

### CUTTING EDGE TREATMENT OPTIONS FOR

# Back and Joint Pain

## Sound wave, or shockwave therapy, is making huge strides in the athletic world.

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Many athletes suffer from pain in their backs and joints. Football players, in particular, often suffer from back, knee, and shoulder problems and are amazed to learn that if their back is hurting, it is often a sign of something that impacts their performance far more than most of them ever realize. Because the spine (back and neck) protects the spinal cord and nerves, when an athlete damages their back and compromises the nerves between the bones of their spine, the organs, and muscles at the end of those nerves are also compromised and weakened. Competitive athletes realize the difference between success and failure on any given play—a touchdown, a sack, or an interception—could be outperforming their opponent by one percent. As a result, many champion athletes turn to chiropractors to have nerve testing, spinal x-rays, and motion x-rays taken to see if they can improve the alignment of their spine and functioning of their nerves.

Chiropractic care addresses three major concerns for many athletes: performance, injury prevention, as well as current and future quality of life and Montana State University (MSU) football players and our community are fortunate to have a number of high-quality

chiropractic options available in Bozeman. Not only does this type of care potentially improve the players' performance, but it also strengthens their entire bodies, which reduces the likelihood of injury. There are four essential ingredients needed for all body parts to function well: food, water, air, and nerve energy. The first three, food, air, and water, are delivered to all parts of our bodies via the bloodstream, which is why the heart is so important. Nerve

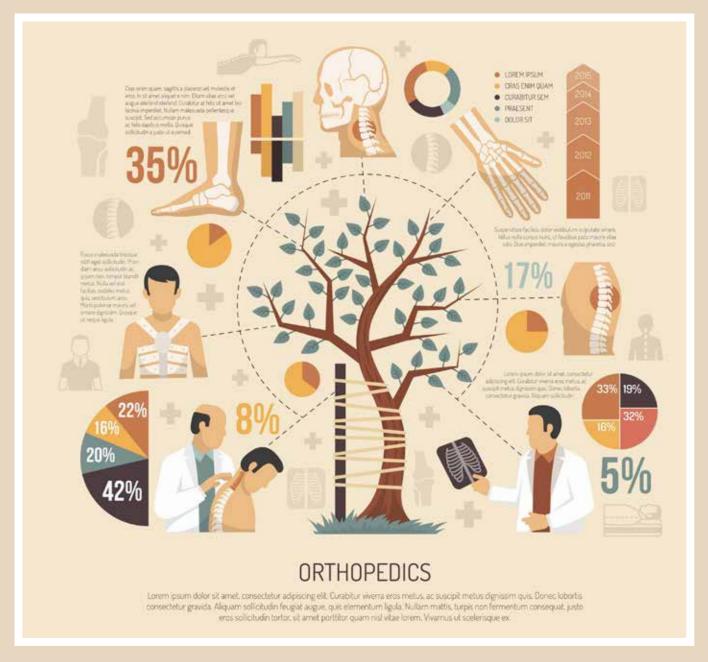
energy is delivered to all parts of our bodies through our nervous system, a huge portion of which is protected by our vertebrae.

To understand the priority of these four essentials, think about how long your body can function without them. It is commonly understood that the body can function without food for weeks, without water for a few days, and, when it comes to air or oxygen, we cannot live without it for more



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than a few minutes. But what is often misunderstood is the importance of the final and fourth essential, nerve energy. If the nerve energy is shut off to a body part, that tissue will immediately no longer function! Athletes and coaches work extremely hard to maximize the function of their bodies to improve performance. What many, unfortunately, are not aware of is how important nerve energy is to amplify the benefits of their efforts. For instance, when we ask, "What is the most

important thing you can do to have strong muscles?" the answer is often, "work out, exercise." Someone who is paralyzed may have a therapist exercising their muscles every day, but they would be better off to trade exercising the muscles for having healthy nerves to the muscle that is paralyzed, because muscles can only be as strong as the nerves supplying life energy to them.

Do not mistake the importance of exercise and proper nutrition. If an

athlete has 100% nerve function to a muscle but does not exercise that muscle, that muscle cannot perform 100%. Similarly, if someone has 100% life energy flowing through the nerves but does not provide good nutrition to the body, they cannot perform optimally. If an athlete eats nutritious food and takes supplements but the body cannot properly digest and absorb those products, the effort does not yield the maximum benefit desired. MSU provides dedicated and talented trainers,

strength coaches, and nutritionists. When athletes incorporate knowledge about spinal health and wellness into their physical training and nutrition plan, progress can be expected.

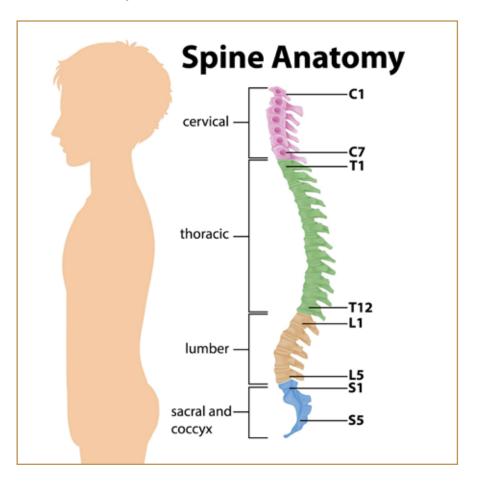
Regular maintenance of all systems is imperative to a body's physical and mental health. Just as you most likely brush your teeth at least twice per day, have your eyes checked annually, and exercise your muscles regularly, the spine and nerves also require consistent effort and maintenance. It could be argued that maintenance of the spine is most critical, because you cannot replace your spine or receive a spinal transplant like you could other body parts. It is important to note that not everyone has ongoing back or nerve problems. Some chiropractors have systems that can easily measure nerve function on any day and indicate whether a patient's spine is working well. If the assessment indicates the spine is aligned, the patient will not be treated at that time. There is nothing better than to tell a patient that their spine and nerves are functioning optimally and no treatment is needed.

Regenerative medicine has opened new doors and provides alternative options to treating joint problems and joint pain. Often, recovery time is short and the return to training is accelerated. When it comes to injuries of ligaments, tendons, and spinal discs, research has shown the benefits of stem cells and platelet rich plasma (PRP) for strengthening and healing injuries. Stem cells are what our bodies use to build and heal us. The number of stem cells naturally produced by our bodies declines as we age, which is why older people often do not heal as quickly or as well as younger people. PRP is acquired from the patient's own blood and then inserted into the injured joint.

It has anti-inflammatory qualities and also introduces a source of growth factors which benefit many athletes who seek recovery from an injury. Some clinics incorporate an additive to PRP called Acellerate, which boosts the effects of PRP.

Sound wave, or shockwave therapy, is making huge strides in the athletic world because of its ability to stimulate the body's natural intelligence for healing joints. Since oxygen is a required element for function and healing. ozone and prolotherapy can benefit many injured athletes. The intent is for the oxygenated tissue to help the injured tissue heal and recover faster. Some clinics also have pEMF (Pulsed Electromagnetic Field) tables available that stimulate blood flow and nerves. Another option for pain treatment is a biofeedback tens unit called Avazzia, which has benefited many athletes.

Professional athletes like Peyton Manning, Tiger Woods, Steph Curry, Kobe Bryant, and others have publicly shared that their careers were improved and prolonged because of these types of treatments. This technology is available in Bozeman and to MSU athletes. Natural, nonpharmaceutical, and nonsurgical options for our MSU athletes are not only desired by the students themselves, but are also often the first choice of parents. It is important to have a multi-disciplinary team that incorporates trainers, physical therapists, nutritionists, chiropractors, orthopedic surgeons, regenerative medicine providers, spiritual counselors, and strength coaches, among others. When a multi-pronged and customized approach is implemented, maximum results become more achievable.



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