



Health Research Report #6

# **THE WINNING EDGE**

**Athletic Performance  
and Chiropractic**

**By Keith Wassung**

Athletes have been benefiting from Chiropractic care for many years; however, it has only recently been receiving attention from the media. Athletes of all types, from the weekend warrior to the world-class athlete, utilize Chiropractic because it is a drug-free way to better health and performance.

Chiropractic adjustments help ensure that the body functions as efficiently as possible, which can maximize healing and recovery from all types of injuries.

***“I would estimate that at least 90% of world class athletes use Chiropractic on a regular basis to prevent injuries and to improve their performance.”***

SEAN ATKINS, Ph.D. Exercise Physiologist

**The following is just a partial list of athletes who use Chiropractic care:**

Joe Montana, Roger Craig, Keith Jackson, Emmitt Smith, Chris Carter, Evander Holyfield, Roy Jones, Jr., Wade Boggs, Penny Hardaway, Jon Smoltz, Ken Griffey, Jr., Mark McGwire, Ryne Sandberg, Ricky Bell, Brett Butler, Dominique Wilkins, Michael Jordan, Scottie Pippin, Charles Barkley, John Stockton, Robert Parish, Gerald Wilkins, Lee Haney, Jan Stephenson, Jim Connors, Irving Fryar, Alex Karras, Arnold Schwarzenegger, Dr. Frank Columbu, Wayne Gretzky, Brett Hall, Tiger Woods, Roberto Clemente, Michael Carbajol, Bob Hayes, Muhammad Ali, Ed Too Tall Jones, Gary Clark, Mark May, Charles Haley, Bill Fralic, Dan Marino, Nancy Ditz, Warren Moon, Tim Dwight, Jack Dempsey, Beth Daniel, Mary Lou Retton, Olga Korbut, Rocky Marciano, Dan O'Brien, Bruce Jenner, Donovan Bailey, Mac Wilkins, Dwight Stones, Mary Decker, Willie Banks, Gregg Blasingame, Fred Funk, Billy Jean King, Tracy Austin, John McEnroe, Ivan Lendl, Lance Armstrong, Aaron Rodgers, Tom Rathman, Tom Brady, Maurice Jones, Johnny Damon, Terrell Owens, Dan Marino



**31 percent of NFL teams use Chiropractors in an official capacity as part of their staffs and a full 77 percent of the trainers have referred to a Chiropractor for evaluation or treatment. A survey of certified NFL trainers revealed that 100% of them agree that players will use Chiropractic without referral from the team medical staff.<sup>1</sup>**

**The science of Chiropractic is founded on the premise that a proper nerve supply is essential to controlling and regulating the functioning of the human body.**

The central nervous system controls every activity in the body by sending and receiving nerve messages and is protected by the bones of the spine called vertebrae.

**When the spine is in its optimal structural position, the nerves are protected and optimal communication exists between the central nervous system and the rest of the body.**

The vertebra of the spine is susceptible to certain stresses and forces, which can cause them to lose their proper structural position.

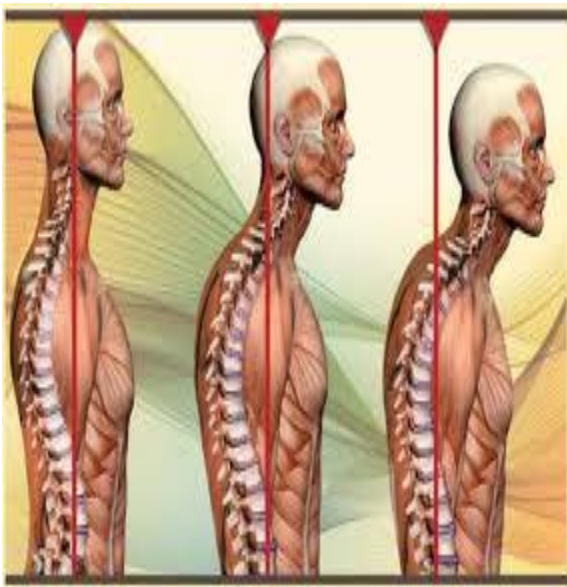
**These minor misalignments of the spine referred to as “subluxations” cause nerve interference and weaken the entire structure of the spine.**



Athletic training can often jar and misalign the spinal column, because the spine is at the center of the body. Impact to the legs, feet, head, shoulders and torso often radiates to the spine.

**Doctors of Chiropractic detect and correct vertebral subluxations by physically adjusting the spine. This restores the spine and nervous system to a more optimal level of function, which maximizes the body’s performance and healing potential.**

Anyone who engages in athletics can benefit from regular Chiropractic checkups to ensure that their spine is balanced and free from structural stress and subluxations. When the spinal column is brought into balance and alignment, the body's nervous system and body biomechanics (posture) are maximized.



*"Changes in the optimal spinal position produce spinal pathologies and loss of function. Spinal pathologies destroy joint reflexes, arc fibers and cause nerve impedance."*<sup>2</sup>

*"Postural strength and coordination are essential for injury prevention and sports performance"*<sup>3</sup>

**Thomas Harris, MD The Sports Medicine Guide**

*"Posture affects and moderates every physiological function, from breathing to nervous system function, and despite the considerable evidence that posture affects physiology and function, the significant influence of posture on health is not addressed by most physicians"*<sup>4</sup>

**American Journal of Pain Management**



In an average year, 25 million people visit a doctor for injuries that they suffer as a result of athletics. In professional sports, injury is the number one reason for early retirement. Overall, 67 billion dollars is spent each year for the treatment of athletic injuries.<sup>5</sup>

### U.S. News and World Report

There are essentially two categories that athletic injuries fall into: acute or traumatic, which is usually the result of a sudden impact or unseen force; and repetitive overuse such as swinging a racket or a golf club. In fact, virtually every workout results in micro-injuries as the body is torn down and then rebuilt through rest and recovery.

As a society, we have been conditioned to believe that symptoms are bad and that the key to health and recovery is their removal. However, symptoms are actually part of the body's healing and repair process



***“Symptoms represent the body’s best efforts to heal itself. By treating symptoms, you are suppressing the body’s natural response and inhibiting the healing process. Instead of treating symptoms, doctors should stimulate the body’s defenses to allow for completion of the healing process.”***<sup>6</sup>

Dr. Stephen Cummings

**If you had a fire in your house, you would not cut off the alarm and then relax, thinking that the fire is gone. The same thing happens to your body when you continue to ignore or mask symptoms. This is why athletes often develop chronic injuries.**

*“Many treatments, compounds and medications claim to speed the rate of healing. I have not read a single scientific article that demonstrates that healing time can be increased artificially. You cannot beat nature. All doctors can do is to be very careful that they do not slow down the natural healing process.”*<sup>7</sup>

**William Southmayd, MD**

Chiropractic's focus on the nervous system and postural biomechanics allow the body to function properly and to heal itself. The healing process always occurs from within the body, but research has shown that Chiropractic has an amazing potential to assist the body in the recovery process.

*“The quality of healing is directly proportional to the functional capability of the nervous system to send and receive nerve messages”*<sup>8</sup>

**Journal of Neurological Science**

More sports-related non-fatal injuries are treated in hospital departments than any other type of unintentional injury. Standard medical procedures may be necessary when an athlete is injured.

**Traditional medical professionals specialize in the management and care of fractures, dislocations, lacerations and damaged tendons and ligaments.**

However, many athletes leave the hospital with as much spinal stress (subluxations) as they were suffering from when they entered.

**Doctors of Chiropractic focus on the entire structure of the body rather than just the obviously injured part. For this reason, they can often detect and help to prevent an injury that might normally be overlooked or ignored.**



*"You obviously cannot compete at your fullest if you are not in alignment and your body cannot heal itself properly if your spine is not in alignment."*

**Dan O'Brien, Olympic Decathlete**

*"Chiropractic has really helped me to keep my body in line to help my body recover"*

**Chris Carter, Minnesota Vikings**

*"Chiropractic has helped keep me injury free--that is half the trick to staying in competition"*

**Lee Labrada, Mr. Universe**

*"As long as I see the chiropractor, I feel like I'm one step ahead of the game"*

**Tom Brady, New England Patriots**

***"Chiropractic has helped thousands of athletes, amateur and professional overcome an injury without resorting to surgery."***<sup>9</sup>





Because Doctors of Chiropractic are experts in the field of human biomechanics, they are very aware of proper posture and movement.

By observing an athlete in action, a Chiropractor can often detect and prevent a structural problem that can lead to injury or poor performance.

Athletic injuries are often caused by improper biomechanics or muscle imbalances within the spine.

Athletes have also discovered that Chiropractic care allows them to achieve an optimal level of performance when training and competing in their respective sporting event

A proper biomechanical structure allows athletes to achieve and maintain their optimal level of performance-safely and naturally. There is a growing body of research and case studies, which clearly show the relationship between Chiropractic care and athletic performance.



**A Canadian research team included Chiropractic care in the rehabilitation program of sixteen injured female long distance runners. Not only did these runners recover quickly, seven of them actually scored "personal best" performances while under Chiropractic care.**<sup>10</sup>



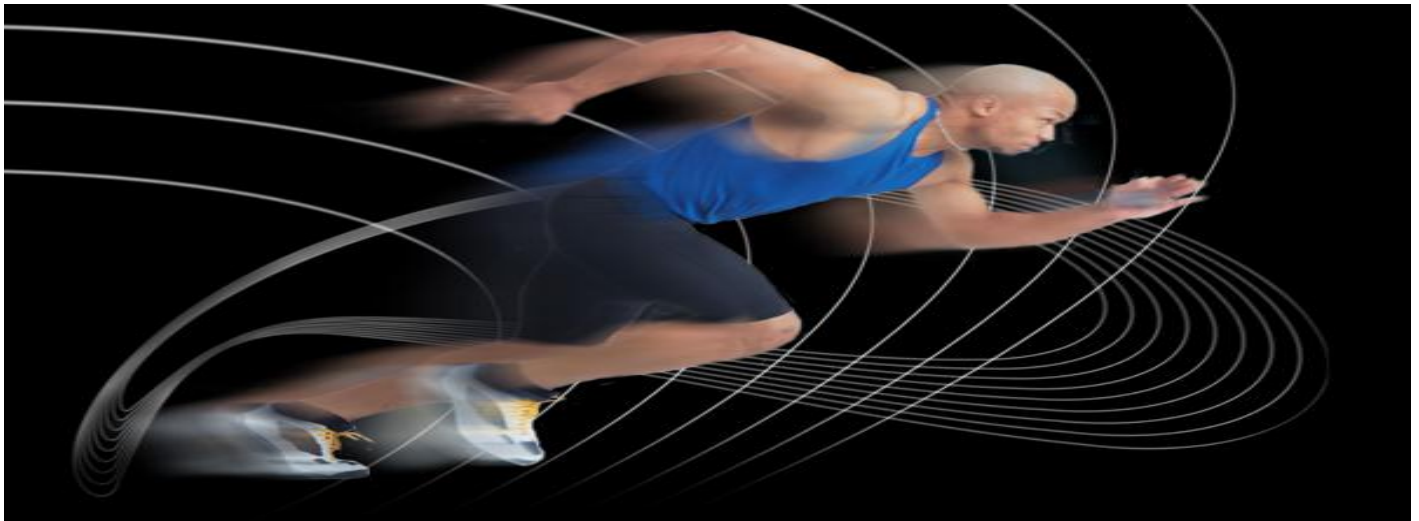
The extent of Chiropractic's "winning edge" was tested on fifty athletes who were divided into a control group and a group, which added Chiropractic care to their usual training procedures.

After six weeks, the group under Chiropractic care scored significantly better on standard tests of athletic ability. When tested on their reaction time, the control group demonstrated less than one percent improvement, while the Chiropractic group achieved reaction times more than eighteen percent faster than their initial scores.<sup>11</sup>

A landmark research effort from the New Zealand School of Chiropractic and the University of Auckland, has evaluated the effects chiropractic adjustments may have on reaction times. Two groups were tested to study variations in reaction times; one group received spinal adjustments, while the other group, only receiving a short period of rest, acted as a control group for comparison.



There was a marked improvement for the group that received an adjustment over the group that received nothing but rest. The group that got only a rest period did show an average decrease in reaction time: 58 milliseconds, an 8% faster reaction time. The group that received the chiropractic adjustment showed a decrease in reaction time of 97 milliseconds, representing a 14.8% faster reaction time.<sup>12</sup>



**The implications for these findings are far reaching for any activity in the game of life, and the data can objectively support anecdotal evidence of enhanced athletic performance under chiropractic care. The ability to react more quickly to any of the demands life can impose provides added performance enhancement benefits for athletes, who rely on optimum reaction reflexes to perform at their maximum competitive capacity. Field based practice experiences indicate that chiropractic care appears to both enhance an athlete's ability to perform and to recover from injuries when they occur; this study provides objective evidence that a vital component of athletic performance rapid reaction time is markedly improved through the chiropractic adjustment.**



## TOP ATHLETES UTILIZE CHIROPRACTIC CARE FOR BETTER PERFORMANCE



*"Athletes are always looking for ways to improve their performances on the field; Chiropractic is one of the best ways to accomplish this"*

**Dr. Nick Athens, Team DC San Francisco 49ers**

*"I definitely try to get on a basis where I use Chiropractic at least twice a week. I would say definitely say that it helps me to perform at a higher level"*

**Emmit Smith, Dallas Cowboys**



*"My shooting has improved because of Chiropractic. I feel more balanced and have more coordination and control. Since I have been under Chiropractic care, I have improved by leaps and bounds"*

**Gerald Wilkins, New York Knicks**

*"Chiropractic is essential for running. If I could put a percentage value on it, I would say that I compete 8-10% better from regular Chiropractic"*

**Dan O'Brien, Olympic Decathlete**



*"Chiropractic helps athletes win without pain and aids in enhancing performance naturally"*

**Tonya Knight, Professional Bodybuilder**

*"I have to have an adjustment before I go into the ring. I do believe in chiropractic. I found that going to a chiropractor three times a week helps my performance. The majority of boxers go to Chiropractors to get that extra edge."*

**Evander Holyfield, Heavyweight Boxing Champion**



It is estimated that 30 million children now participate in organized sports including soccer, football, swimming, gymnastics, hockey, skating and baseball. Correspondingly, as participation increases, injuries increase. Sports injuries to young people now exceed the occurrence of infectious disease.<sup>13</sup>



More than 700,000 children under the age of 15 are taken to the hospital emergency room for treatment of sports-related injuries. In fact, children between the ages 11-15 account for 55% of all sports-related injuries that require hospitalization.<sup>14</sup>

Sports and recreational activities account for 4.3 million or 36% of all injuries to children in the United States.<sup>15</sup>

### AMERICAN FAMILY PHYSICIAN

The increase in emergency-related injuries for children includes well-known injuries such as broken arms and twisted ankles-these injuries are certainly not new. What is new; however, are the types of children's sports injuries seldom seen in past generations. They are overuse injuries caused by small, but repetitive injuries to the body's tissues, joints and spinal column resulting in chronic health conditions.



Chiropractic adjustments for children of all ages are of tremendous benefit for the treatment and prevention of injuries and to maximize performance potential.

Chiropractic's focus on the spine and nervous system is also important for children, since it is their nervous system, which controls their entire growth and development.

# CHIROPRACTIC FACTS

Chiropractic is the fastest-growing and second-largest primary health care profession.

Doctors of Chiropractic receive extensive, demanding professional education on par with medical doctors (MDs) and osteopaths (DOs).

Doctors of Chiropractic are primary health care providers.

Doctors of Chiropractic are licensed in all 50 states.

Chiropractic is recognized by governmental health care programs.

The Doctor of Chiropractic is an effective source of preventative and wellness care.

The process of chiropractic adjustment is a safe, efficient procedure which is performed nearly one million times every working day in the United States.

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## COMPLIMENTS OF



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