

# Get your brain in sync with your body for better golf

Today's lesson is on one of the newest and probably the most important discoveries since the metal-headed drivers. It is called Interactive Metronome and I am going through the training myself. Helping us today is Dr. Peter Jo.

After four years of chiropractic school Dr. Jo did a three-year residency where he focused on pain management (fewer than one percent of chiropractors go through a full-time residency upon graduation). He then earned a specialty degree in clinical neurology.

Dr. Jo is a board certified chiropractic neurologist and there are only 10 in the Seattle area. He also finds time to be a physiology and anatomy instructor at Bellevue Community College.

You may have purchased dozens or more teaching aids at various golf supply stores, but none of them rehabilitate the brain. So take it away Dr. Peter Jo and thank you for the great information.

"If you want to make the most out of the tips provided in this column, you need to have a healthy body. The benefits of flexible hips, core strength and pain-free shoulders are obvious. But let's take a moment to think about the most important part of your body — your brain.

Your brain is in charge of coordinating all the parts of your body so you have a smooth, fluid swing. Much like a conductor needs to coordinate all the voices in an orchestra, the brain must

coordinate the feet, legs, hips, pelvis, back, arms, neck and head in order to strike the ball successfully.

Many of us know something about exercising your body, but how do you exercise your brain?

Ask members of the Miami Heat (NBA), Miami Dolphins (NFL) or professional golfer Vijay Singh. These athletes have taken advantage of a technology that Golf Digest called 'one of the hottest pieces of workout equipment on tour' to improve timing, accuracy and focus. While

modern devices such as video and motion analysis can successfully identify problems, the Interactive Metronome will actually fix those problems.

The Interactive Metronome is a device that hospitals, clinics and research centers have used for the past 15 years. Patients with neurological disorders ranging from ADD/ADHD, multiple sclerosis, Parkinson's disease, and brain injury have benefited from IM. Balance, timing, coordination and motor skills have been shown to improve with therapy.

After seeing success in patients with profound neurological deficits, some clinicians began to ask, 'If this works with patients, would this work with athletes?' The results have been impressive. Professional and amateur athletes across the country have used IM to improve performance. In fact, a study involving 50 golfers at Central Michigan University found that training with IM im-



Submitted photo

**Dr. Peter Jo works with Steve Wozniak on Interactive Metronome training.**

proved shot accuracy by 20 percent. Those players with a handicap under 15 improved their accuracy up to 40 percent. This kind of success prompted Fox Sports to call IM, 'training of the future.'

How does this training work and what does it involve? Much like the heart has a built in 'pacemaker' that allows it to perform its function; the brain has a built-in timing mechanism. The jury is still out, but this area may be in an area of the brain called the basal nuclei or the cerebellum. When this timing is thrown off, some researchers believe that problems such as attention deficit or dyslexia may result. Not all timing problems lead to learning difficulties. It may simply interfere with muscle coordination and promote an unsteady golf swing.

If the timing mechanisms of your brain aren't precise, then your ability to coordinate your

many body parts, for the purpose of hitting that little ball, will be compromised.

Let's assume you have flexible hips, smooth arms, a strong core, balanced leg muscles and you set up for your swing. What would happen if your hands began to move way earlier than your hips? Ask Steve and he may tell you that you'll be looking for your ball in the trees. There's nothing wrong with your hands. There's nothing wrong with your hips. The problem is that they're not working as a team. Your brain's timing makes your body work as a team. All the push-ups and stretches in the world won't improve that timing.

IM involves just a few pieces of equipment: headphones, hand trigger, foot piece and a computer. As you stand and listen to a steady rhythm of tones through the headphones, you clap your hands at precisely the same moment that you hear the tone.

Adding in toe taps and heel hits forces your brain to focus and coordinate. If you clap too early or too late, that tells us that parts of your brain are not talking to each other as efficiently as they should. It's almost as if you have a bad telephone connection where you hear the conversation with a one-second delay. The information is still there but the flow of the conversation is disrupted.

Treatments are carried out in 12 sessions over four weeks. A typical program involves about 28,000 repetitions where rhythm is reinforced with feedback through the headphones and on the computer monitor. Just as it takes thousands of repetitions before a golf swing becomes grooved into your body, thousands of repetitions are required to restore timing to your brain. The good news is that the effects are permanent. People that have gone through IM training gain long-term benefits that don't decline over time.

We all recognize the importance of the brain. When it is damaged, we see cognitive, emotional, behavioral and physical problems. While most golfers may have a reasonably healthy brain, improving its timing will increase accuracy and lower your score. You'll still need your tips and lessons, but your brain will be better prepared to perform what you learn."

Dr. Jo runs a brain-based athletic performance program in his clinical practice and teaches human anatomy and physiology at Bellevue Community College. For more information, call 425-256-2946 or visit [www.bellevuechironeuro.com](http://www.bellevuechironeuro.com).

## GOLF TIPS



**Steve Wozniak**