



Nutrition for people with MS

What to choose or avoid when you have MS.

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What do we Know??

Has someone ever told you that your condition will improve if you stop eating...

Or maybe you should start eating.....

Facts need to be scientifically studied to become valid.

Statically significant studies are wildy conducted and funded by pharmaceutical companies.

Nutrients, food and diet for MS patient are well researched as new drugs.

Proof is in the pudding!

Diets such as Paleolithic Diet, Mediterranean Diet, McDougall Diet and Swank Diets have claimed to help, cure or eliminate MS. Many are too restrictive in some nutrients and have lead to malnutrition.

However overnutrition is also a problem.

Obesity is not only a risk factor for MS but will accelerate progression.

Inflammation

MS is an inflammatory disease that causes adverse effects on the immune system.

Gut microbes influences the immune system.

They were divided into pro- or anti- inflammatory.

Research shows that people with MS have a specific gut microbial profile.

Too few anti-inflammatory and increased number of pro-inflammatory bugs.

GUT MICROBES/GUT FLORA

What is gut microbes?

Bugs that live in our digestive system, stomach, and intestines.

Bacteria not only break down food and nutrients for digestion but are involved in our immune system.

What is the relationship of gut flora to MS?

What Researchers Found

Microbes that influence immune system.

Akkermansia muciniphila and *Acinetobacter calcoaceticus* found in people with MS prompted a pro-inflammatory response.

Parabacteroides distasonis is immune-regulatory was found to be abnormally low in people with MS.

How can we change our gut flora?

Changing Gut with Probiotics and Prebiotics

Probiotics may help boost levels of beneficial bacteria in our gut and strengthen our immune system.

Probiotics is available in supplements and in fermented foods.

Prebiotics provides good nutrition for the good bacteria.

Where can I get Probiotics and Prebiotics

PROBIOTICS (Fermented Foods)

Supplements

Yogurt*

Kefir

Kim-Chi

Sauerkraut

Kombucha (fermented tea)

PREBIOTICS (Fuel for Probiotics)

Artichokes

Garlic

Leeks

Asparagus

Onions

Chicory

FIBER

Fiber found in plant food promotes optimal health.

Fiber encourages regular bowel movements.

Provides nourishment for good gut bacteria.

Filling food, decreases hunger.

Fruits, vegetables, nuts, seeds and legumes.

Recommendations >25 grams of fiber per day.

B Vitamins

B7 Biotin mega doses lead to improved outcomes.

B1 and B12 helps nerve conduction

Vitamin D

Low vitamin D levels increase risk to develop MS

Vitamin D also has protective qualities in people with MS.

Supplementation is recommended over increased sun exposure that increases risk of carcinoma.

Summary

1. Maintain a healthy weight, if you are overweight lose weight.
2. Choose foods that are not processed.
3. Eat a wide variety of colorful foods, whole grains, colorful vegetables, lean meats, fresh fruits, beans and pulses.
4. Avoid fried foods and saturated fats.
5. Limit salt.
6. Daily dose of vit D, B12, magnesium and probiotic/prebiotic.
7. Plan to meet with a Registered Dietitian.