

# WellSpring

## The Role of Complementary Alternative Medicine in Physical Activity and Sport

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Complementary alternative medicine (CAM) is often associated with healthy living. This is partly because many complementary alternative care providers tend to be wellness-oriented, meaning they take a patient's lifestyle factors into account when considering a diagnosis.

Research exploring CAM and physical activity is limited. Many people wonder what CAM professionals do and how their work is related to physical activity. This article explores such questions and addresses how CAM professionals can be an effective group of advocates for increased physical activity and lifestyle improvements.

Research demonstrates that people who seek complementary alternative care are more likely to take responsibility for their own health and are less likely to be obese. They are also 45% more likely to report frequent physical activity than those who seek conventional medical care alone (Ndetan et al., 2005).

### What's in This Article for You?

- Types of Complementary Alternative Medicine
- About Chiropractic Care
- About Massage Therapy
- About Acupuncture



### Types of Complementary Alternative Medicine

There are many forms of complementary alternative medicine available to Canadians, however some are more heavily utilized than others. Chiropractic care, massage therapy and acupuncture are among the most utilized forms of CAM in Canada (Foltz et al., 2005).

Complementary alternative health care providers enable their patients to be more physically active through health education, injury prevention and injury rehabilitation techniques.

As more people aim to take a proactive role about their own health, CAM has grown in popularity (Sirois, 2008). Taking an active role in one's health and treatment of the whole person were the two top reasons for using CAM in 2005. The third most likely reason was being dissatisfied or unhappy with the results of conventional medical care (Sirois, 2008).

Generally, CAM providers are in a good position to educate and reassure their patients on maintenance of muscle and connective tissues through nutrition, exercise and stretching. In many cases, patients see a CAM professional regularly, which can provide an excellent opportunity for regular promotion of physical activity and injury prevention education (Ndetan et al., 2005).

### About Chiropractic Care

Chiropractic care is used for all types of injuries, from runners with plantar fasciitis, to office workers with neck pain. Chiropractors are licensed health care professionals who specialize in the diagnosis and management of neuromusculoskeletal injuries.

Chiropractors frequently provide treatment for low back pain, joint pain, and postural syndromes. Patient treatment usually involves a combination of manual adjustments, soft tissue therapies, rehabilitation techniques and modalities.

During a chiropractic adjustment, the chiropractor uses his/her hands to manipulate the joints of the body – particularly the spine – in order to reduce pain, and restore or enhance joint function. Many chiropractors are also trained in acupuncture, active release therapy, kinesiotaping and graston techniques.

Research demonstrates that chiropractors commonly prescribe exercise as part of patient treatment and are competent in educating their patients on the benefits of physical activity (Ndetan et al., 2005).

Since many patients fear that engaging in physical activity will cause or worsen their pain, chiropractors can play an integral role in encouraging and reassuring their patients to remain active post-injury. Chiropractors also help patients to maintain physical activity by providing education on injury prevention, and by providing nutritional advice targeted at

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keeping bones and joints healthy.

### Example: Chiropractic Management of Back Pain and Physical Activity

Chronic back pain is the condition associated with the highest rate of CAM use, with chiropractic being the most widely used therapy for this condition (Foltz et al., 2005). Back pain can

be extremely debilitating and can result in significant time off work and loss of function. Patients with low back pain often avoid exercise for fear of making their condition worse.

Chiropractors can effectively treat those suffering from low back pain by providing pain relief through spinal adjustments, soft tissue therapy and prescribed exercise. Research demonstrates that exercise combined with manipulation is an effective treatment for low back pain (Lawrence et al., 2008). Chiropractic treatment can result in less disability, and a faster return to work, normal daily living and physical activity.

### About Massage Therapy

Most people associate massage with stress reduction and relaxation. Although massage therapy does achieve this effect, it also has many physiological benefits.

Massage therapists integrate a variety of massage techniques to accomplish a desired effect in the soft tissues of their patients. The techniques frequently used in research are referred to as Swedish massage.

Those who practice sports massage use more specialized techniques that may include compressive strokes, broad circular friction, and jostling strokes (Mraska, 2005). These techniques serve to relax the muscles by warming tissue, assisting in circulation, stretching the muscle and fascia, breaking down scar



tissue, reducing trigger point activity and loosening adhesions between tissues (Mraska, 2005).

Adequate flexibility and range of motion are generally believed to be beneficial to injury prevention and optimal muscular performance. Soft tissue limitations, such as adaptive shortening of muscles and improper body alignment, can result in over-compensation by muscles in other regions, which is associated with injury. Massage therapy may increase range of motion and flexibility by affecting both the muscular and connective tissues (Mraska, 2005).

Muscle pain and tenderness generally develop 24 hours after exercise and are usually described as delayed-onset muscle soreness (DOMS). Massage is widely used as a therapeutic modality for recovery from DOMS, muscle fatigue, and inflammation (Zainuddin et al., 2005). Studies have demonstrated that massage is effective in alleviating DOMS and reducing muscle swelling after an exercise session (Zainuddin et al., 2005).

The effects of massage on DOMS are particularly important for those who are just beginning an exercise program, as they might be tempted to stop exercising for fear of injury. Massage therapists can help relieve the pain associated with beginning an exercise program and provide reassurance to their patients.

### Psychological Elements of Massage and Fitness

Most people are familiar with the benefits of massage that relate to relaxation, stress and similar psychological factors.

In the general population, massage therapy has been reported to reduce psychological measures including



anxiety, tension, stress and depression, and increase mood and quality of life, all of which contribute to the patient continuing physical activity (Mraska, 2005).

When it comes to sports, the psychological component to sporting competition is very influential on the athlete's success. Massage has been shown to offer athletes a psychological edge over the competition (Mraska, 2005). Athletes have reported to be more refreshed, recharged, rested and recovered when an exercise session was followed by massage (Mraska, 2005). In sports such as gymnastics or golf, where the ability to stay relaxed and focused are very important, massage offers performance benefits of a non-physiological nature by enabling the athlete to stay calm.

### About Acupuncture

Acupuncture has been practiced in Asia for over 2000 years. It is a popular form of CAM that can be used to help control pain, hasten recovery, and treat injury (Wadsworth, 2006).

According to the philosophy of traditional acupuncture, energy circulates in "meridians" located throughout the body. Pain or ill health happens when something occurs to cause this meridian energy circulation to be blocked. The way to restore health is to stimulate the appropriate combination of acupuncture points in the body by inserting very thin needles (Manheimer et al, 2010).

Modern acupuncturists use sterile, disposable acupuncture needles to treat acupuncture points selected according to symptom location and origin (Wadsworth, 2006). Acupuncturists often treat myofascial trigger points, which are taught bands of muscle fibres. These points can produce significant pain. Acupuncturists sometimes treat trigger points directly, while some acupuncture points are



purported to treat symptoms related to specific organ systems, or headaches. Many of these points have been validated by magnetic resonance imaging (MRI) studies (Wadsworth, 2006).

Acupuncture is a minimally invasive, relatively safe treatment that appears to have positive effects on the central and peripheral nervous system, immune system, and pain perception (Wadsworth, 2006).

### Acupuncture for Pain Control


Clinical trials and the combined results of studies (meta-analyses) have supported the effectiveness of acupuncture for treatment of a variety of conditions that are normally treated by sports medicine specialists. These include some of the more chronic and difficult conditions seen in sports medicine, such as “tennis elbow” [lateral epicondylitis] and “runner’s knee” [patellofemoral pain] (Wadsworth, 2006).

Osteoarthritis is a major cause of pain and functional limitation, yet few treatments have been found to be safe and effective. Recent research demonstrates that acupuncture can be an effective treatment for pain associated with osteoarthritis (Manheimer et al., 2010).

Joint pain can interfere with a person’s rehabilitation and participation in physical activity. Although acupuncture should not replace the role of physical rehabilitation, it is a useful adjunct to treat pain, enabling the patient to continue with their rehabilitation program and regular physical activity.

### Looking Ahead

The use of various types of CAM continues to rise in Canada, with many patients reportedly pleased with the results.

Different types of CAM professionals are in an ideal situation to provide information to their patients to encourage participation in physical activity. For wider integration of CAM to occur within health treatment plans for individuals, it will be vital for primary health care providers, fitness professionals and CAM professionals to continue and increase their collaborations, to ensure that all patients are aware of their options and receive the best possible health care. 

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## Mission Statement of the Alberta Centre for Active Living

Working with practitioners, organizations, and communities to improve the health and quality of life of all people through physical activity.

### IF YOU HAVE ANY SUGGESTIONS OR QUESTIONS, WE’D LIKE TO HEAR FROM YOU.

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