# OPTIMAL HEALTH UNIVERSITY<sup>TM</sup>

Presented by Katie Gravesen, DC

# **Rock Climbing for Optimal Health**

Do you want to improve strength, agility, balance and mental focus? Dr. Gravesen encourages patients to explore creative ways to get and stay in shape. Rock climbing is one such activity to try. More than a sport for only the most rugged explorer, rock climbing offers a wide range of styles and levels of difficulty to accommodate anyone with a sense of adventure.

Because of the growing number of indoor climbing walls, it is also a convenient pastime. And the best news? Research shows that this great workout provides added therapeutic benefits, both physical and psychological. Read on to find out what rock climbing can do for you — and how chiropractic care can prevent and manage climbing injuries.



Sportschaden 2011;25:87-92).

# A Great Way to Stay in Shape

Regular exercise is a core component of the chiropractic lifestyle — it strengthens muscles to support and stabilize the body, boosts cardiovascular condition, improves flexibility and helps in maintaining a healthy weight.

Dr. Gravesen encourages all patients to make time for physical activities that they enjoy and can stick to regularly. Climbing is also a fun activity for older children and teens.

Climbing may look like a slow activity compared to, say, running or cycling, but it is actually a highly effective aerobic workout.



A climber must tense muscles for extended periods. The heart beats harder to keep blood flowing to the tense muscles, and stronger breathing keeps the blood oxygenated.

In addition, rock climbing is great for strength training. The diverse movements required work the upper body, the legs and the all-important core. Strong core muscles — including the abdominals, hips and back — are critical for aligning and supporting the ribs and spine. Proper joint alignment protects the body against injury.

However, great physical strength is not a prerequisite for the novice climber, as technique is equally important. With training, climbers can develop increased agility and coordination that work in tandem with muscle tone.

#### **Therapeutic Climbing**

An exciting area of recent investigation is therapeutic climbing — the practice of rock climbing for physical and/or mental rehabilitation. A recent literature review highlights its successful use for musculoskeletal injuries, as well as for psychomotor and neurological conditions (Sportverletz

#### **Climbing Prevents Low-Back Pain**

Dr. Gravesen is also excited about research demonstrating that climbing wards off low-back pain.

A study out of Germany assigned 28 individuals with chronic low-back pain to four weeks of either therapeutic climbing or a standard exercise program. Both groups met for four training sessions per week. They also completed questionnaires at the beginning and end of the training period to assess physical and mental well-being.

The climbing and general exercise groups both showed improvements, but the climbing group showed significantly greater recovery in physical functioning and overall health perception (*Spine* 2011;36:842-9).

# **Climbing Eases Other Disorders**

Another investigation compared therapeutic climbing to yoga for adults with multiple sclerosis (MS). Twenty patients were randomly assigned to ten weeks of rock climbing or yoga.

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Evaluations before and after the exercise programs revealed that the MS patients in the climbing group experienced nearly a third less fatigue, while yoga had no effect on fatigue (*Clin Neurol Neurosurg* 2010; 112:597-601).



Therapists are beginning to explore the therapeutic potential of rock climbing for children on the autism spectrum. Other research supports the power of physical exercise to benefit children on the spectrum by improving academic performance and reducing stereotypic behaviors in the short term (*Pediatr Phys Ther* 2011; 23:187).

Rock climbing also holds promise as a supplementary therapy for psychological disorders. Researchers say the activity provides positive relationships and experiences that give contrast to negative patterns (Rehabilitation 2009;48:51-8).

## **Common Rock Climbing Injuries**

Like any active pursuit, rock climbing occasionally leads to injury. A survey of climbing-related injuries treated in emergency departments shows that fractures, sprains and strains from falls are most prevalent (*Am J Prev Med* 2009;37:195-200).

However, research indicates that overuse injuries account for the overwhelming majority of rock climbing injuries, particularly to the fingers and wrists.

Overuse injuries and dislocation of the shoulder are increasingly common in advanced and competitive climbers, as is an exaggerated curvature to the back called "climber's back" (Wilderness Environ Med 2011; 22:126-9).

# **Chiropractic for Climbing Injuries**

The painful inflammation and stiffness of an overuse injury can keep you from enjoying climbing and from participating fully in everyday life. Pain medications like aspirin, ibuprofen and naproxen may offer temporary relief, but long-term use irritates the gastrointestinal tract, potentially causing ulcers and stomach bleeding.

Instead of taking a chance with drugs, consider chiropractic care. Our chiropractic office is experienced in caring for patients with sports injuries, and research supports this practice.

A trial including 150 patients with shoulder pain compared the effects of usual medical treatment plus chiropractic manipulation with usual medical care alone. After 12 weeks, 43 percent of the patients who received chiropractic care reported full recovery. In contrast, less than half that number in the medical group improved (Ann Intern Med 2004;141:432-9).

Chiropractic care can also target climbing-related hand and wrist pain by addressing joint dysfunction in the spine as well as the hand and wrist.

How does chiropractic care ease and prevent sports injuries? The doctor examines patients' spines for *vertebral subluxations* — misalignments in the bones of the spine, or *vertebrae*. These are corrected with gentle, effective maneuvers called *chiropractic adjustments*.

Similar adjustments can also correct dysfunctions in other joints, often resulting in an immediate reduction of pain and more benefits with repeated adjustments.

# **More Injury-Preventing Tips**

As in most sports, overuse injuries from rock climbing can often be prevented with a little prudence. In addition to regular chiropractic care, the doctor advises climbers to a variety of climbing techniques to avoid overstressing individual muscles through repetitive motions.

Stop climbing before your body reaches the point of complete exhaustion — exhausted muscles are more likely to falter. Finally, give your muscles, joints and ligaments time to rest and recover between strenuous climbing sessions.

## Schedule an Appointment Today!

Regular chiropractic care is beneficial for any climber, from the weekend warrior to the elite competitor. The doctor will identify and correct vertebral subluxations before they affect your climbing ability and up your risk for injury.

The chiropractic lifestyle is holistic and includes counsel on nutrition, ergonomics and other aspects of wellbeing to keep you at your best both on and off the cliff or climbing wall. Call today to schedule a chiropractic evaluation and take charge of your optimal health.



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