

The 6-Step Guide to Decreasing Pain
While You Train



Hello! My name is Dr. Chris Leib, owner of Movement Professional and I want to thank you for signing up for this FREE guide. I am confident you will find it valuable for your fitness and healthy living goals.



The purpose of this guide is to set a foundation of principles in training that will give you the best opportunity to achieve positive effects while at the same time substantially minimize your risk of injury. These principles have been put together based on current scientific research as well as through my extensive experience as both a licensed physical therapist and strength and conditioning professional.

6-Step Guide to Decreasing Pain When You Train

1. Train a variety of movements/body systems

Everyday activities require a combination of endurance, strength, power, stability, coordination, agility and flexibility. Make sure that your exercise program trains all of these areas in order to prepare your body for day-to-day activities. Moreover, performing the same movement (i.e. running, walking, cycling, etc.) for long durations creates muscular imbalances similar to sitting for extended periods. These muscular imbalances are often contributing factors to pain and injury. So MIX IT UP!

2. Perform closed-chain exercises

Closed-chain exercises include deadlifts, squats, lunges, push-ups and pull-ups and are those in which the hands or feet are fixed and the trunk is moving. When performed well, these exercises promote more rapid strength gains, muscular balance, and motor learning specific to activities of daily living^{1,2}.

Click the links below for examples and demonstrations of closed chained exercises:

[*Bodyweight squat*](#)

[*Kettlebell deadlift*](#)

[*Kettlebell swing*](#)

[*Kettlebell single leg deadlift*](#)

3. Minimize sitting

Sitting increases the pressure in the discs of your lower back contributing to herniated/degenerated discs and sciatica.³ It also creates a vicious cycle of faulty postural habits perpetuating muscle/ joint imbalances which subsequently lead to a variety of musculoskeletal conditions (i.e. rotator cuff tendonitis, various muscle strains, cervical headaches).

Moreover while sitting, the diaphragm, which is your primary muscle for breathing, gets chronically compressed leading to decreased respiratory performance and increased muscle tension.

When forced to sit for long periods, try sitting with a lumbar roll either across your lower back or between your shoulder blades

and attempt to keep your knees lower than your hips. Moreover, stand up and perform bodyweight squats, back bends, foam rolling, balance exercises, walking (basically anything that doesn't hurt and extends the hips or thoracic spine) at least every 30 minutes when in these situations (SET A TIMER!)

Click on the links below for options for varying up your sitting posture:

[How to use a couch better](#)

[Sitting variations on the ground](#)

[Sitting variations in a chair](#)

4. Eat foods that decrease inflammation and avoid those that cause it

A diet rich in Omega-3 fatty acids has been shown to decrease inflammation.³ Try incorporating foods such as wild caught salmon, grass-fed/free range meat/poultry, flax seed, hemp seed, walnuts and dark leafy greens into your daily nutritional regimen.

On the end of the spectrum, foods that are highly processed and full of sugar can be toxic to the body, disrupting blood glucose levels, releasing free radicals and leaving inflammation as a byproduct.⁵ Examples of these foods include highly processed grains such as bread and pasta, hydrogenated oils (trans fats) and all refined sugars.⁶⁻⁸

Experiment with separately removing all sugar, grains, dairy, legumes and processed meats from your diet for 30-day periods and assess for changes in pain, sleep habits, digestion, breathing, general conditioning and sinuses.

Click on the links below for book recommendations to help you use diet to decrease inflammation:

[The Paleo Diet - Dr. Loren Cordain](#)

[Grain Brain - Dr. David Perlmutter](#)

[The Whole 30 Diet - Melissa and Dallas Hartwig](#)

[Enter the Zone - Dr. Barry Sears](#)

[The Bulletproof Diet - Dave Asprey](#)

5. Develop proper sleeping habits

Amongst many adverse effects, insufficient sleep leads to an increase of the hormone cortisol which, when in excess, can lead to a breakdown of muscle tissue and increased inflammation.

Do your best to get 8 hours of sleep each night, but more importantly take steps to improve the quality of your sleep. Sleeping in as much darkness as possible stimulates the release of melatonin, a hormone responsible for preparing the body for sleep. So get yourself some blackout curtains and make sure to turn off or cover any light from electronic devices. Moreover, meditation ([see video](#)) has been shown to be effective in improving sleep quality,⁹ so try meditating for 10-15 minutes in complete darkness before going to bed.

6. Train around an injury

If you do get injured, please STAY ACTIVE!

Too often fear of re-injury or making the current injury worse creeps into the psyche of an injured individual. This fear can often become more debilitating than the current injury being faced.

Both old and current scientific evidence^{10,11} demonstrate the dangers of fear and apprehension in regards to recovering from injury. The common theme of these studies indicate that structural diagnoses are rarely scientifically valid and that psychosocial factors, including fear of movement and socioeconomic factors, have been demonstrated to be more important than biomechanical tissue stress.

This means that it is more important to believe that you can recover and understand that you can still can be physically active than it is to figure out what structure is causing your pain. This is because, contrary to popular belief, pain and structural tissue damage do not go hand and hand.

They never have and they never will!

It is convenient to try to simplify pain and injury down to singular structural diagnoses because physical structure is easier to visualize and quantify than that of psychological factors such as fear and anxiety. Unfortunately, simplification does not make for effective treatment, especially when you are treating the wrong thing.

As a physical therapist, I attempt to take an 80/20 approach to physical activity when treating injured patients. That is to say 80% of activity I prescribe is pain-free movement around the area of injury, and only 20% of activity is geared towards the injury. This latter 20% includes interventions such as carefully executed manual therapy or corrective exercise targeted at the area of injury to gradually improve resiliency to the injured tissues.

These interventions also help to develop a sense of control over the symptoms of an injury by using them as feedback to understand which specific movements are provocative and which are free and clear to be trained. In this way, patients can see that pain and symptoms are not something to be feared but instead information for which movements are healthy and which need more focused care.

Obviously, it is important to see a movement professional quickly after an injury for assistance in figuring out which movements can be trained and which need modification. However, even without this assistance it is important that pain-free activity be maintained and sought out as much as possible.

Although all six factors are of vital importance in order get the most out of your training, please do not let this list overwhelm you. Small changes in any of these six areas can elicit rapid results. It is my sincere hope that this list can start you on the right path to getting strong and fit ... *SAFELY*.

Please reach out to chris@movementprofessional.com if you have any questions or inquiries.

Be well!

References:

1. Irish, S., Millward, A., Wride, J., Haas, B., & Shum, G. (n.d.). The Effect of Closed-Kinetic Chain Exercises and Open-Kinetic Chain Exercise on the Muscle Activity of Vastus Medialis Oblique and Vastus Lateralis. *Journal of Strength and Conditioning Research*, 1256-1262.
2. Kachanathu, S., Kaur, H., Natho, M., & Nuhmani, S. (2013). The effect of open and closed kinematics chain exercises in the management of meniscal injuries. *Journal of Scientific and Innovative Research*, 2(5), 927-931.
3. Nachemson, A. (n.d.). Towards A Better Understanding Of Low-Back Pain: A Review Of The Mechanics Of The Lumbar Disc. *Rheumatology*, 129-143.
4. Kiecolt-Glaser, J., Belury, M., Andridge, R., Malarkey, W., & Glaser, R. (n.d.). Omega-3 supplementation lowers inflammation and anxiety in medical students: A randomized controlled trial. *Brain, Behavior, and Immunity*, 1725-1734.
5. Buyken, A., Flood, V., Empson, M., Rohtchina, E., Barclay, A., Brand-Miller, J., & Mitchell, P. (2010). Carbohydrate nutrition and inflammatory disease mortality in older adults. *American Journal of Clinical Nutrition*, 634-643.
6. Howard, B. (n.d.). Sugar and Cardiovascular Disease: A Statement for Healthcare Professionals From the Committee on Nutrition of the Council on Nutrition, Physical Activity, and Metabolism of the American Heart Association. *Circulation*, 523-527.
7. O'Keefe, J., Gheewala, N., & O'Keefe, J. (n.d.). Dietary Strategies for Improving Post-Prandial Glucose, Lipids, Inflammation, and Cardiovascular Health. *Journal of the American College of Cardiology*, 249-255.
8. Kiage, J., Merrill, P., Robinson, C., Cao, Y., Malik, T., Hundley, B., Kabagambe, E. (2013). Intake of trans fat and all-cause mortality in the Reasons for Geographical and Racial Differences in Stroke (REGARDS) cohort. *American Journal of Clinical Nutrition*, 1121-1128.
9. Nagendra, R., Maruthai, N., Kutty, B. (2012). Meditation and Its Regulatory Role on Sleep. *Frontiers in Neurology*, 3(54).
10. Nachemson A. (1992). Newest Knowledge of Low Back Pain: A Critical Look. *Clinical Orthopedics and Related Research*, 279, 8-20.
11. Denison, E, Asenlof, P, & Lindberg P. (2004). Self-efficacy, Fear Avoidance, and Pain Intensity as Predictors of Disability in Subacute and Chronic Musculoskeletal Pain Patients in Primary Health Care. *Pain*, 111(3). 245-252.

