

Nutrition for Multiple Sclerosis



Presenter:

Kari McDougall

Nutrition & Multiple Sclerosis

- Several theories exist as to what causes MS, such as viruses, bacteria, autoimmunity & metabolic disorders, heredity, environment, stress and chemical toxins, but none are conclusive.
- Researchers has found that good nutrition can help to manage the symptoms of MS.

Nutritional Recommendations for MS

1. Reduce Allergenic & Inflammatory Foods

- Researchers believe that allergies, which cause tissue inflammation, are a contributing factor in the development of MS.
- Two common food allergens are **gluten & dairy**.
- Researchers have found that diets high in gluten and dairy, exist more in areas where there are higher rates of MS.



What is Gluten?

- Gluten is the protein found in wheat, rye and barley has a similar amino acid sequence to immune cells and can cause an allergic response.
- Gluten is often difficult for people to digest which puts unnecessary stress on the digestive system.



Foods that Contain Gluten

- Gluten is typically found in:
 - Flour
 - Bread
 - Pasta
 - Crackers
 - Chips
 - Processed foods.



Gluten-Free Alternatives

GF Flour Options:

- Almond flour, quinoa flour, coconut flour, chickpea flour

GF Pasta Options:

- Quinoa pasta, legume-based pasta & brown rice pasta

GF Bread Options:

- Chia-seed bread, flaxseed bread & brown rice bread.

GF Cracker Options:

- Mary's GF crackers, flax crackers & rice crackers



Inflammatory Foods

- Chronic inflammation causes the myelin sheath to break apart (demyelination) and this leads to patchy areas that become thick and hard (sclerotic).
- These sclerotic areas cause nerve impulses to become impaired and therefore affect one's ability to function.

Foods that Lead to Inflammation

- Excessive consumptions of carbohydrates and sugars, e.g. pasta, bread, rice, pop, cookies and pastries can lead to chronic inflammation.
- Other foods that lead to inflammation include: trans fats, artificial sweeteners, and nightshade vegetables (e.g. potatoes).



Foods that Can Help Reduce Inflammation

- There are foods that act as natural anti-inflammatories & can help reduce inflammation.
- Anti-inflammatory foods include:
 - Turmeric
 - Garlic
 - Ginger
 - Dark leafy greens
 - Fish
 - Pineapple



2. Increase Essential Fatty Acids

- Low consumption of Omega 3 and Omega 6 are thought to be a significant contributing factor in the development of MS.
- Deficiencies in Omega 3, DHA & EPA have been connected with impaired myelin formation, increased inflammation and increased platelet stickiness.
- Eating essential fatty acids (EFA) foods can help people with MS by reducing inflammation and supporting the nervous system.

Healthy Fats to Eat:

- Salmon
- Sardines
- Mackerel
- Herring
- Chia seeds
- Flax seeds
- Nuts and seeds



3. Increase Vitamin B Foods

- Low levels of B vitamins can contribute to demyelination.
- B Vitamins are also required for proper energy production, which can help with **fatigue** associated with MS.
- Especially vitamin B1, B9 and B12



Vitamin B Foods to Eat:

- Chicken
- Nuts and seeds
- Mushrooms
- Asparagus
- Avocados
- Green peas
- Spinach



4. Increase Antioxidants

- Antioxidants are a precursor for Glutathione Peroxidase (GSH-Px), which protects cells from free radical damage.
- There is some evidence that low GSH-Px levels may make the myelin sheath more susceptible to damage
- **Vitamin A, C, & E**, as well as the mineral **selenium** are powerful antioxidants that help neutralize free radical damage and can help prevent myelin sheath damage.

Antioxidant Rich Foods

- Berries
- Sweet potato
- Papaya
- Spinach
- Cilantro
- Kale
- Red peppers
- Sunflower seeds
- Brazil nuts



5. Increase Vitamin D Foods

- Low levels of Vitamin D have been linked to relapse attacks in MS.
- Studies have also found high levels of Vitamin D have been shown to decrease immune-cell-mediated inflammation and prevent MS-like lesions.

Vitamin D Foods to Eat:

- Salmon
- Sardines
- Eggs
- Mushrooms
- Soy
- Dark Leafy Greens

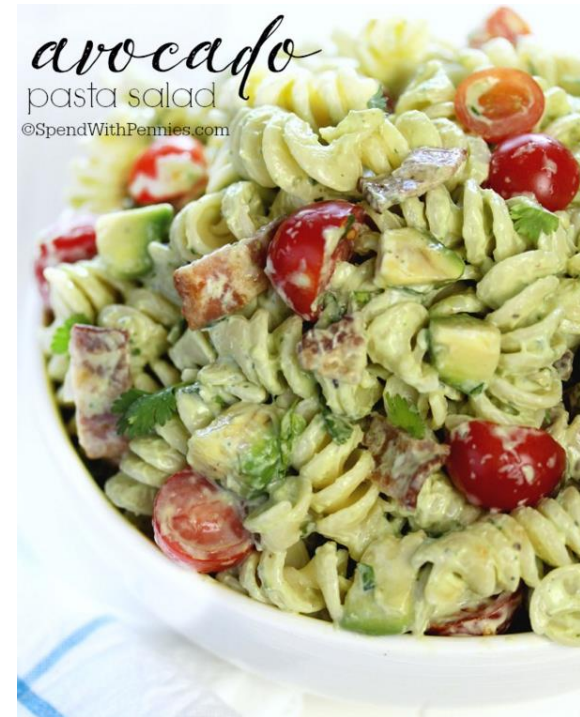


Recipes for MS

Avocado Pasta Salad

Main Ingredients:

- Chickpea Pasta
- Cherry tomatoes
- Avocado
- Green onion
- Cilantro
- Lime juice
- Cumin



Quinoa Tabbouleh Salad

Main Ingredients

- Quinoa
- Kale
- Cucumber
- Tomatoes
- Onion
- Parsley
- Garlic
- Mint



www.fruitfulelements.com

fruitful elements



fruitfulelements@gmail.com

416.992.2927