Food & The Nerves

The link between diet and health has never been as clear as it is today. Nearly everywhere you turn there is another study confirming that what we put into our bodies has a direct and profound impact on our health.

In a recent testimony before the U.S. Senate, United States Surgeon General Dr. Richard Carmona testified that “because of the increasing rates of obesity, unhealthy eating habits, and physical inactivity, we may see the first generation that will be less healthy and have a shorter life expectancy than their parents.”

For many Neuropathy patients, complications from diabetes provide even more reason to pay attention to diet and blood sugar levels. Given this clear and ever present link between our diet and health, it is especially important for those of us suffering from nerve damage to be aware of how the foods we eat may be helping or hurting not only our health – but also our nerves.

This guide is intended to give you the knowledge you need to take control of your diet by eliminating those things that hurt your symptoms and getting more of the vitamins and nutrients that can help.
What To Avoid | Foods That Aggravate The Nerves

Casein-based products

Casein is a type of protein commonly found in dairy products. Some studies have shown a potential link between casein and an aggravation of Neuropathic pain. In addition to dairy products, casein can be found in non-dairy products such as margarine, tuna, cereal bars and more. Check food labels for “casein” or “lactic acid”. If either is present on the label, it may be best to avoid that food.

Artificial Sweeteners

Food additives such as monosodium glutamate (MSG) and artificial sweeteners such as aspartame can aggravate nerve pain. These ingredients activate neurons that increase our sensitivity to pain. Aspartame is commonly found in diet sodas and artificially sweetened yogurts. MSG is commonly found in frozen dinners, Asian foods and canned vegetables or soups.

Gluten

Gluten sensitivity is most common among those suffering from Celiac Disease. However, new research is finding possible connections between gluten intolerance and Peripheral Neuropathy. In a study of 140 patients with “idiopathic neuropathy” (meaning there was no medical explanation for the cause of their neuropathy), 34% were shown to be sensitive to gluten. Additionally, the celiac disease genes were found in 80% of neuropathy patients.
Added Sugars

There are a number of potential causes of Peripheral Neuropathy, but the most common cause is diabetes. As such, managing blood sugar levels is especially important for neuropathy sufferers. Added sugars are high glycemic, which complicates blood sugar management.

Additionally, added sugars offer little nutritional value. As such, a diet high in added sugars may lead to many of the nutritional deficiencies that can cause or aggravate the symptoms of Neuropathy. Some common foods with added sugars included soda, candy, sweetened cereals, cookies and more.

Refined Grains

Like added sugars, refined grains are high glycemic, meaning they raise the blood glucose levels more than a low or medium level glycemic food would. According to the Neuropathy Association, maintaining tight glycemic control within the diet is an important element of preventing the worsening of neuropathic symptoms. Common foods with refined grains include white bread, wheat bread, instant rice, enriched pasta and more.
Things That Help | Nutrients That Promote Healthy Nerves

B-Complex Vitamins

The B vitamins are an important class of vitamins. They convert carbohydrates into glucose, thus fueling our body with the energy it needs. They are rich in antioxidants that fight free radicals and can slow the aging process. Perhaps most importantly for those with Peripheral Neuropathy, the B vitamins play a critical role in maintaining the health and normal functioning of the nervous system.

Here’s a breakdown of the most important B vitamins for nerve health and their best food sources:

**Vitamin B1**

Vitamin B1 converts carbohydrates into fuel for your body and its systems – the nervous and muscular systems in particular. It is also needed by your body to create ATP, a molecule used by every cell in the body for energy.

The form of vitamin B1 found in foods is thiamine. Though it is important to look for food sources of vitamin B1 as much as possible, the body has a difficult time absorbing thiamine and is only able to absorb minimal amounts of it, thereby inhibiting its ability to provide maximum benefit to the body.

As such, it is important to make up for any deficiencies in your dietary intake with B1 supplements. We recommend taking benfotiamine, a more bio-available form of vitamin B1. This form of B1 can be up to 25 times more effective than thiamine at absorbing into the cellular tissue.
Food Sources:

- Sunflower Seeds
- Navy Beans
- Black Beans
- Green Peas
- Lentils

Vitamin B2 & B6

Among the eight different B vitamins, Riboflavin – or Vitamin B2 – is a key player in helping the other B vitamins perform their necessary functions. Of particular relevance to Neuropathy sufferers is the role Riboflavin plays in helping Vitamin B6 perform its vital functions.

Vitamin B6 carries out many functions. According to Dee Sandquist, MS, RD, CD, a spokesperson for the American Dietetic Association, “It is important for cardiovascular, digestive, immune, muscular, and nervous system function.”

Vitamin B6 helps the body make neurotransmitters that carry signals from one nerve cell to another. These transmitters are essential for maintaining nerve health. It also helps the body maintain normal blood sugar levels by converting carbohydrates into glucose when levels drop too low.

In order to carry out these and other essential functions, Vitamin B6 is reliant on Riboflavin to change it into a form the body can use. According to researchers at Oregon State University, “Riboflavin deficiency can affect multiple pathways in the metabolism of vitamin B₆, folate, niacin, and iron.”
Food Sources:

Vitamin B6

- Tuna
- Salmon
- Beef
- Chicken
- Spinach

Vitamin B2

- Soybeans
- Beet Greens
- Spinach
- Asparagus
- Almonds
**Vitamin B12**

When it comes to nerve health, Vitamin B12 is an essential player. Vitamin B12 supports the protective covering, known as the Myelin Sheath, around the nerves. If this sheath is damaged or weakened, the electrical signals in the body are unable to transmit properly, often resulting in severe pain or numbness. In the event that the sheath is damaged, Vitamin B12 plays a key role in repairing the damage.

In order to perform its duties effectively it must absorb into your system. However, due to its complex structure, vitamin B12 often has poor absorption rates and is prone to failure. There is, however, a more bio-available form of Vitamin B12 known as methyl B-12. Compared to the more common form of B12 (cyanocobalamine), methyl B12 is more easily absorbed into the body as it is delivered to the body in the form in which it is needed – thereby negating the need for the body to convert it and therefore reducing the rate of failure.

According to a study in the Journal of Neurological Science, methyl B12 (a form of Vitamin B12) may increase protein synthesis and help in the regeneration of nerves. In ultra-high doses, it is shown to produce nerve regeneration. For this reason, if you choose to support your dietary intake of B12 with a dietary supplement of the vitamin, we recommend taking a Methyl B12 supplement.

**Food Sources:**

- Sardines
- Salmon
- Tuna
- Cod
- Yogurt
Vitamin D

You wouldn’t think one of the richest countries in the world would need to worry much about nutritional deficiencies, but the truth might surprise you. Many Americans suffer from some form of nutritional deficiency – such as iron or magnesium deficiency (both of which share many of the same symptoms as fibromyalgia). Among the various nutritional deficiencies plaguing Americans, there is one in particular that has seen a startling increase in recent years – vitamin D deficiency.

According to recent estimates, vitamin D deficiency among Americans has tripled from 1980 to now, with nearly 13% of Americans suffering from it and another 30% on the verge of deficiency. Some of its symptoms include pain, muscle weakness, depression and cognitive impairment.

According to the Mayo Clinic, “adults with severe vitamin D deficiency may experience bone pain and softness, as well as muscle weakness.” Vitamin D is critical in promoting the absorption of calcium for strong and healthy bones. Besides promoting calcium absorption and keeping bones healthy, Vitamin D has other less known but equally important benefits. These benefits include reducing the risk of insulin resistance and elevated blood sugar, lowering blood pressure, regulating the immune system, and improving or maintaining mental clarity.

**Food Sources:**

- Salmon
- Sardines
- Yogurt
- Fortified Cereal
- Mushrooms
Magnesium

According to recent estimates, nearly 80% of Americans suffer from magnesium deficiency. That’s a startling percentage! Symptoms of deficiency can include fatigue, weakness, numbness, tingling, muscle contractions and cramps, seizures, personality changes, abnormal heart rhythms, and coronary spasms.

Getting enough magnesium is especially important for those suffering from Neuropathy. Magnesium works to alleviate pain by relaxing the nervous system and relaxing your muscles. By relaxing the nervous system, magnesium prevents nerves from transmitting pain sensations in the event of otherwise small stimuli. By relaxing your muscles, magnesium helps promote better flexibility and reduces pain from tightness. According to the University of Maryland Medical Center, one clinical study “found that a proprietary tablet containing both malic acid and magnesium improved pain and tenderness” in patients suffering from chronic pain.

Magnesium can also promote better sleep by creating a sense of calm in the body. Deficiencies in the nutrient have been tied to disturbances in the body’s production of melatonin, the hormone that controls your sleep and wake cycles. Additionally, magnesium helps to calm nervousness and anxiety, both of which can cause restlessness.

Food Sources:

- Pumpkin Seeds
- Spinach
- Soybeans
- Quinoa
- Cashews
Zinc

Low levels of Zinc can affect our body’s ability to fight inflammation. Zinc helps regulate the inflammatory process by obstructing some of the proteins within the body that cause inflammation. One study by the University of Sydney showed that supplementation of at least 45 mg/day of zinc consistently reduced levels of the pro-inflammatory cytokine.

Zinc is also well known for boosting the immune system. Zinc supports various cells that fight and destroy infection in the body. Maintaining sufficient levels of Zinc is essential to a healthy and strong immune system.

Food Sources:

• Sesame Seeds
• Pumpkin Seeds
• Garbanzo Beans
• Shrimp
• Lentils
Emerging research is showing promising evidence that a plant-based diet, when combined with B12 supplementation, can help ease or even eliminate neuropathy symptoms in type 2 diabetics. The study, conducted by Anne Brunner, PhD, and Caroline Trapp, MSN, of the Physicians Committee For Responsible Medicine, showed that patients who adhered to the plant based diet with B12 supplementation showed a significant improvement in neuropathy symptom scores compared to the control group who was on B12 supplementation only.

Other studies have made similar observations. In an observational study by Crane and Sample, 81% of type 2 diabetic patients with nerve pain who stuck to a month long plant-based diet experienced complete relief from their pain. According to researchers at Pantox Laboratories in San Diego, “The vegan diet/exercise strategy represents a safe, 'low-tech' approach to managing diabetes that deserves far greater attention from medical researchers and practitioners.” One of the key benefits they note is the rapid remission of neuropathic pain in the majority of type 2 diabetes patients.

Though more research is needed, the existing evidence of the effectiveness of managing diabetes related nerve pain with diet is both exciting and promising. As always, talk to your doctor to find out what dietary changes are right for your situation.

Sources:
http://www.medpagetoday.com/Endocrinology/GeneralEndocrinology/47127
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3921297/
Conclusion

Your battle with nerve pain can and should involve more than just medications. The foods you put into your body can either help or hurt you – and as such, diet should become a key part of your strategy for attacking and slowing your Neuropathy. Now that you know which ingredients to avoid and which to include in your diet – begin today by creating a one-week menu plan incorporating the foods and ingredients in this guide. Keep a food journal and record how certain foods help or hurt. Though trial and error determine which foods work for you. Doing so will allow you to build a plan tailored to your own body and will empower and motivate you as you continue your battle with nerve pain.

About Us | Neuropathy Treatment Group

We specialize exclusively in the research of natural ways to reduce symptoms related to Neuropathy. Our goal is simple: help you find natural relief from your symptoms and give you your life back. In fact, we don’t offer any products that aren’t related to relieving the symptoms of Neuropathy.

Learn more about us at http://www.neuropathytreatmentgroup.com/