

# Effects of neuropathy on the body and options for alleviation

**Kevin D. Imperio**

<sup>1</sup> Exercise & Sport Nutrition Lab, Department of Health & Kinesiology, Human Clinical Research Facility, College Station, Texas, USA, 77843-4253

\* Correspondence: imperioke@tamu.edu

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**Abstract:** The purpose of this paper is to educate individuals unfamiliar with the topic of neuropathy. This is also meant to be an aid for neuropathy patients who may not have been fully aware of the causes of their pain and symptoms. Also, this serves as possible aids to allow them to live a better life and cope with the pain. This paper did not target specific neuropathy patients but was meant to be a general understanding of the condition. While diabetic patients are most commonly found with neuropathy, many other individuals develop the condition through other incidents. Considering neuropathy symptoms are very similar across all ages and forms of neuropathy, the paper allows for many individuals to benefit from the compiled research. The most important part of this article covers ways to naturally alleviate neuropathy symptoms through following a balanced diet and consuming proper supplements daily

**Keywords:** Neuropathy, Polyneuropathy, Neuropathy Treatment, Supplements for Neuropathy Patients, Diet for Neuropathy Patients

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## 1. Introduction

The focus of this article will be to educate individuals on the disease known as neuropathy and possible treatments to aid in living a life with the disease. Covered topics will include what neuropathy is, what different kinds of neuropathy there are, most common treatments for neuropathy, and what dietary aids can be focused on to alleviate symptoms of neuropathy. To further specify this article, emphasis will be focused on ways to reduce the symptoms of neuropathy and alleviate the pain in a manner that does not involve frequent hospital visits and strict medication routines. The most beneficial dietary aids to subdue the symptoms will be researched and compiled into this article, this will include vitamins, minerals, and food consumption that will could help individuals suffering from neuropathy.

Neuropathy is most commonly known for its association with diabetic patients. While focusing on diabetic patients is not the goal of this article, diabetic patients with neuropathy will be able to benefit from the findings compiled in this article. However, do to the nature of being diabetic; food consumption must be monitored carefully so that drops or spikes in blood sugar can be avoided.

## 2. Methods

The process by which this article is written includes online searches for neuropathy, polyneuropathy, peripheral neuropathy, neuropathy treatment, and diets for neuropathy patients. This research was conducted through the internet by searching for web pages, academic journals, medical journals, and medical studies involving the effects of neuropathy and possible treatments of individuals with neuropathy. All of the articles that have been compiled for the presentation of this article will be provided below for further personal research if desired. Each article used will be involved in the writing of this paper to ensure authenticity and validity of the information provided.

## 3. What is Neuropathy?

According to the Cleveland Clinic, neuropathy is also called peripheral neuropathy or polyneuropathy [1]. This term refers to any condition that effects the peripheral nerves of the body that become damaged or destroyed and cause feelings of numbness, tingling, intense pain, and loss of pain sensation, burning sensation, and many more symptoms associated with loss of proprioception [1]. These nerves run outside of the central nervous system and do not include the brain and spinal cord. The sensations are mostly focused on the outer extremities such as the hands and feet. This condition is commonly found in diabetic patients, but can also be developed through injuries, infections, alcohol abuse, and certain toxins to the body that can damage and destroy nerves that lead to the onset of neuropathy. Certain cases may affect the autonomic nervous system that can damage internal organ function and lead to organ or gland dysfunction [2].

### 3.1. Types of Neuropathy

Neuropathy alone ties to many different forms of conditions associated with nerve damage. While neuropathy seems to be most common in diabetic patients, various forms of neuropathy are not associated with diabetes. A few examples of neuropathy are as follows: idiopathic, hereditary, systemic, compression (such as carpal tunnel syndrome), Bell's palsy, inflammatory (like hepatitis and HIV/AIDS) [3]. When referring to polyneuropathy or mononeuropathy this simply explains if the condition is affecting multiple nerves or just one nerve group. Alcoholic neuropathy also seems to be a noticeably relevant form of neuropathy that can affect small fibers leading to a slow progression of neuropathic pain [4].

## 4. Peripheral Neuropathy

The remainder of this research will be focused on peripheral neuropathy as a whole, not focused on specific types that in reality the main difference is the reason for the onset of the disease. Symptoms are similar across the different kinds of neuropathy. The focus will be in general of looking for aids and treatments to nerve pain due to damaged or destroyed nerves.

The Mayo Clinic suggests many options if looking to be diagnosed and treated. For diagnosis the Mayo Clinic states that doctors may order blood tests, imaging tests, and nerve function tests to determine the condition of the patients [5]. Treatment options that are recommended include pain relievers to alleviate mild symptoms, anti-seizure medication, or antidepressants which can also help relieve pain [5]. However, all of these options can become expensive or could even cause unwanted side effects depending on the medication prescribed to individuals. Looking into dietary aids could benefit patients more because creating a diet that can alter a lifestyle to live with less pain and not bound by medication usually sounds more appealing to patients.

The Foundation for Peripheral Neuropathy covers many topics regarding healthy eating to help cope with neuropathy. Besides the fact that eating healthy is good for the body in so many ways, the foundation recommends a well balanced diet of fruits, vegetables, whole grains, lean protein, and omega-3 rich foods. The diet choice laid out basically calls for a diet avoiding inflammatory foods such as fried foods, alcohol, and high sodium intake [6]. In addition, vitamins and minerals are very important to neuropathy patients for various reasons such as reduce pain, inflammation, improve nerve function, and raise energy levels. Vitamins that should be focused on are B-1, B-6, B-12. In addition, alpha-lipoic acid, acetyl-L-carnitine, and N-acetyl cysteine.

## 5. Summary and Practical Applications

This research article covered information over the disease known as neuropathy. Through this writing it was learned that the most popular form of neuropathy is a condition that affects the peripheral nerves of the body causing sensations of numbing, needles, pain, burning sensation, and weakness. Effectively diminishing proprioceptive feedback from the distal portions of the body. Due to advancing medicine there are various

forms of treatment to help individuals live a simpler life and cope with the condition. However, forcing pills everyday and having frequent doctor checkups, prescriptions refills, and medical bills an alternative was looked at. Research found that adjusting one's diet can have very positive effects on their pain and symptoms. By creating a healthy diet plan to follow and including proper supplementation of vitamins and minerals, individuals can learn to live a happier life without feeling constrained to medication and hospital visits.

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### Conflicts of Interest

Authors have no competing interests to declare. Comments and conclusions drawn do not constitute endorsement by the authors and/or the institution. Authors independently reviewed, analyzed and interpreted the results from this review and have no financial interests in the results of this study.

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