

# COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM) FOR ATHLETES: WHAT YOU NEED TO KNOW FOR PEAK PERFORMANCE INTRODUCTION

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Along with smelly running shoes, just what do active and athletic people have hidden in their gym bags these days? Those of you who are curious are likely to find a visualization/relaxation tape, a belt of magnets, and **the appointment card for a massage therapist, chiropractor, or acupuncturist.** The use of complementary and alternative medicine (CAM) has exploded in recent years [1]. The breakthrough 1993 and 1998 surveys of the general population in the United States by Eisenberg et al [1,5] indicated that 42% of respondents reported CAM use, that 72% of CAM users did not tell their physicians that they had done so, and that visits to a CAM practitioner exceeded the total visits to primary care physicians! Not only is the baby boomer population integrating complementary and alternative medicine into their repertoire of health care options, but also, **professional and elite athletes are voicing satisfaction with the treatments they receive from acupuncturists, chiropractors, massage therapists and mind-body practitioners [3].**

## ATHLETES ALWAYS LOOK FOR AN ADVANTAGE

Athletes have always been progressive in finding therapies or treatments thought to increase power, speed, and overall performance. As a former professional athlete and sports chiropractor, I have witnessed first hand the measures that athletes will go to in order to obtain a competitive advantage. It is these elite athletes that are leading the charge in exploring complementary and alternative therapies. The increased popularity of CAM use by athletes has prompted an increased interest in research. A recent survey of NFL trainers found that 31% of NFL teams have an "official" chiropractor on staff; of teams without an official chiropractor, 12% referred players to chiropractors [4].

Athletes can maximize their health and performance through a well designed complimentary injury prevention and treatment program. It is important for all consumers of complementary and alternative therapies to gain information and understanding about the services and practitioners that they choose. There are a variety of choices available which can provide specific and individualized results with the guidance of a qualified practitioner.

## TREATMENTS FOR SPORTS INJURIES

### MASSAGE THERAPY

Massage therapy includes a variety of methods, from the long, gliding strokes of Swedish massage to the targeted pressure of deep-tissue massage. One study has shown that massage may reduce muscle soreness after exercise. [14] Sports massage may be tailored to the pre and post competition needs of athletes, but athletes also use regularly scheduled sessions to help avoid injuries. Since the evidence supporting the effectiveness of massage is so overwhelming, it was included in the official medical services at the Olympics for the first time in Atlanta in 1996.

### CHIROPRACTIC

Doctors of Chiropractic have extensive education and specialize in the management of neuromusculoskeletal conditions primarily through joint mobilization and manipulation of both the spine and extremities, rehabilitation exercises, physical therapy and nutrition. A growing number of scientific studies support the use of chiropractic for neuromusculoskeletal conditions. [7,8,9,10,11,12] Chiropractic specialization in neuromusculoskeletal conditions, creates a natural fit for athletes dealing with injury rehabilitation and injury prevention. There are now over 1600 chiropractors who belong to the American Chiropractic Association's Council on Sports Injuries and Physical Fitness. Also, the Canadian College of Chiropractors offers a fellowship program in sports sciences where chiropractors undergo an additional 3 years of training specializing in sports injuries, orthopedics and team dynamics.

### ACUPUNCTURE

Acupuncture is a traditional Chinese healing method that involves inserting thin needles at specific anatomic points to redirect the body's energy flow, known as Qi. Acupuncture received a boost last year when a National Institute of Health (NIH) consensus development statement concluded that it may be beneficial as an adjunct therapy, an acceptable alternative, or part of a comprehensive treatment program for such conditions as tennis elbow, fibromyalgia, low back pain and carpal tunnel syndrome. [6]

## RELAXATION TECHNIQUES

A 1997 NIH report "found strong evidence for the use of relaxation techniques in reducing chronic pain in a variety of medical conditions". [15] These techniques include autogenic training (which focuses on imagining a peaceful environment), meditation, progressive muscle relaxation, and paced or deep breathing. The mental focus involved in the practice of these techniques is familiar to many athletes, who may use directed thought patterns to enhance performance. Familiarity with such mental focus methods may make athletes candidates for using relaxation techniques to lessen pain.

## MAGNET THERAPY

Magnet therapy is the latest interest among athletes, who claim it reduces muscle soreness, swelling and pain. It involves wearing high powered magnetic disks or sleeping on magnetic mattress pads. Though therapeutic magnets have been used for decades by some athletes, research on their effectiveness has just begun. One current effort is being led by Ann Gill Taylor at the Center for the Study of Alternative and Complementary Therapies at the University of Virginia in Charlottesville. Her double-blind, randomized, controlled study is evaluating how sleeping on a static magnetic mattress pad affects pain in fibromyalgia patients. Bioelectromagnetism, which involves extremely low-voltage electrical currents and magnetic fields, has been studied for its effects on pain relief and on soft-tissue wound healing. [18] Possibly the most significant finding of this therapy is that it may promote healing in non-uniting bone fractures. [13]

## THE FUTURE OF CAM AND ATHLETICS

As you can see, complementary and alternative medicine has found its way not only into the healthcare arena of the general public, but also onto the practice fields and into the equipment bags of both amateur and professional athletes. We must find a way to guide and educate those active and athletic patients who are trying to navigate this maze of healthcare options. Integration of complementary and alternative medicine into the athletic arena is only going to increase in the future, which calls for more collaboration and discussion between healthcare practitioners of both conventional and complementary medicine. This is an extremely exciting time to be an athlete, and with further research, we will be able to discover those complementary and alternative treatments that are the most efficacious and safe for athletics in their quest for the ultimate performance aid.

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