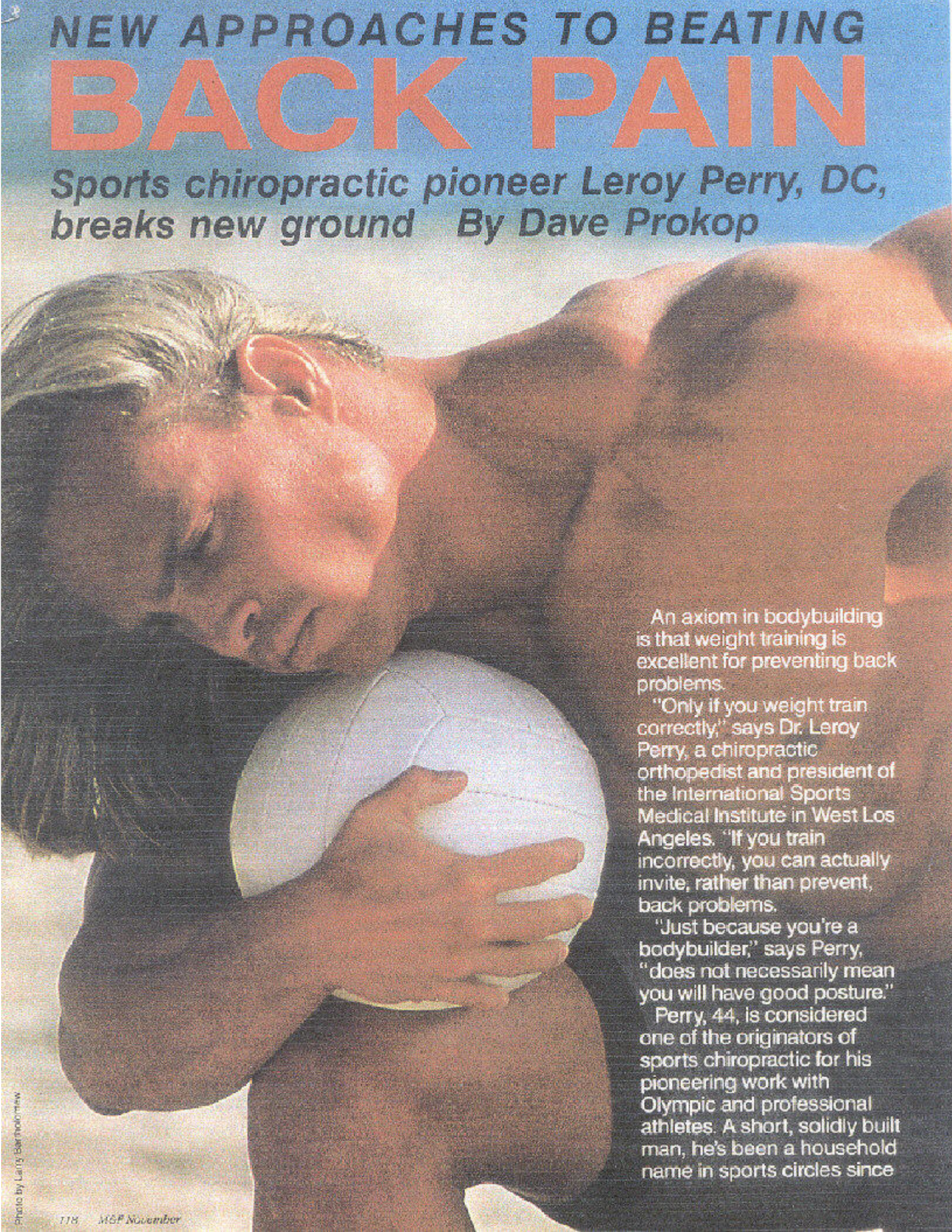


# NEW APPROACHES TO BEATING BACK PAIN

Sports chiropractic pioneer Leroy Perry, DC,  
breaks new ground By Dave Prokop



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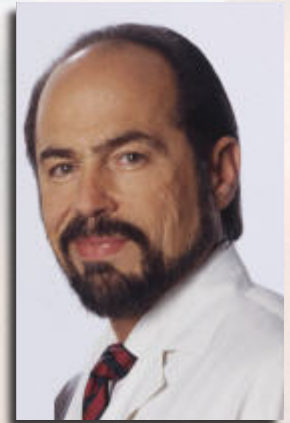


# Dr. LeRoy Perry's

## INTERNATIONAL SPORTSCIENCE INSTITUTE™

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An axiom in bodybuilding is that weight training is excellent for preventing back problems. "Only if you train correctly," says Dr. Leroy Perry, a chiropractic orthopedist and president of the International Sports Medical Institute in West Los Angeles. "If you train incorrectly, you can actually invite, rather than prevent back problems. Just because you're a bodybuilder," says Perry "does not necessarily mean you will have good posture." Perry, 44, is considered one of the originators of sports chiropractic for his pioneering work with Olympic and professional athletes. A short, solidly built man, he's been a household name in sports circles since the 1970's, when he became the first chiropractor ever to serve as an official Olympic team doctor (Montreal 1976) and his work was featured in such magazines as Sports Illustrated. He's treated athletes in almost every professional sport, and in 1977 he became the first chiropractor to officially work the World Series (he was the team chiropractor for the Los Angeles Dodgers). Treating back problems, of course, is a chiropractor's stock in trade. But Perry, who has treated thousands of back pain sufferers from around the world, has gone even further in the battle against back pain. Specifically, he's developed special equipment and innovative new therapy techniques to alleviate spinal compression and back pain.



### FAULTY TRAINING

"We treat a lot of bodybuilders who have developed poor posture because they simply did not train properly. Often they developed the front of their neck (the anterior neck flexors) versus the back of their neck (posterior neck extensors). This creates biomechanical instability of their neck and upper thoracic spine, often leading to injury. Another common example is people with rounded shoulders who probably developed their chest (flexors) more than their upper back (extensors), so they walk around with their heads projecting forward, looking like bulldogs. "Bad biomechanics is bad biomechanics. A lot of weightlifters and bodybuilders who are novices really have no idea what they're doing when it comes to developing proper muscle mass versus biomechanically efficient agonist and antagonist muscle balance. Therefore, they run the risk of either injuring themselves or performing below their maximum capability. "I learned a lot about weight training, power, strength, endurance and speed from some of my favorite athletes and friends - two-time Olympic gold medalist in the discus Mac Wilkins, Olympic bronze medalist in the shot put Al Feuerbach, former world record holder and Olympic medalist in the javelin Kate Sxhmedt, all-time great high jumper Dwight Stones, and Dwight's weight training coach Harry Sneider. To me, building a beautiful body is not enough; I want that body to be functional and biomechanically efficient under the utmost physical exertion. Alberto Juanterena, the great Cuban runner, taught me about endurance and speed, but only efficient biomechanics enabled him to become a double Olympic gold medalist. I feel that weight training, in the majority of Olympic and professional athletes' careers, has provided the extra strength and endurance to give them the winning edge." Bodybuilding is an excellent way to develop good posture, enhance athletic performance and prevent back problems, says Perry. "A symmetrical physique should equate to good posture, both at rest and in motion," he says. "You can enhance the athlete's posture through symmetrical development rather than just trying to build big muscles. Big muscles do not necessarily mean that there's an efficiency or symmetry of development." In other words, there's a physiological necessity, as well as an aesthetic one, to strive for anaerobic and aerobic balance as well as symmetry in bodybuilding. And when bodybuilding judges look for symmetry when they're judging a contest, they're unconsciously looking for good posture as well because the two, in fact, are interdependent.

Of course, even if you have perfect muscular symmetry and posture, you can still injure your back by lifting too much weight or using improper technique in exercises like the squat. If you arch your back too much, you may create too much load on your lower back.

### **TRAINING SMART**

"Often injury is a fine line between knowledge or experience and overzealous exertion," says Perry. "Many an Olympic or professional athletes lose the opportunity to perform in the big game or event because of last-minute overtraining. It isn't pumping more or harder. It's training smart that counts.

"Another problem that seems to be occurring is associated with what I call back room gym docs - you know, your friend who wants to help you when you experience that back spasm or pain in the neck. Then they want to help you a little more by trying to play chiropractor or medical doctor and manipulate your neck or back, or suggest their favorite drug. Unfortunately, sometimes one of these gym docs injures a friend and now there's a problem a pinched nerve, maybe a broken rib, a negative reaction to the drug and now a possible lawsuit. Sometimes a gym doc's help ends up causing severe enough injury that the athlete cannot train and valuable time is lost getting ready for a contest or some other sporting event. "A word to the wise. We have treated many athletes through the years that were injured as a result of back room gym docs. "There is nothing wrong with trying to help a friend. Just be smart. Don't try to do something you're not trained to do. And if you're the person who has pinched a nerve in your back, consult a professional."

Perry says that stretching and warming up before you train will reduce the rate of injury to muscles, tendons and ligaments. "The real problem is that few of us, myself included, take the time to warm up and stretch. I know what a pain in the butt it is to take the time to stretch. On the other hand, I personally experienced most of the injuries that you can get in weight training. I now look at the stretching as a good investment in my health.

### **WARM UP & STRETCH**

The best way to ensure good posture and muscle development is to warm up and stretch out before and after you train, whether you're doing a weight training workout or an aerobic activity. At the International Sportsmedicine Institute, we have combined athletic stretching and yoga to ensure proper decompression of the spine.

"One of the reasons I developed, products and self-help methods was to give athletes and other people with muscular compression problems an effective way to decompress their spines and stretch their muscles without having to come to us for continued treatment. Hippocrates said the word 'doctor' means 'teacher' and I believe a primary responsibility of the doctor is to teach patients to help themselves. We have taken Hippocrates' concept one step further by developing means and methods to help patients learn to help themselves."

One of his inventions is the Invertabod formerly called the Orthopod, a very simple but ingenious A-frame contraption that enables you to suspend your body straight downward while flexing from the hips, thus stretching and elongating the hamstrings, buttocks and spine, taking pressure off the spinal discs and nerves, alleviating back pain and often allowing for better circulation. Another unique aspect of the Invertabod is that it can be extended on the floor to allow the athlete to use it while in lying position with knees bent at a 30-degree angle, creating specific isolation of the lower abdominal musculature and abductor muscles to ensure the perfect sit-up or abdominal curl. In case you're wondering, hanging from a chinning bar by your hands is not an effective way to decompress your lower back. There's too great a distance between the hands and your lower back. The greatest destructive load is on the elbows and shoulders, not a great idea for anyone with a history of shoulder instability. "I should also point out that if anyone has a back problem, he or she should never use any equipment or therapy mode without first being examined by a professional."

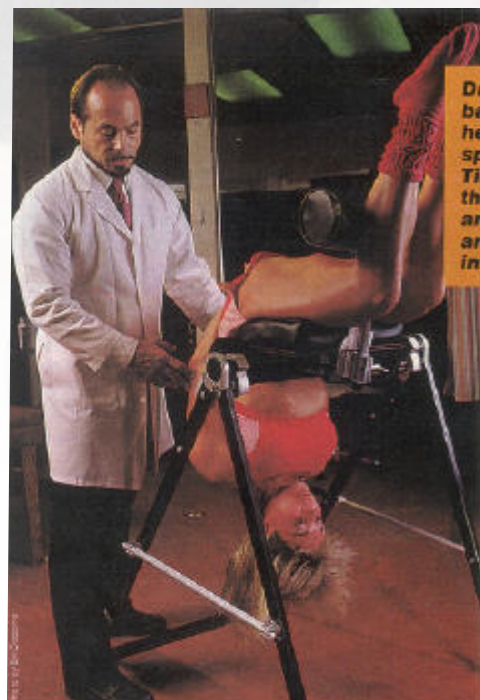
### **FINDING THE PROBLEM**

One of the reasons to see a professional when you hurt your back is that it's necessary to evaluate exactly what the particular problem is before starting treatment. Otherwise, you're just guessing - and that could have serious consequences. "My experience is that you cannot ever prejudge a back problem, says Perry." You have to be diagnostically on top of things, listen to the individual, and perform the proper examinations for evaluation, which often includes an X-ray or, if necessary, MRI (magnetic resonance imagery) in serious cases. Depending on the case, chiropractic manipulation may or may not be the answer. Sometimes consultation with a sports medicine podiatrist will be necessary to stabilize the feet and ankles to reduce compensatory pressure on the spine. Physical therapy, anti-inflammatory medication, acupuncture or any combination thereof may be helpful. Sometimes if the problem is extremely severe, surgery may be the only answer. But no matter what the treatment

protocol may be, good posture is a necessity to rehabilitate, as well as avoid, a back problem. And one thing hopefully that chiropractic does for you is to teach you about correct posture, reinforcing the proper techniques of movement. And if you have an alignment problem because of structural or muscle imbalance, you may need chiropractic manipulation to supplement your exercise program to stabilize your structural balance. But each case must be evaluated individually to determine need." "One of the most common back injuries that bodybuilders encounter is disc or nerve root damage from compressing the lower back as a result of doing squats or snatches with too much weight or using improper technique. But bodybuilders experience many other back problems and in his 18 years of practice Perry has treated them all. "In bodybuilding, back problems are generally caused by one of two things," says Perry. Too much weight or bad biomechanics. A third issue, however, that should not be overlooked is congenital instability. "Congenital instability means you're born with something wrong to begin with. Maybe you have a vertebra that didn't form properly, a spinabifida or hemivertebra. You might have various structural instabilities that won't go away by themselves. Other common problems include scoliosis, or curvature of the spine, where the spine forms a 'C' curve or an 'S' curve when viewed from the front. Lordosis, or sway back, when viewed from the side. Or kyphoscoliosis, forward slumping or curving of the upper thoracic spin, often causing the head and neck to protrude. "So the point is that you've got to take into consideration that an individual may have been born with one leg slightly shorter than the other. And the person may have developed a spinal curvature secondary to having a shorter leg or some other structural problem. So when you get into these areas, it's a whole new can of worms, and you've got to understand what it is you're dealing with. Just remember, structure and function are dependent upon each other. The bodybuilder or weight trainer must understand that his/her athletic endeavor is predicated on the physics of load. If you go against the laws of physics, you will inevitably pay the price."

## WATER THERAPY

Perry continues to take an innovative approach to treating back pain, such as water therapy. Aqua-aerobics, aqua-kinetics and many other forms of aerobic and anaerobic water exercise popular today are the direct result of his research. Perry, who comes from a family of all-American swimmers, swam in competition for 11 years. But it wasn't until he was seriously injured in an accident that he truly understood the therapeutic benefits of water. In the mid-'70s, after being exposed to hydrotherapy concepts while working with Olympic athletes in Germany, he started using hydrokinetic therapy on athletes and nonathletes alike. Often patients at ISI are placed in a swimming pool, either in a horizontal or vertical position, depending on the individual's specific problem. Horizontal Hydrokinetic Spinal Decompression Therapy can be performed both supine and prone in the water. Although some bodybuilders shy away from swimming pools out of a misguided fear that water will somehow deflate their muscles, Perry points out that water therapy like that used at ISI can enable bodybuilders to deal with a back problem and keep training at the same time. He says: "The East Germans



Dr. Perry's innovations in back pain therapy have helped athletes from all sports. Here Perry shows Tina Plakinger how to use the Invertabod to stretch and relax spinal muscles and reduce pressure on intervertebral discs.

were among the forerunners in devising methods that would enable the athlete to continue to train through or around injuries. Hydrokinetic decompression techniques are self-help methods that serious bodybuilders and other athletes who train with weights can use to help themselves in this regard."

In Vertical [Hydrokinetic Decompression Therapy](#), spinal distraction (or stretching) occurs by submerging the patient in water vertically up to the shoulders with a flotation vest on the upper torso and a tether around the waist attached to weights below (regular plates like you'd put on a barbell bar, except that they're plastic or rubber-coated so they won't scar the bottom of the pool or rust). The flotation vest exerts an upward pull on the patient's spine, the weights exert a downward pull, thus distraction (or stretching) occurs by submerging the patient in water vertically up to the shoulders with a flotation vest on the upper torso and a tether around the waist attached to weights below (regular plates like you'd put on a barbell bar, except that they're plastic or rubber coated so they won't scar the bottom of the pool or rust). The flotation vest exerts an upward pull on the

patient's spine, the weights exert a downward pull, through distracting (or stretching) the spine and relieving all or a lot of the back pain. (Note: Not any style flotation vest will work. You cannot use a vest with any straps or flaps between the legs. This creates vertical pressure on the groin and substantially reduces the benefits of Perry's hydro-decompression technique.) The amount of weight suspended from the tether varies depending on the individual's bodyweight, size, muscle mass, and orthopedic/neurological/muscle examination evaluation in the case of a disc, scoliosis or other back problems (all of these examinations are repeated periodically depending upon the response of the patient). The weights can be increased or decreased, and the duration of time spent in the water can be altered as the particular situation demands.

**PAIN RELIEF**

After working on thousands of patients with disc, nerve and back problems of all types (many of these patients referred to ISI by physicians for all parts of the U.S. and abroad), Perry says, "There is no panacea, no magical technique that will somehow make a herniated disc or fragmented disc go away. However, in many cases of disc bulge, nerve compression, scoliosis and other neuro-musculo-skeletal compression problems, Hydrokinetic Spinal Decompression Therapy has worked wonders. These patients are often referred to ISI by their physicians because they cannot take medication due to sensitivity or allergic reaction to drugs. Others are referred because they have heart problems or are just too old to be suitable candidates for surgery. So their doctors are seeking alternative methods of pain relief for these patients. Diabetics, patients with vascular problems and the aged in general can often benefit from Hydrokinetic Decompression Therapy." In the past, many such patients would ordinarily be told to go home and live with the pain. But Perry finds a great majority of these people can be helped - often dramatically. Again, he's quick to point out there is no magic wand, and for these types of conditions you should always check with your physician before attempting a weight training program, hydrotherapy or any exercise program. It takes hard work to stay healthy and deal with back pain. Sometimes the family members have to play a role in the recovery phase. He says the pool technique is a great help, but the patient must also understand the importance of proper biomechanics in everything he/she does.

"There is no substitute for correct posture," Perry says. "It's all a matter of physics, distribution of weight and load. If you cross the line of proper balance, something must give."

**HEAL THYSELF**

Perry has been called a futuristic self-help thinker because he strives to find ways for patients to help themselves rather than just treat them. It's an attitude that grew out of his own struggles to overcome serious injuries he sustained when he was in his 20s - most notably a work-related injury on a summer job during his college days when a crane fell on him and his leg was so badly damaged it took 6 1/2 years and four surgeries before he could walk without a crutch or cane. "Having had more injuries than I care to remember as a pre-med student and being a patient for many years, I became very disenchanted with the medical approach to health care," he says. "It was always another drug, another surgery or some therapist who never knew quite what to do, trying to work on you after being given inadequate instructions by a physician who often knew little or nothing about rehabilitation to begin with. Years later, when I became a chiropractor, then eventually a chiropractic orthopedist and started my own practice, I had the opportunity to work with physicians and athletes from Eastern European countries. I was impressed by a difference in attitude that revolved around patient education and self-help concepts. In order to maintain a patient relationship with a clinic in those countries, the patients and even their families were often required to attend a lecture on health. Today at ISI we still host such orientation lectures for our patients with emphasis on self-help." Thanks to people like Perry, some very sophisticated, innovative ways to deal with back problems are available today. However, even he would agree, the best approach where the back is concerned is to avoid problems in the first place. When doing exercises directly affecting the back (squats, hyperextensions, etc.) adhere to strict, correct form and don't use more weight than you can handle. Train all the muscles to ensure muscular symmetry and correct posture. Be careful not to gain too much weight around you midsection - a protruding belly is almost guaranteed to adversely affect your posture and put added stress on your lower back. Also, as already mentioned, it's a good idea to decompress the spine before and after you exercise or train. If you happen to have a congenital back instability, as many people do, all of the above becomes even more important. Plus, you probably should be working closely with a sports chiropractor like Perry, an experienced physician or some other professional who can examine you from time to time and expertly set up a regimen, which will help to enhance your performance and hopefully prevent back problems - or rehabilitate the back if problems occur.

