois Center Golf, indoor facilities, heated driving range stations, 221 N. Columbus, Chicago

Winter golf

Caldwell Woods, 6200 N. Caldwell, Chicago
Indian Boundary, 8800 W. Belmont, Chicago
Peter Jans Community Golf Course, 1031 Central, Evanston, weather permitting

takes."

Minyo, 47, said he has suffered minor back injuries and has found Voyles' course helpful in preventing more problems. He also has learned small preventive moves

that ease muscular strain.

"It's an athletic position," agreed Brett Compton, an instructor at Illinois Center Golf, 221 N. Columbus, which recently opened amid the high-rises along the south bank of the Chicago River. Compton is a

teaching professional who shows golfers the proper swing and techniques for keeping fit during winter.

Basic stretching exercises, such as arm stretches across the chest, walking up and down stairs and

regularly practicing the grip on a golf club, will keep muscle patterns in shape.

"A good swing will be effortless," Compton said. Muscle memory, which can be reinforced within 21 days, is the key, he said.

"Practice makes permanent," Compton said. He said memorizing the moves of the swing takes place with both the mind and body.

"Flexibility, strength, coordination and a good sense of body awareness are all important to a good game of golf," Compton added.

That requires conditioning, although "golf is seldom seen as a sport that requires conditioning, even at the professional level," he said.

Play Golf: Live Longer?

By Betsy Voyles, MSPT

**Body
Balance
for Performance**



Can playing golf actually increase your life expectancy? According to a study by the Scandinavian Journal of Medicine and Science in Sports the answer is YES. They found that the death rate for golfers is almost 40% lower than for non-golfers of the same age, sex and socioeconomic status. This equated to about 5 years of extra life.

Sound too good to be true? Well, there is a catch, according to lead researcher Anders Ahlbom: the study only examined golfers that walk while they play, not those that regularly ride in a cart. He states, "A round of golf means being outside for 4 or 5 hours, walking at a fast pace for about 4 miles." The study data was collected from 300,000 Swedish golfers.

A general healthy lifestyle may also help explain the lower death rate among these golfers. Swedes have been known to eat a very anti-inflammatory diet including Omega-3 fatty fish, antioxidant-rich fruits and vegetables, healthy oils and fats, whole grains, lean proteins, and few processed foods which are much more prevalent in other parts of the world. US diets in particular tend to have more saturated and trans fats, refined grains, sugar, and nitrites which are known to cause general inflammation in the body.

Playing the game is still likely to have a positive impact on health (provided it doesn't cause too much stress!). Golf is often played into older age and this alone can have a positive social and psychological impact on health. So even if you don't walk while you play, playing golf can still improve your life!

If you would like more information on keeping your body young enough to continue playing into older age, or any other golf health or fitness questions, please contact us at **Body Balance for Performance: 312-214-9079** or www.bodybalancegolf.com.



Is Your Game Hurting II

By Betsy Voyles, MSPT and Chris Kendall, MPT
Physical Therapist with "Body Balance for Performance"
The Complete Golf Health and Fitness Training Program

Better posture throughout the day and while on the course can a significantly decrease your risk of injury.

In the July issue we discussed a number of golf-related injuries and why they typically occur. Now we want to show you a few things you can do to help prevent these injuries and have a great injury-free season.

First of all, you can save your body a lot of wear and tear if you simply squat down and use your legs instead of bending over and stressing your back. This goes for any number of activities on the course, from teeing up the ball to retrieving it from the cup.

Better posture throughout the day and while on the course can also significantly decrease your risk of injury. Holding yourself upright aligns your joints, ligaments, tendons and muscles so they can work efficiently and effectively.

Specifically we discussed wrist, elbow, rotator cuff, hips and trunk issues. Decreased mobility in one area can weaken another area.

1. Wrist and Elbow Stretch

Arm at 90 degrees to trunk with gentle pressure at wrist bending it down and out. You should feel a stretch in the forearm toward the elbow.

2. Shoulder and Rotator Cuff Stretch

Arm up on the wall as shown. Keep shoulder blade down and back. Gently turn away from the wall until stretch is felt in the front of the chest and shoulder.

3. Trunk Rotation

Lie down as shown. Slowly open arms and rotate trunk as far as



possible keeping the knees together and the top knee slightly in front of the bottom knee.

4. Hip Rotation

Lie on back with legs crossed as shown. Bring both knees up toward chest until you feel a stretch deep in buttocks of the top leg.

Do not force any stretches. You should feel relaxed. Breathe deeply allowing the muscles to let go and stretch. Monitor the stretch by "feel" and not by time. Modifications can be made if any of these are too difficult.

Please feel free to contact us at "Body Balance for Performance" if you have any questions: 312-214-9079. We are also making a special offer to our *Golf Chicago!* readers - 50% off your initial evaluation. That's a \$125 Value and the first step to healthier, happier golf!



Is Your Game Hurting?

By Chris Kendall, MPT and Betsy Voyles, MSPT
Physical Therapists with “Body Balance for Performance”

Many players tell us that they thought it was ‘normal’ to play with lower back pain. Just because a lot of professionals on tour do—doesn’t mean we should too!

Why does a sport like golf produce so many injuries? Even though golf is a non-contact sport, it is not a non-impact sport. The impact is obviously the club hitting the ball and the ground. Studies have shown that golfers produce approximately 90% of their maximal muscle force during the golf swing.

Very few golfers prepare appropriately for the sport (and it is indeed a sport!) in terms of warming up, stretching and golf-specific strengthening. Add to this some poor swing mechanics and improperly fit clubs and it becomes pretty clear that many golfers will experience a golf-related injury at some time.

We unfortunately have to treat these injuries daily in our Body Balance for Performance centers before we can progress to the performance aspects of their programs. Some of these injuries include wrist and elbow tendonitis, shoulder (especially the muscles of the rotator cuff), neck and low back strains.

The wrists and elbows often become over stressed when a golfer has to rely too heavily on hand and forearm action during the swing. Over time, this golfer can develop microscopic tears in the small muscles and tendons in the wrist and forearm. Often, the underlying reason why the arms are being overused is the lack of rotational flexibility in the mid-spine and hips. (The loss of mobility in these two areas will be a common theme underlying many of the injuries we will discuss.)

If the mid-spine and hips are not flexible enough to produce an efficient and safe golf swing, the arms take on too much of the workload. Over time this will lead to breakdown in the wrists and forearm muscles. The other main reason why they get injured is from a too steep downswing which leads to hitting very fat shots. The continual impact of digging excessively into the ground leads to injury. Another reason for injury in the upper body can be from playing with clubs that are too heavy or too stiff.

The next golf-related injury that we typically see is a strained or torn rotator cuff tendon in either shoulder joint. This injury is usually the result of a chronic address posture that is too rounded in the shoulders and mid-

back. Coincidentally, this is the same posture that a lot of our clients have while sitting at their desks all day. This posture forces the tendons of the shoulder to get over-worked because the spine can become frayed. Hitting lots of balls off hard practice mats can also lead to several overuse injuries.

Another reason why rotator cuff injuries occur relates to the golfer who, either because of poor swing mechanics or poor flexibility, makes an overly flat backswing. This flat position can really strain shoulder joints over time, especially the left in the right-handed player.

The neck is also an area that commonly gets injured during the swing. This injury is often related to a golfer who keeps their head down well after impact. When the head stays down excessively as the entire body is moving left through impact, there is a tremendous amount of stress placed on the muscles and joints of the neck. Annika Sorenstam has been criticized in the past that she might bring her head up too soon in her swing. It certainly hasn’t hurt her physically or financially!

The last golf-related injury we will discuss is actually the most common that we treat—the infamous lower back strain. Many players tell us that they thought it was ‘normal’ to play with lower back pain. Just because a lot of professionals on tour do—doesn’t mean we should too! This pain is usually caused by a combination of poor mid-spine flexibility, poor hip rotation mobility, weak abdominal support and/or inefficient weight shifting throughout the swing.

As we discussed earlier, the mid-spine region must be able to supply the majority of the rotational swing flexibility, but often it can’t do its job because of poor posture and/or inherent joint stiffness in the spine. The hip joints also need to have good rotational flexibility for a safe and efficient swing.

Often those golfers who suffer from low back pain have the unfortunate combination of poor hip rotation and poor mid-spine mobility. This leads to trying to rotate through the lower back, which it is not designed to do. It is designed to mostly bend forward and backward; i.e. bending over to touch your toes or bending backwards to put a light bulb in overhead.

If the low back is forced to rotate time and time again, eventually dysfunction and pain will result. With tightness in the body directly above and below the low back, it becomes pretty easy to see why it is the most common body part injured. About 10% of all professional sports-related injuries are to the spine, however, professional golfers have about a 40% incidence of low back problems at sometime during their careers.

Golf shouldn't hurt! Everything in golf that prevents injury also improves your performance. That's a great combination. In the August issue of *Golf Chicago!* we will show you how to prevent some of the most common golf-related injuries. Please feel free to contact us at 312-214-9079 if you have any questions. We are also making a special offer to our *Golf Chicago!* readers (who make it to the end of our articles): 50% off their initial evaluation...that's a \$125 value and the first step to pain free golf!

Golf Chicago! TV

- Sun., July 25, 5:30PM Show #7
- Mon., July 26, 3:00PM Show #7 (R)
- Thur., July 29, 3:00PM Show #7 (R)
- Sat., July 31, 5:30PM Show #7 (R)
- Wed., Aug. 4, 3:30PM Show #7 (R)
- Sun., Aug. 8, 5:30PM Show #8
- Tue., Aug. 10, 3:30PM Show #8 (R)
- Sat., Aug. 14, 3:00PM Show #8 (R)
- Sun., Aug. 22, 5:30PM Show #9
- Thur., Aug. 26, 12:00PM Show #9 (R)
- Sat., Aug. 28, 3:00PM Show #9 (R)

All listed times are Central
Schedule subject to change



★★★★★ 5 Stars Chicagoand Golf Magazine
★★★★★ 4 1/2 Stars Golf Digest "Best Places to Play"
Listed in Zagat Survey's "America's Top Golf Courses"

*G*iving you an unforgettable golf experience, again & again, is truly our passion.

TRAPPERS TURN
A MASTERPIECE[®]
by
ANDY NORTH & ROGEE PACKARD

For Group Outings, Golf Vacation Packages & Tee Times call:
1-800-221-TURN(8876) • Wisconsin Dells
www.trappersturn.com

Muscular Dystrophy Association

Where
Hope Begins

MDA

1-800-FIGHT-MD
www.mdausa.org

St. Ives Resort

Experience 36 holes of world-class golf and the Inn at St. Ives

Play two of the most recognized and award-winning golf courses in Michigan, then enjoy full-service lodging at the Inn at St. Ives.



St. Ives Golf Club
★★★★★ Golf Digest
the highest rating in U.S. golf



Tullymore Golf Club
Top 25 Public Golf Courses
in America - Golf Digest
No. 1 New Upscale Public Course
in America - Golf Digest

Call
800.503.2604
to book your golf getaway today.

Call
800.722.5549
for information about St. Ives/Tullymore
real estate opportunities.

www.stivesgolf.com



St. Ives Resort is
1 hour north of
Grand Rapids and
30 miles west of
Mt. Pleasant.

Packages starting at \$89 suite / \$99 standard.



Open Up

By Betsy Voyles, MSPT

Do you sit most of the day at work? Most of the evening at home? Do mostly sitting exercises at the health club? Have a long commute? Usually ride a cart when you play golf?

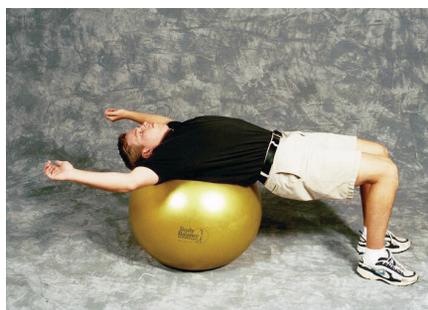
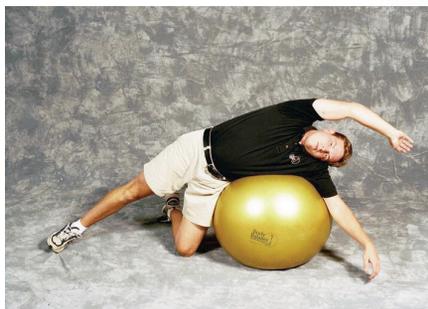
If the answer to more than one of these questions is yes, then your body probably needs to lengthen and open up.

Sitting for long periods each can be detrimental to the swing and overall performance. Daily activities primarily use the front of the body. Thus, the back tends to get very stiff and tired while trying to stabilize all of the forward activities, such as driving, computing, eating, childcare and swinging a club. As a result, it becomes nearly impossible to have an open, relaxed, fluid golf swing after being in a tight, rounded posture.

Here are a few big ball exercises to help getting the body opening up. Hold each stretch until there is the feeling of gaining length in the particular area. Gentle stretching with deep breathing is best.

Side Stretch

The more the ribs can expand, the more length there is from the hip to the



shoulder. This creates greater rotation of the trunk region during the swing.

Chest Stretch

The more chest expansion and middle back extension there is, the more width is created to maintain in the swing.

For information on flexibility for golf or other questions about golf health and fitness, contact Body Balance for Performance at 312-455-9691 or visit bodybalancegolf.com.



Picture Perfect Posture

by Betsy Voyles, M.S.P.T. and Chris Kendall, M.P.T.
Physical Therapists with Body Balance for Performance
The Complete Golf, Health and Fitness Training Program

One of the best effects of good posture is how it can immediately improve your golf game.

We all should have listened to our mothers more after all, especially where posture is concerned. Not only does good posture make you look better, but it physically improves your circulation, digestion, lung capacity, and many arthritic conditions. One of the best effects of good posture is how it can immediately improve your golf game.

Keeping your body in its best postural alignment during your swing will help to lengthen your spine, open your chest, strengthen your shoulders and hips, increase your trunk rotation, and help stabilize your low back and pelvis by activating your lower abdominal muscles. Add all of this together and you get a much more powerful and consistent golf swing with a significant decrease risk of injury. A great combination!

This includes beginners to elite Tour players. Look at today's top players and you will notice a significant change in their postures as compared to the older Tour players. Much more care is taken to

ensure a long and healthy career. Improving your overall postural stability is one of the best ways to do this.

LPGA Tour Pro Nicole Jeray has some great things to say about how changing her posture has improved her game:

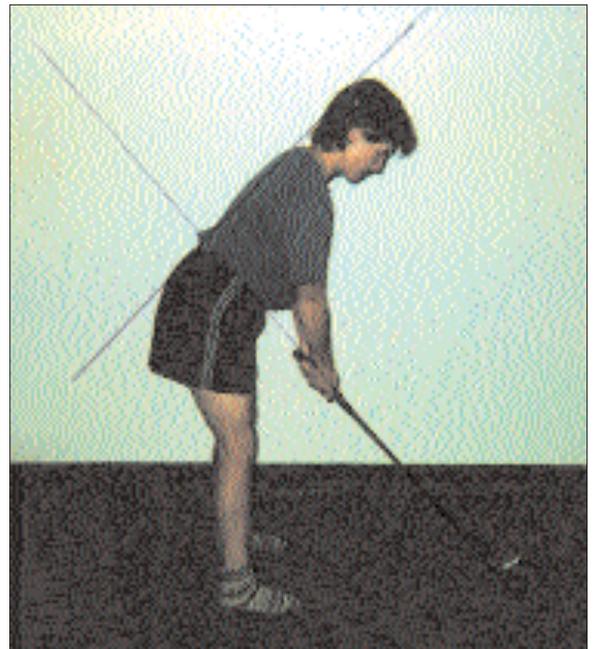
"In December 2001 I was fortunate to have played with an amateur who experienced tremendous improvements in his game and overall physique after partaking in the Body Balance (for Performance) program.

For my entire golfing life, I have struggled with maintaining my spine angle at the top of my swing and follow through. My posture was unstable and I hit many weak, thin shots. After two weeks of working with the professionals at Body Balance and doing the exercises prescribed for me, my golf swing spine angle and posture improved dramatically. Suddenly it is easier to take a divot and my thin shots became uncommon.

Yes, I have always received compliments on my



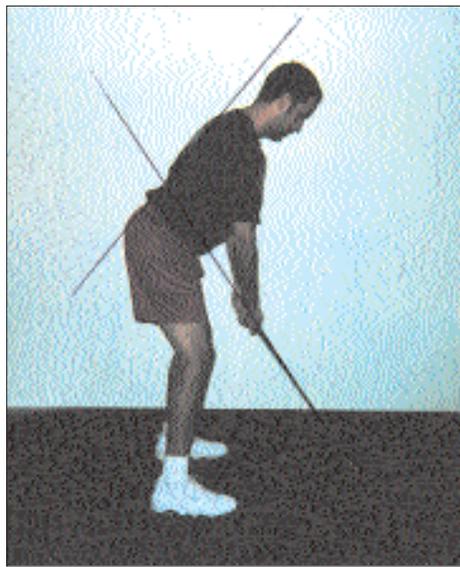
LPGA Tour Pro Nicole Jeray before treatment.



LPGA Tour Pro Nicole Jeray after treatment.



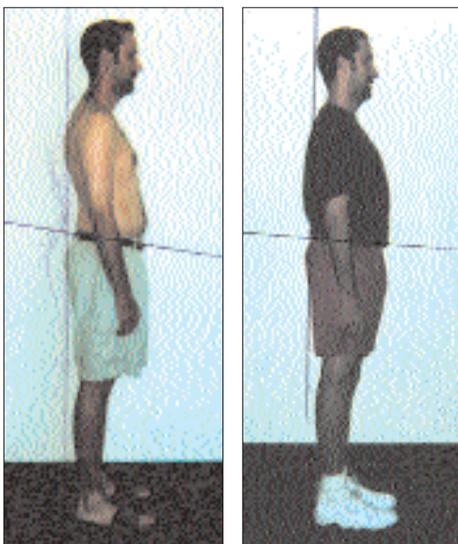
Male amateur golfer before treatment.



Male amateur golfer after treatment.

golf swing, but never about my posture and spine angle. Two weeks ago, a perfect stranger working at a golf store was in awe of how perfect my spine angle, set up, and posture was. This put a big smile on my face.

Not only has Body Balance helped my golf game; my overall posture has improved. My round shoulders are disappearing as you read this, my physique is more equalized, and I am preventing the back and neck problems that most golfers suffer from.



Male amateur golfer before and after treatment.

It has been 10 months since I started working with Body Balance. I can see the results. I can feel the results. My golf

scores and before and after pictures are concrete evidence. The obvious progress I have made makes me very eager to let people know the advantages of such a great program.”

See Nicole’s before and after pictures, as well as, one of our amateur client’s dramatic improvement in his overall and address postures. Stay tall and have a great season!

If you would like more information about the “Body Balance for Performance” golf health and fitness training program, please call 312-214-9079, visit our website at www.bodybalance-golf.com, or Email us at bvoyles@sprynet.com. We have three Chicagoland centers dedicated to customizing golf-specific programs to help each golfer improve their bodies and their games. 

10 Reasons You Should Plant Trees ... Now!

- 1** Trees conserve energy in the summer, and save you money.
- 2** Trees help clean the air.
- 3** Trees bring songbirds close by.
- 4** Trees around your home can increase its value by up to 15% or more.
- 5** Trees help clean our rivers and streams.
- 6** Trees conserve energy in the winter.
- 7** Trees fight global warming.
- 8** Trees make your home, and your neighborhood, more beautiful.
- 9** Tree planting is fun!
- 10** It's easy! Here's how: Join the nonprofit Arbor Day Foundation and we'll send you 10 trees ... FREE ... with easy-to-follow planting instructions.



tree planting and care information. Your six to twelve inch trees are guaranteed to grow or they'll be replaced free of charge. Trees are shipped when conditions are right for planting in your area, February through May in the spring or October through mid-December in the fall.

To receive your free trees, send a \$10 membership contribution to 10 Flowering Trees, The National Arbor Day Foundation, 100 Arbor Ave., Nebraska City, NE 68410, or join online at arborday.org.

Join now, and plant your Trees for America!

 **The National Arbor Day Foundation**
www.arborday.org

When you join you'll receive 10 flowering trees—2 Flowering Dogwoods, 2 Flowering Crabapples, 2 Goldenrain trees, 2 Washington Hawthorns, and 2 American Redbuds, or other trees selected for your area. You'll also receive the Foundation's colorful bimonthly, *Arbor Day*, a membership card, and *The Tree Book* with

Power Posture for Golf

By Chris Kendall, MPT and Betsy Voyles, MSPT

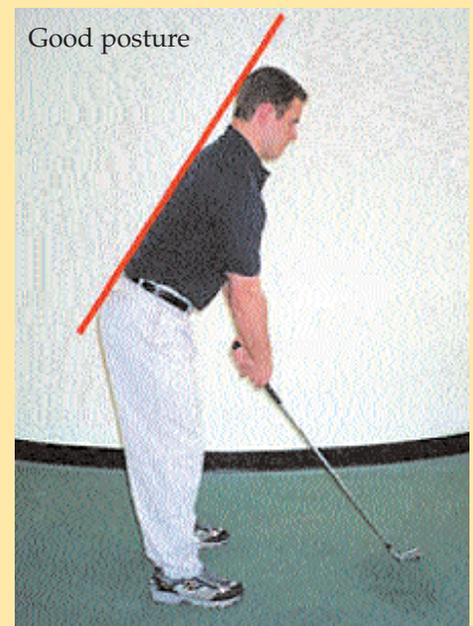
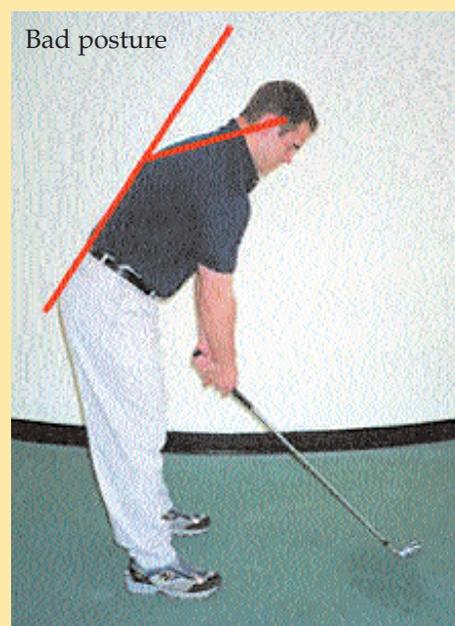
We all want to have more consistency and accuracy with our game. Most teaching professionals agree that at least 90% of all swing faults can be improved with the proper posture. This means not only being able to achieve good posture at address, but more importantly, to maintain it throughout the swing and throughout the round.

Proper posture and spinal alignment not only promote better swing mechanics, but also help to prevent injuries. That's a winning combination! We all WANT to play better, but we all NEED to prevent injuries. You need to stay strong and healthy in order to keep playing your best golf.

Did you know that golf has more injuries than any other sport? Most of these injuries are the result of poor posture, tight and/or weak muscles, overusing muscles and joints, and using poor body mechanics throughout the round. When golfers do not have the correct physical tools to play the game, they have to make a number of compensations during the swing to

try to hit the ball consistently. This is the main reason why golf is so difficult! The goal is to improve each golfer's body so that they do not have to compensate for their physical limitations.

Your address posture should be rock solid and balanced with your body positioned so that your ears, shoulders and hips are aligned. You should be able to hold a golf club along your back with contact at your sacrum, spine, and the back of your head in your set-up position.



This good spine angle allows your body to move much easier throughout the swing, and allows your body to move the way it was designed to work. A good analogy that we like to use is if you bent the shaft of your golf club around a tree, would you continue to use it? Certainly not! You would get the shaft replaced with a STRAIGHT shaft, so why do most golfers continue to play with their backs in this faulty, BENT position?

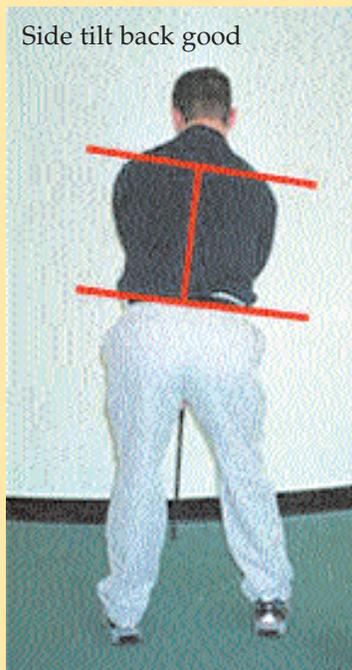
In a good set-up, you should be bent forward from your hip sock-

ets, not from your back. Your shoulder blades should be pulled down and back to open up your chest and allow your shoulders to work from their strongest position. This also allows your hands to stay relaxed directly under your shoulders. Your lower abdominal muscles are your powerhouse and need to be strong and activated throughout the swing. They also support your back, pelvis, and hips.

Proper posture at address also requires a side tilt of your body. Most teaching professionals will agree that you want to maintain a straight spine angle with your shoulders and hips parallel to each other. Think of your body as a capital letter "I". Your shoulders are the top of the "I", your hips are the bottom of the "I", and your spine is the straight line connecting the top and bottom lines.

For right-handed golfers, your right hand is lower on the club, correct? How do you maintain this letter "I" when you grip the club? Most golfers will side bend their spine to the right instead of keeping it straight. This can eventually cause a lot of strain to the low back, which is the number one injury in golf.

As the picture illustrates, the spine stays straight when you pivot through your hips instead of your spine. Maintaining the "I" will make you a more powerful



and consistent ball striker. Why? Because you are moving from a powerful, athletic position; not from a side-bent, injury-promoting position. This side tilt move is great because it sets you into a pre-loaded position so that you can more easily transfer your weight onto your right side in the back swing.

Some simple thoughts for attaining and maintaining proper posture:

1. Always try to be one inch taller than you actually are. This will automatically start to strengthen your abdominal and shoulder blade muscles to support a strong, stable posture.

2. Try not to let your chest and bellybutton get closer together.

This is a great tip to pay attention to not only in your golf posture, but also sitting at work every day. Most of the activities that we do during the day are forward activities where it is very easy to round the back and shoulders into a weak, "bent golf club" position.

Now we know the correct posture and body mechanics to utilize for golf, so why don't we see every golfer at the driving range in the correct position? Well, it's simple, most people cannot physically assume or maintain the positions we have discussed above. Each golfer's physical STRUCTURE will govern how they FUNCTION while playing golf. So if a golfer is lacking flexibility and strength in certain key areas then they will have to change their structure (improve the strength and flexibility limitations) if they want to improve their function (lower golf scores with less risk of injury).

We are going to show you two flexibility exercises that are typically needed for golfers to begin to change their structure to improve the address position.

The first area to focus on is tight hamstring muscles. Most golfers have tight hamstrings so when they attempt to get into the straight spine, athletic address position, these tight muscles will pull their

Continued on page 40

Continued from page 39

seat underneath them because of the muscle's attachment to the pelvis. Because of this, the only way to then get the club to the ground behind the ball is to round the back and shoulders into a weak, faulty position.

So let's stretch the back and hamstrings out! Stand with your feet slightly wider than shoulder width, place a club on the ground in front of you with both hands on top of the club. Squat slightly so your hips and knees are bent. Keep your back flat and begin to sit back toward your heels. Push the club out away from you as you straighten your elbows. You should feel a stretch in your back, shoulders, and along the back of your legs.

You can also move the club to each side to feel a bigger stretch along your side muscles.

The next stretch is great for stretching the front of your chest and shoulders. Like the hamstrings, these muscles, when tight, do not allow the optimal spine and shoulder position at address. To stretch these muscles, move your elbows out to your sides to shoulder height with palms facing outward. Open your chest and shoulders by pulling the shoulder blades back and down while moving the elbows down slightly.

Hold these stretches for 30 seconds to one minute taking deep breaths to allow maximal muscle stretch. These flexibility exercises should be done daily to get the best

results (they should also be used as part of your warm-up before practicing and playing).

These two flexibility exercises will begin to help you achieve the ideal posture at address and maintain it throughout your golf swing. We hope these exercises and the information about the proper spine position at address help you! Remember, the path to lower scores and more enjoyment with your golf game is directly related to changing your physical structure to allow your body to perform optimally for you. Call Body Balance for Performance at (312) 455-9691 or (847) 441-8799 if you have any golf fitness questions or if you would like more information about our golf fitness programs. 

“Wife” In Name Only



**For A Hassle Free Life,
Let Us Be Your “Wife”!**

*Expertise in Personal Shopping, Social
Organizing, and Image Consulting.*

Why waste your precious time when you can have a “Wife” free up your life?
Call “Wife” In Name Only for free consultation with a professional “Wife”.

312-649-5611 or 312-320-SHOP
email: WifeInNameOnly@cs.com

No Wedding Ring Required!

Core Strength May Be the Core of Your Golf Game

By Chris Kendall, MPT and Betsy Voyles, MSPT

What is it going to take to play your best golf next season?

Buy new golf clubs with the latest technology? Take golf lessons from a well-respected teaching professional? Learn how you can perform better mentally on the course? Go out to the driving range and practice more? Learn how to get your body in condition to play your best and safest golf?

The answer to playing your best golf is to successfully integrate all of these performance factors into your game. Without concentrating on each of these factors, you will not play to your ultimate potential.

Although all of these factors are critical to performance, we are going to focus on how the condition of your body is directly related to your golf swing, and subsequently, to your golf scores. There are many physical factors which must be considered with golf, including strength, flexibility, posture, balance, and control.

Golfers must have sufficient core

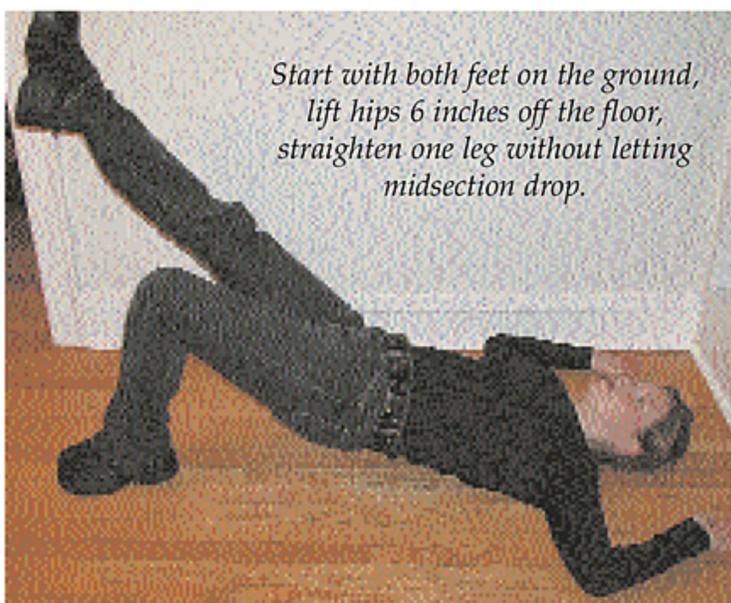
strength to play effectively and reduce the chances of injury. The core muscle groups that must be well conditioned for a sound golf swing include the lower abdominals, the side stomach muscles (obliques), the gluteals, and the muscles surrounding the shoulder blades. One of the main problems with many golfers stems from poor strength and poor endurance in these core muscles. Each of these muscle groups must be strong so that the rotational forces that are produced during the swing do not cause joint or muscle injury. The lower back is the most common body part injured during golf and the main reason for this is due a lack of core strength. It's like the

saying "the tail wags the dog". Golfers must achieve a higher level of core strength so that they can swing the club, not allowing the club to swing them!

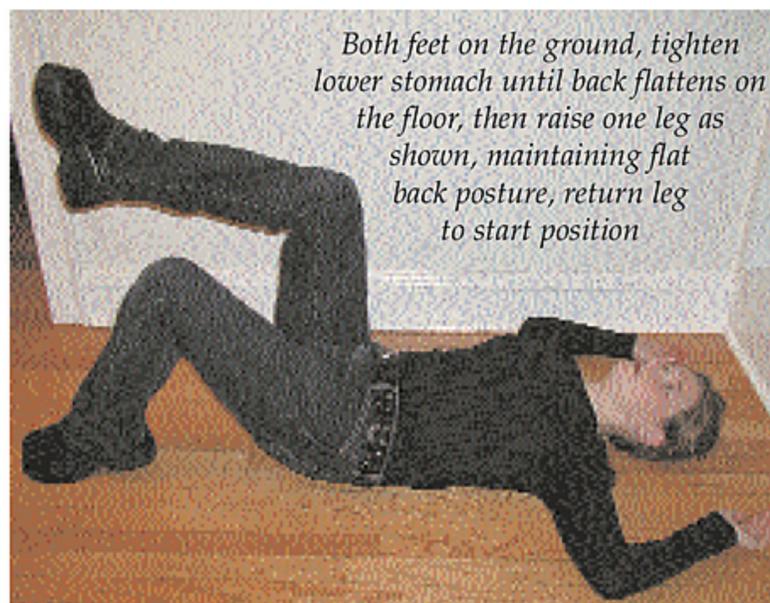
Studies have shown that amateur golfers use approximately 90% of their peak muscle activity when hitting a golf ball. This type of muscle activation can be compared to other sporting activities such as football and tennis. The main difference between golf and these other sports is the sport-specific training the athletes endure in



Start with back rolled-out over ball as shown, curl upper torso upward with slight rotation to one side. Arms can be across the chest.



Start with both feet on the ground, lift hips 6 inches off the floor, straighten one leg without letting midsection drop.



Both feet on the ground, tighten lower stomach until back flattens on the floor, then raise one leg as shown, maintaining flat back posture, return leg to start position

Should you warm-up or stretch before you play?

By Betsy Voyles, MSPT

Do you want to increase your range of motion, or to simply warm up to play? Here are five basic types of stretching:

STATIC: A muscle is taken to a point of a mild stretch and held there for 10 to 30 seconds. Relax the muscle and then repeat two to six times. Static stretching has been found to increase range of motion but does not increase core temperature.

PASSIVE: Similar to static stretching but done with a partner who is applying the stretch slowly and holding it for 10 to 30 seconds. This type has been found to increase range of motion but does not increase core temperature. With this method the partner must be very careful not to over-stretch and cause injury.

DYNAMIC: Involves active motions that gradually increase range of motion and speed. Examples include arm circles, leg swings, and trunk rotations. Dynamic stretching increases range of motion but also increases core temperature and helps the muscles warm up.

BALLISTIC: Involves bouncing and moving the muscle past its normal length. However, the muscle reflexively contracts to fight against the over-stretch and this can potentially cause injury to the muscle.



CONTRACT-RELAX: Performed with a partner who applies pressure in the direction of the stretch. The partner slowly pushes the player to the stretched position for six to 15 seconds. Then the player contracts and pushes back against the partner in the opposite six to 15 seconds. Finally the player relaxes for two to three seconds and the partner pushes the muscle further into the stretch for another six to 15 seconds. This sequence is typically repeated three or four times. Contract-relax can be very effective to gain range of motion and can mildly increase temperature of the muscles being activated.

THE BOTTOM LINE

Dynamic stretching is the only one that increases core temperature and is great for warming up, but it is not great for gaining range of motion. Dynamic stretching has been found to improve performance in high intensity activities, which includes the golf swing, and is recommended prior to any exercise, training or athletic pursuit. Static, passive and contract-relax stretching can all be good for gaining long-lasting range of motion, but should be done ideally after exercising so the core temperature is elevated. Ballistic stretching is not recommended since it tends to cause muscle soreness and potentially injury.

For any questions about warming up or stretching, contact us at the Chicago FitGolf Performance Center at 312-214-9079, www.fitgolfchicago.com, or bvoyles@fitgolf.

