Medical Xpress

New study finds diet, in particular pro-inflammatory diet increases relapse rate for multiple sclerosis patients

May 24 2023

Credit: Pixabay/CC0 Public Domain

A new study published this month in Multiple Sclerosis Journal found a pro-inflammatory diet is associated with an increased risk of relapse in

multiple sclerosis (MS) patients. The researchers found a more pro-inflammatory diet is associated with a higher risk of relapses and more inflammatory brain lesions for MS patients in the years following their first disease attack. Dietary intake did not impact disability progression or the volume of lesions with chronic inflammation, seen on MRI scans.

MS is an autoimmune disease characterized by chronic inflammation that can damage nerve cells. MS can be a debilitating disease that impacts the brain, spinal cord, optic nerves and nerves of the central nervous system.

A pro inflammatory diet as per the study includes foods containing high amounts of fats and proteins. These foods are thought to drive chronic inflammation and immune dysregulation that could affect the course of MS. The study found an anti-inflammatory diet can help patients prevent flare ups. An anti-inflammatory diet includes consuming foods high in fiber, and other nutrients including turmeric and beta-carotene.

MS is often treated with drugs that aim to shift the immune system into a less inflammatory state. "Disease modifying agents are a crucial part of the treatment regimen in reducing the frequency of relapses and slow the progression of the disease. They are not helpful at relieving a patients' immediate MS symptoms, treating exacerbations, or shortening the duration of a relapse" said Krupa Pandey, M.D., Director of the Hackensack Meridian Neuroscience Institute at Hackensack University Medical Center's Multiple Sclerosis Center, a certified center for excellence recognized by the National MS Society. "An anti-inflammatory diet can be an excellent complement to medications by promoting a less inflammatory environment. "

In fact, part of the comprehensive treatment at Hackensack Meridian's Neuroscience Institute MS Center, involves meeting with a dietician. "We regularly recommend MS patients begin an anti-inflammatory diet,

like the Mediterranean diet," said Susan Kraus, MS Center registered dietitian. "The Mediterranean diet not only limits inflammation, but is found to have lessen the risk of heart disease, stroke, diabetes, and Alzheimer's disease." The MS Center recommends whole foods rather than processed foods, whole grains and beans, along with heart healthy fats. "We strongly suggest a broad spectrum of fruits and vegetables in every color including reds like tomatoes, apples and strawberries, blues like eggplant, cabbage and berries, greens like spinach, kale, peppers, and yellows like squashes, corn, peas, peaches and cantaloupes, " Kraus said.

It is important to note although a change in diet has shown benefits for MS patients, there is no one size fits all diet for MS. "Foods and diets can affect patients differently and any dietary changes should be discussed with physicians in conjunction with an understanding of medical history and medications being taken," Kraus added.

The research is published in the *Multiple Sclerosis Journal*.

More information: Alice M Saul et al, A pro-inflammatory diet in people with multiple sclerosis is associated with an increased rate of relapse and increased FLAIR lesion volume on MRI in early multiple sclerosis: A prospective cohort study, *Multiple Sclerosis Journal* (2023). DOI: 10.1177/13524585231167739

Provided by Hackensack Meridian Health