

# NUTRITIONAL MANAGEMENT OF MULTIPLE SCLEROSIS

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*We now have the science to recognize the role that inflammation plays in the brain and endothelium of people with MS. It is also understood that the first step in successfully managing inflammation is in healing the gut, and the first step in healing the gut is creating a supportive diet. Therefore, whether newly diagnosed with MS or recovering from venoplasty (CCSVI treatment) and looking to prevent re-stenosis, a sound nutritional strategy has never been more important.*

*Extensive research on nutrition and MS exists from as early as the 1930's. Two researchers who have contributed to this field are neurologist **Dr. Roy Swank MD** and **Dr. Ashton Embry PhD** ([ms\\_direct.com](http://ms_direct.com)). Many others like **Dr. T. Colin Campbell PhD** and author of *The China Study*, and neurologist **Dr. David Pearlmutter MD**, irrefutably connect nutritional intake and habits with chronic illness including MS.*

*Each time we eat something, whether we realize it or not, we direct the body to either an inflammatory or an anti-inflammatory response. An inflammatory state causes further degeneration, and an anti-inflammatory state sets the stage for restoration and maintenance. A healing diet also provides the nutrients needed to promote efficient detoxification pathways and optimal metabolic function – all connected, all vital in the management of inflammation.*

The key to good eating is to focus on a whole foods diet. Dietary change requires dedication and commitment. I recommend you make it manageable for you. Zero in on things that you know you can change easily and once you have mastered these, move on. As you continue to raise your bar, you will bring a new awareness to every meal you eat and how it affects your overall well-being.

To get started, create a supportive environment. Go through your cupboards and get rid of foods that do not support your new model. Explore health food stores with a grocery section or regular grocery stores with health food sections. Local farmers' markets are excellent resources for fresh, local, in-season fruits and veggies. Choose organic when possible if you need to choose – always choose organic meat first.

***Remember there is no such thing as Junk Food.  
There is Junk and there is Food.***

Bon Appetit!

*The following recommendations come from a sound understanding of functional nutrition and the current research, clinical observation and personal experience. Please allow them to find a place in your plan for recovery.*

*Let food be your medicine and medicine be your food.*

*–Hippocrates*



## *Fats – the Good, the Bad and the Ugly*

### SATURATED FATS

- ❖ Because of its inflammatory nature limit animal source saturated fat intake to no *more than 15g* per day.
- ❖ Saturated fat is solid at room temperature and generally comes from animal sources. So, butter and the fat marbled through a steak are examples of saturated fats. These are most prevalent in red meats like beef and pork. The saturated fat in poultry seems to concentrate in the skin which can be removed.
- ❖ What's that mean? Examples of saturated fat content: 1 tsp butter = 5g. 1oz skinless chicken or turkey = 1 g. 1oz beef = 3-8g. This means a touch of butter, or a 4-5 oz portion of turkey or chicken fall well within Dr. Swank's recommendations. Beef is a different story. A 4oz beef tenderloin would be about 12 g of saturated fat while the average 6oz burger would be 48 g of saturated fat. That's more than a three day supply inflammatory saturated fats on a bun! Fish on the other hand contains no saturated fat.

### OMEGA 3 OILS

- ❖ The omega 3 oils from fish and sea vegetation are powerfully anti-inflammatory, neuroprotective and neurorestorative. Two key components of Omega 3 oils are EPA and DHA. A daily intake of 3g+ of EPA & DHA is recommended.
- ❖ In addition to supplementing with at least 1 tsp of fish oil per day, enjoy cold water fish 1-2x per week (Eg. Salmon, cod, mackerel, herring, sardines etc). Approx 4-5oz of oily fish provides around 1g of EPA/DHA.
- ❖ Organic flax oil, canola oil, walnut oil and perilla oil provide a plant based form of Omega 3 oils (ALA) that can be converted to EPA and DHA in the body. Use them liberally in salad dressings, sprinkled on steamed veggies or grains.

### BUTTER, COCONUT AND OTHER OILS

- ❖ I still feel that butter can't be beaten for flavor and for the tiny bit we should be using, can simply be made better. For a better butter, mix one pound of butter with 1/3 to 1 cup of extra virgin olive oil (depending on the consistency you prefer). Whip at room temperature and store in the refrigerator. OR add the olive oil to clarified butter which removes the allergenic components of the butter. This provides the benefits and taste of butter and the essential fatty acids of olive oil. You may also choose to add 2 tsp of L-glutamine powder per ½ lb of butter. This tasteless white powder is powerhouse in gastrointestinal health.
- ❖ Use extra virgin olive oil or coconut oil for all other situations requiring oil. Coconut oil can be used when frying as it tolerates high heat.
- ❖ Flax oil can be added to steamed veggies, grains, shakes, or even breakfast.



## *Protein*

- ❖ Protein is important to maintain energy, and to give the body tools for repair. 40-60g of protein per day is recommended including approx. 15g at breakfast. Good sources of protein include skinless chicken and turkey, fish, nuts and seeds and their butters (ie almond butter), hemp hearts, avocado, seaweed, spirulina (or other blue-green algae), the grains quinoa and amaranth or good non-dairy protein powder (for your shake), preferably hemp or brown rice based.
- ❖ Include a scoop of protein powder in your breakfast smoothie, or in your post exercise recovery drink.

## *Problematic Food Proteins*

- ❖ **Dairy – cheese, milk, yogurt.** In our modern world commercial dairy is simply not worth eating. We lack the enzymes to digest it and any contribution by the cow is destroyed in the pasteurization process. Three components of dairy cause great aggravation to human health – whey, lactose and casein. The protein, casein, besides having other detrimental health consequences, blocks Vitamin D receptors impacting immune function.
- ❖ **Gluten.** A lectin found in grains such as wheat, spelt, rye, barley, kamut and oats, gluten increases inflammatory immune response and excitatory neurotransmitters in the brain causing damage to the neurons. It is important not to simply replace bread and flour with gluten-free (GF) products because most commercial GF products are made from refined white rice flour and contain other non-desirables like corn and potato starch – not to mention they're very expensive. Focus your attention on reducing your consumption of refined grains (anything made with any kind of flour) as much as possible.
- ❖ **Legumes** (including soy products) Legume lectins often confuse the immune system and cause it to become hyperactive. In the case of MS they act as molecular mimics to myelin promoting further immune attack.

## *Identify and Remove Food Allergies and Sensitivities.*

- ❖ Foods can cause immunological (allergy) or non-immunological responses (sensitivity) both of which can aggravate the immune system and increase the inflammatory response.
- ❖ Once you have made some changes, you can further refine your nutritional intake by identifying foods that are detrimental to your health. These are not mutually-exclusive, consult your healthcare provider (Naturopath, Nutritionist etc) to determine the best one for you.
  - **Food Allergy Testing** identifies foods that create a direct immune response by measuring IgE and/or IgG responses
  - **Food Sensitivity Testing** identifies sensitivities that are unique to you and interfere with normal immune and metabolic functioning.



*Food Allergies and Sensitivities Con't*

- ❖ In the meantime, the following foods are well recognized as highly allergenic and you can begin to avoid these now. They include:
- Eggs
  - Soy products (also a legume)
  - Citrus fruits –except lemons & limes
  - The nightshade family of vegetables (tomatoes, potatoes, eggplant and peppers)
  - Corn products
  - Peanuts and peanut butter
  - Sugar, NutraSweet and all sweeteners (except honey, maple syrup and agave)
  - Fried and Processed Foods

*Excitotoxins – The Taste that Kills*

Excitotoxins are food chemicals that are directly related to diseases of the nervous system. They increase the excitatory neurotransmitters and stimulate neuron firing, with *no off switch*. This causes the neurons in the brain to fire until they die. You may be familiar with the Chinese food hangover – that's MSG.

Monosodium glutamate (MSG)- salty, and Aspartame – sweet, are two of the most notorious excitotoxins. Many other food additives also include MSG. Foods containing these additives should be strictly avoided.

*Excitotoxins: The Taste That Kills* by Russell L. Blaylock, MD, copyright 1994, Health Press, Box 1388, Santa Fe, New Mexico, 87504

See [www.waterdownclinic.com](http://www.waterdownclinic.com) – Hidden Sources of MSG under Patient information

*Packaged and processed food.*

- ❖ Remember I said there is no such thing as junk food – there is FOOD and there is JUNK. These foods mostly qualify as junk, they tend to be highly refined and contain high levels of bad fats, nitrates, colors, MSG, Aspartame, sugar etc etc.
- ❖ Packaged and processed foods should be avoided. Read labels – if you can't pronounce it put it back on the shelf!
- ❖ When you're shopping avoid temptation by such foods and stick to the perimeter of the grocery store. That is generally where the fresh foods are.

*Avoid pro-inflammatory beverages like coffee, pop and alcohol.*

- ❖ Once again these promote inflammation. Favor good old water, herbal teas, or green tea. If you drink juice ensure it has no added sugar and water it down. Avoid orange juice.



## *When adjusting your diet, be sure to include:*

### **NUTS AND SEEDS**

- Add a palm sized portion of almonds to your diet. To improve digestability, soak them in water overnight.
- Grind flax, pumpkin, chia, sesame or sunflower seeds and add to steamed vegetables, cooked grains etc.
- Create a ‘salad topper’ by combining a variety of seeds and nuts in a jar to sprinkle on your salad (this increases the protein value of that salad).
- Include nut and seed butters e.g. almond, cashew, sesame. Avoid peanut butter as peanuts are actually legumes –with a high saturated fat content.

### **SPICES**

- Choose spices and herbs to delight your tastebuds! A great way to change something from bland to bold and beautiful. If you don’t have much experience with spices, go to a bulk food store and try them a little bit at a time. Or use fresh herbs liberally.
- One herb that has been known to be highly anti-inflammatory for centuries (recently proven in science) is *turmeric*. This mild curry spice blends well into rice and quinoa dishes, stir fries and even the morning shake. I recommend you get 1-2 tsp per day.

### **TO DRINK**

- A minimum of 6 to 8 glasses of spring, filtered or reverse osmosis water every day.
- You may also choose to drink 2 to 4 cups of herbal tea. Herbal teas are best taken in the evening and sipped slowly. These are included in the 6-8 cups.
- Green tea is also known for its anti-inflammatory properties and if you throw away the first steep, the caffeine goes with it! Re-steep good green tea up to 3 or more times.
- Small amounts of rice, almond or hemp milk are permitted.
- For those of you with bladder problems who look at this and laugh, your bladder will adjust over time. Sip the water, don’t gulp it. And remember water is vital for the rest of your body to function well. Dehydration is also directly connected to fatigue.

### **FRUITS AND VEGETABLES**

You simply cannot over-consume vegetables – I double dare you to try! Vegetables provide the micronutrients we need to control inflammation, enhance detoxification and optimize metabolic function. They also contain between 2-4g of protein per serving – and are a great source of fibre and since no level of constipation is OK (and it is often a problem in MS) keep eating. Enjoy them raw, steamed or stewed.



## FRUITS AND VEGETABLES CON'T

- Begin with **6 portions** (1 portion =1/2 cup cooked, 1 cup leafy) of veggies per day and work up from there. Steamed veggies are best because, *steaming improves the availability of the food nutrients allowing the GI mucosa to repair itself.*
- Include raw veggies as snacks and salads – an easy way to get 3-4 portions per day!
- Always include something green with every meal. How? A kale leaf and piece of avocado in your morning shake, a salad with lunch and steamed greens with dinner!
- Fruit may be included in the total count. To keep the inflammatory process down, eat only 1-3 pieces per days. Favor dark berries, apples, pears, kiwi etc.
- The nightshade family of vegetables are pro-inflammatory and should be avoided as much as possible. This includes improperly ripened tomatoes, potatoes that are green or sprouted, eggplant and peppers. Roma tomatoes are OK, as are red potatoes.
- Eat a variety of all the vegetables (except the night shades) and try new ones often. Add your favorite herbs and spices to enhance the taste.
- The best vegetables are grown locally, are organic, and eaten fresh and in season.

## GRAINS

- Consume no more than one to two cups of cooked, non-gluten grains per day.
- Gluten-free: basmati or brown rice, millet, quinoa, amaranth, buckwheat.
- Explore Quinoa! It is yummy and a great source of protein. Add lots of veggies to it and call it a vegetarian dinner! Lots of recipes on my website.
- While rice crackers and rice cakes are often a staple in GF diets, there are now so many more multigrain GF options available. When it comes to pasta I would recommend a quinoa pasta as it has a higher protein content, add tons of veggies to keep the glycemic index down.

*I am often asked about supplements when it comes to MS. As an ND there is much more to rejuvenating tissues, enzymes systems, and physiology than supplements, but there are a few I will mention. First remember- the more nutrients you eat, the less you have to supplement and always check with your own Naturopath to establish an individualized plan. To get started; Vitamin D 4,000-10,000iu per day (have your levels tested), Fish oil – 1-3tsp per day, and an excellent quality probiotic twice daily.*

*Nutritional changes will become new healthy habits in no time. Remember this is something that **you** have total control over and it will have a long-term impact on the overall course of your health condition.*

