

Pain

Neck & Back (vertebral disc stress, nerves and muscle)

Neck and back pain is a major problem in the U.S. It is the second most common reason for missing work, affecting four out of five people at some time in their life.¹⁷ The most common causes of neck and back pain include strains, sprains, arthritis, degenerative disc disease, herniated discs, scoliosis and osteoporosis.

Neck and back pain is one of the most common conditions treated by orthopedic surgeons and the main condition treated by chiropractors. Many surgical treatments are ineffective, with patients reporting no improvement and increased pain after healing from the procedure.¹⁸

Nutrition and whole food supplementation play a unique and profound role in neck and back pain, especially as it relates to the discs. Research has proven that malnutrition of the spinal discs create mechanical stress which causes bulging and degeneration of the disc material, creating pain. Smoking has also been proven to cause nutritional deficiencies leading to neck and back pain.¹⁹ Deficiencies in omega 3 fatty acids promote tissue inflammation and can increase spinal pain.²⁰ Also, increased body weight and poor nutritional habits contribute to spinal instability.

Many nutrients have been proven to help with neck and back pain. Methyl Sulfonyl Methane (MSM) has many therapeutic benefits in reducing pain from arthritis, muscle soreness and back pain from a herniated disc.²¹ Glucosamine²² and Chondroitin sulfate²³ help to reduce pain associated with osteoarthritis. Proteolytic enzymes reduce inflammation and increase healing of the tissues, unlike Tylenol, aspirin, and prescription anti-inflammatories.²⁴ Manganese in special bound form was even found to help regenerate disc material in animals.²⁵ Using proteolytic "PLANT" enzymes before treatment or surgery, increases the healing and reduction of pain and inflammation.^{26, 27} Antioxidants are also very important to the body to ensure the damaged cells are repaired and are able to maintain their function in healing.²⁸ The specific enzyme blend in Optimal Acute (for acute pain) reduced inflammation and increased healing time 300% over NSAIDS. Optimal Muscle Rx has a government patent proving it can sustain and build skeletal supportive muscle better than steroids, without the side effects. A loss of muscle is a leading cause of vertebral joint stress and pain.

Protocol to nutritionally support the reduction of neck and back pain

Severe back pain

debilitating pain to a point you cannot function normally.

| | | |
|---------------------------------|-----------------|---|
| 4 Acute | 3 times a day | Proteolytic Enzymes |
| 4 Chronic | 2 times a day | Glucosamine, Chondroitin |
| or 1 Joint Pak | 3 times a day | Glucosamine, Chondroitin, Yucca, Proteolytic pain and inflammation reducing enzymes |
| 5 Muscle Rx | 2 times a day | Glutamine, Creatine, Magnesium, BCAA's |
| Optimal Fruit & Veggie Complete | 1 serving daily | Antioxidants from raw fruits and veggies |

Moderate back pain

pain is constant but you can function at work and other daily activities.

| | | |
|---|-----------------|---|
| Joint Pak consisting of 2 Acute and 4 Chronic | 2 times a day | Chondroitin, Glucosamine, Proteolytic enzymes |
| 3 Muscle Rx | 2 times a day | Glutamine, Creatine, Magnesium, BCAA's |
| Optimal Fruit & Veggie Complete | 1 serving daily | Antioxidants from raw fruits and veggies |

Nutritional Support

Eat more dark and colorful raw fruits and vegetables. Foods that contain fatty acids such as avocados, young coconuts and salmon are extremely good for the joints and disc spaces. Stay away from processed foods, fried foods and carbonation. Carbonation should be avoided because of its acidity. Stay away from smoking. It is associated with back pain because it causes malnutrition of the spinal discs, creating mechanical stress.

Exercise

Proper exercise programs have been proven to dramatically reduce neck and back pain and are necessary for complete recovery. A stretching program for the legs and especially the hamstrings along with the low back is important. Strengthening exercises for the abdominals and other muscles help your core be stronger, which takes pressure off your spine and discs.

Drugs

NSAIDS (Non Steroidal Anti-Inflammatory Drugs) like Tylenol, aspirin, or prescription drugs like Naproxen, Cox-2 inhibitors and inflammatory pain relief type drugs actually cause cartilage damage instead of fixing it. Research done at the Indiana University School of Medicine proved this point.²⁹

Manipulation of the spine to stimulate nerve and nutrient flow is highly recommended. It is a most effective form of treatment for cervical, thoracic or lumbar dysfunction.³⁰ Patient satisfaction with results is higher when chiropractic care and nutrition is used over medical care that doesn't teach holistic principles.³¹

17. Rehab Brief: Chronic Back Pain. Vol. XV, No. 7 (1993). ISSN: 0732-2623. National Institute of Disability and Rehabilitation Research Office of Special Education and Rehabilitative Services Department of Education, Washington D.C. 20202
 18. Waddell, Kummel, Lotto, Graha, Hall & McCulloch, 1979. Failed lumbar disc surgery and repeat surgery following industrial injuries.
 19. Ernst, E. Smoking is a risk factor for spinal diseases. Hypothesis of the patomechanism. Wien Klin Wocenschr, 1992; 104: 626-30
 20. Erasmus, Udo. Fats that heal Fats that kill, thirteenth printing. Pg. 44
 21. Jacob, S.W., et al. The Miracle of MSM: The Natural Solution for Pain. New York: GP Putnam's Sons; 1999: 57-58
 22. McAlindon, T.E., et al. Glucosamine and chondroitin for treatment of osteoarthritis: a systematic quality assessment and meta-analysis. JAMA. Mar2000, 283(11):1469.
 23. Leeb, B.F., et al. A metanalysis of chondroitin sulfate in the treatment of osteoarthritis. J Rheumatol. Jan 2000;27(1):205-11
 24. Rathgerber, W.F., "The use of proteolytic enzymes in sporting injuries." South African Medical Journal 45: 181-3 (1971)
 25. Albion Mineral Amino Acid Chelates and Absorbing Story. Clearfield, UT.
 26. Tassman, G.C., Zafran, J.N., Zayon, G.M. A double-blind crossover study of a plant proteolytic enzyme in oral surgery. J Dent Med. 1965;20:51-54
 27. Tassman G.C., Zafran J.N., Zayon G.M. Evaluation of a plant proteolytic enzyme for the control of inflammation and pain. J Dent Med. 1964: 19:73-77
 28. McAlindon, T.E., Jacques P, Ahang Y., Hannan M.T., Aliabadi P, Weissman B., et al., antioxidant micronutrients protect against the development and progression of osteoarthritis. Arthritis Rheum. Apr. 1996;39(4):648-56
 29. Effects of nonsteroidal anti-inflammatory drugs on chondrocyte metabolism in vitro and in vivo. Brandt, K.D. Department of Medicine, Indiana University School of Medicine, Indianapolis 46223. NSAIDS are prescribed to reduce pain from inflammation but they further the damage to the cartilage instead of repairing it. NOTE: Proteolytic enzymes help reduce inflammation without damaging the cartilage.
 30. Meade T.W., Dyer, S., et al. Low back pain of mechanical origin: Randomized comparison of chiropractic and hospital outpatient treatment. British Medical Journal. June 1990;300,pp.431-437
 31. Manga, P, et al. The effectiveness and cost-effectiveness of chiropractic management of low-back pain. University of Ottawa, Canada: Pran Manga and Associates, 1993