



Healthy Diet, Nutrition, and Supplements

Choices we make in our daily lives regarding diet and nutrition can have a profound impact on our general sense of well being, and can also be used as a tool in controlling spine, sports, or nerve injury related pain. Dietary choices can help us control our body's state of inflammation as well as promote tissue healing and optimal nerve function. This approach to pain relief through healthy food choices can also be used to manage and treat the pain of osteoarthritis, degenerative disc disease, facet and sacroiliac joint arthritis, and other common causes of pain and inflammation.

A proper diet, including the addition of many antioxidant rich foods, whole grains, adequate protein, "good" fats, and moderate portions into ones' daily choices, is a natural way to promote health and healing. **Foods that are colorful and fresh, such as vegetables and fruits, contain high amounts of anti-oxidants and vitamins.** Vitamins promote growth and healing by supporting the chemical processes of growth and restoration of normal body tissue. Anti-oxidants protect us from the daily chemical, physical, and energy production related stresses that our bodies are subjected to. **Anti-oxidants are anti-inflammatory**, too.

Complex carbohydrates, such as those found in whole grains, allow energy sources to be absorbed into and used by our bodies gradually, thus avoiding spikes in blood sugar levels. Spikes in blood sugars lead to weight gain, increased inflammatory levels, and can negatively impact nerves. Diabetic patients with neuropathy can sometimes partially relive their symptoms by maintaining good control over their blood sugars. Complex "carbs", with their longer and steadier release of sugar energy into the body, also helps maintain a steady level of brain function.

"Good" fats include polyunsaturated fats and omega-3 fatty acids. Polyunsaturated fats can be found in nuts, seeds, fish, avocados, olive oil, krill, and other sources. Omega-3 and other "essential oils" can be found in flax seeds, fish, walnuts, soy and canola oils, and other sources. These fat sources are known to promote normal nerve and brain function and are helpful in treating spine pain, depression, ADHD, and other disorders. **Omega-3 fatty acids also have an anti-inflammatory effect.**

Protein is the source for the essential building blocks of our bodies, which are the amino acids. Protein with less fat, and which is more digestible, is preferable. Good sources of proteins include beans and peas, eggs, lean meats, nuts and seeds, milk, tofu, and grains.

Strong bones (prevention of osteoporosis) are promoted by adequate calcium and vitamin D intake. Additionally, magnesium and vitamin K are important. **Vitamin D3 also has an anti-inflammatory effect**, as well as possibly preventing cartilage breakdown. It may even help our brains function at their best.

Bioflavonoids such as **quercetin** are antioxidants, and have an anti-inflammatory effect. Good sources of quercetin include onions, kale, leeks, cherry tomatoes, broccoli, blueberries, black currants, cocoa powder, green tea, apricots and apples with skin. Bioflavonoids can also be found in citrus and other tropical fruits, strawberries, peppers, garlic and spinach. **Spices**, such as **ginger or turmeric** (used in yellow curry), can also be **good anti-oxidants, with anti-inflammatory properties**.

The smart eater will avoid too much simple sugar or flour, saturated or trans-fats, overly large portions, or foods that do not carry enough vitamins or nutritional value in comparison to their calorie content. Smoking or excessive alcohol intake can markedly increase our levels of inflammation, and can cause harm in other ways.

A healthy diet should be combined, to the extent possible, with adequate sleep, regular exercise, and, with strategies to manage stress.

A great source of additional information about healthy food choices has been created by the Centers for Disease Control and Prevention:

<http://www.cdc.gov/nutrition/everyone/index.html>

Supplement Regulation and Consumer Protection

Food and vitamin supplements can have positive influences on our health status. There are an overwhelming number of supplement options and manufacturers to choose from, however. The supplement industry has seen an explosion of growth since the passage of The Dietary Supplement Health and Education Act (DSHEA) in 1994. This allows consumers to obtain dietary supplements without a prescription. It also places the burden of researching the quality of supplements largely on the consumer. There are some resources that help with this task, though.

The FDA has means to issue “Good Manufacturing Practices (GMP)” labels to those supplement producers who adhere to specific labeling and manufacturing best practices. More information on the FDA’s guidance for supplement makers can be found at:

<http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/DietarySupplements/default.htm>

Sites that check to see if supplements meet labeling claims:

www.consumerlabs.com

www.NSF.org

NSF also checks for contaminants, which can be helpful to high-level athletes subject to drug testing.