

## FREQUENTLY ASKED QUESTIONS ABOUT...

# DIET for ATAXIA

### SOME GENERAL GUIDELINES and CAUTIONS

*These diet guidelines are primarily for discussion purposes with your neurologist. Your neurologist may also recommend that you discuss these guidelines with a physical therapist and nutritionist familiar with movement disorders. Ataxia is a complex systems disorder that often works best with a team approach for your medical treatment.*

*These diet guidelines do not offer a cure for ataxia or even the elimination of specific symptoms. At best, these dietary guidelines have been developed to hopefully:*

- a) reduce the severity of some bothersome symptoms;*
- b) reduce reliance on poorly tolerated or contraindicated pharmacotherapies; and c) enhance the ataxia patient's perception of personal control and sense of responsibility for the management of his/her neurological condition.*

*However, these diet guidelines have not been proven to help all forms of ataxia, nor have they been tested with a sufficient sample of ataxia patients to recommend their applicability for any specific patient. More research on diet's effect on ataxia is needed. **These dietary guidelines should not be tried without first consulting your treating physician team as to their potential usefulness in your specific case.***

### WORK WITH YOUR MEDICAL TEAM

Neurological issues are typically 'systems problems' that will require all the physicians and caregivers who you are working with, as well as you, being on the 'same page.' Having good data is key to making good medical decisions going forward. Consider asking each of your treating physicians to send copies of their clinic notes to you, as well as the other specialists you see who need to know about that visit.

### THE IMPORTANCE OF EXERCISE

Dietary changes and exercise are often necessary to achieving the optimum beneficial results. This is where a physical therapist experienced with movement disorders can often be exceedingly helpful. Specifically tailored daily exercises may even slow the advancement of some neurologically caused balance problems.

With the advice of your physical therapist, the recommendation is to design an exercise program that you will faithfully do almost every day for at least 40-minutes, year-in-year-out, as long as you are able. The National Ataxia Foundation has a fact sheet titled *Coordinative Physiotherapy for Patients with Ataxia* which was developed by a physical therapist in Germany specifically for those with neurological disorders. The fact sheet is available on the NAF website, [www.ataxia.org](http://www.ataxia.org) or you may email [naf@ataxia.org](mailto:naf@ataxia.org) and request a fact sheet to be mailed or emailed to you.

### WHAT ARE THE PURPOSES OF AN ATAXIA DIET?

- Sound nutrition to support healthy body weight and normal bodily functions. It is important to achieve an appropriate body weight for improved movement ability and lower stress on joints.
- Increased energy and less fatigue.
- High fiber that may add better regularity to bowel movements.
- Improved mood and spirit.

### A SIMPLE CARBOHYDRATES-RESTRICTED, HIGH FIBER DIET MAY BE HELPFUL

Ataxia patients may sometimes benefit by avoiding simple carbohydrates. What this means is to eliminate foods sweetened with high fructose corn syrup, sugar, and artificial sweetener; no or very small amounts of cookies, cakes, candies, pastries, white flour, and fruit juice. Often ataxia patients crave high sugar, simple carbohydrates toward off fatigue and depression. However, this does not work well in that such foods cause even more fatigue and depression than they relieve. Instead, eat protein, fats, and complex carbohydrates such as unsweetened fruits, starchy vegetables, legumes, rice, and pasta. Try to avoid processed meats with additives and preservatives. Most importantly, drink plenty of liquids: 6 to 8-8oz. glasses/day, avoiding sugar and diet cold drinks as well as fruit drinks loaded with sugar or artificial sweetener.

Additional fiber may be a beneficial addition to the ataxia patient's diet. Total dietary fiber intake for adults should be about 30-40 grams a day. But adults in the U.S. usually get no more than about 15 grams a day from their diet, about half of the recommended amount. For most people, this means adding a fiber supplement to a healthy diet consisting of daily servings of vegetables and fruits, as well as whole grains and beans. Often doctors recommend psyllium husk (Metamucil, Konsyl) or methylcellulose (Citrucel). For some ataxia patients with low blood pressure, psyllium husk may cause one's blood pressure to drop too low, increasing the potential for falls. Again, consult with your physician before beginning any fiber supplement regime. When you are discussing the possibility of adding fiber to your diet with your physician or nutritionist, ask them if you might also benefit by taking a probiotic, along with the added fiber.

## ARE THERE FOODS I SHOULD LIMIT OR AVOID?

The foods in the table below, when avoided and combined with certain exercises chosen for you by your physical therapist, sometimes help ataxia patients by reducing dizziness and improving a sense of balance. Individual tolerances will tend to vary by individual and over time relative to the patient's symptoms progression and other environmental factors. The purpose of the table is to provide a solid starting point of where one might begin - not a forever proscription.

**TABLE 1: FOODS THAT IF LIMITED OR AVOIDED MAY REDUCE DIZZINESS AND IMPROVE A SENSE OF BALANCE IN SOME ATAXIA PATIENTS**

Aspartame	No foods containing NutraSweet are allowed.
Breads, fresh baked	Avoid freshly baked breads less than 1 day old.
Chocolate	Dark or milk chocolate or foods containing chocolate are discouraged. White chocolate is okay.
Citrus-Containing Foods	Limit amounts of citrus fruits and their juices - as well as bananas or foods with bananas as ingredients.
Monosodium Glutamate (MSG)	Foods with MSG are discouraged. This includes all foods with hydrolyzed protein as an ingredient.
Nitrate/Nitrite Containing Foods	Bacon, hot dogs, sausage, ham, smoked fish, etc. with nitrates or nitrites are discouraged.
Onions, raw	Avoid raw onions. Cooked onions may be tolerated.
Sulfite -Containing Foods	Avoid raisins, dried fruits, dates, figs, etc. preserved w/ sulfites.
Tyramine-Containing Foods	Limiting consumption of many hard cheeses (cottage cheese, ricotta, cream cheese, and American cheeses are okay), pizza yogurt, sour cream, buttermilk; beef liver, chicken liver; nuts, including peanut butter (seeds are okay); soy sauce and foods containing hydrolyzed soy protein; beans such as lentils, lima and navy beans sometimes helps to reduce dizziness in some patients.

## WHAT VITAMINS SHOULD I TAKE?

For ataxia patients, taking a daily multivitamin is important to help with fatigue and general health. But, oftentimes, a multivitamin needs to be supplemented to provide the minimum daily requirements (MDRs) of some specific micronutrients.

Below is a list of micronutrients recommended for adults that sometimes require supplementation beyond a good daily multivitamin and a healthy diet that ataxia patients may wish to consider taking on the advice of their nutritionist:

**TABLE 2: MICRONUTRIENTS RECOMMENDED FOR ADULTS**

<b>MICRO NUTRIENT</b>	<b>DOSAGE</b>	<b>CONSIDERATIONS</b>
Vitamin B-12	100-400 mcg/day	Vitamin B12 malabsorption and vitamin B12 deficiency are more common in older adults.
Vitamin C	500-1,000 mg/day	Some people find sodium ascorbate and calcium ascorbate less irritating to the gastrointestinal tract than ascorbic acid.
Vitamin D-3	2,000 IU/day (50 mcg)	Vitamin D is required for optimal calcium absorption. Obesity tends to reduce bioavailability of vitamin D. Aging also tends to reduce the capacity to synthesize vitamin D. Staying indoors or the regular use of sunscreen blocks vitamin D synthesis.
Vitamin E	200 IU/d	Total sources should not exceed 400 IU/d
Vitamin K	Women: 90mcg/day; Men: 120 mcg/day	Adequate intake (AI) of vitamin K is essential in maintaining bone health.
Calcium	1,200 mg/day	Adequate intake (AI) from all sources for both Males/Females over 50. To maximize absorption, take no more than 500 mg of elemental calcium at one time. Most calcium supplements should be taken with meals, although calcium citrate and calcium citrate malate can be taken anytime. 400 IU/d of D-3 will help insure calcium absorption.
Coenzyme Q-10	100-200 mg/day	Coenzyme Q10 is fat-soluble and is best absorbed with fats in a meal. Women who are pregnant or breast feeding should not take CoQ 10.
Magnesium (Mg)	100 mg/day	The metabolism of carbohydrates and fats to produce energy in the body requires numerous magnesium dependent chemical reactions. Mg may also be helpful for muscle cramps. Mg is best absorbed in aspartate or glutamate amino acid chelated form or alternatively in glutamate or lactate salts form. Mg oxide is less well absorbed.
Omega-3,6, 9	2,000 mg/day	Omega 3 (ALA, EPA, and DHA), 6 (GLA, linoleic acid), 9 Fatty Acids. These fatty acids require adequate Vitamin E.
Glucosamine sulfate only. Not glucosamine HCl or with Chondroitin sulfate. Take only after discussing with your physician	1,500 mg/day for relief or arthritis pain only in some patients	Three months of treatment is a sufficient period for the evaluation of efficacy; if there is no clinically significant decrease in osteoarthritic pain by this time the supplements should be discontinued. There is no evidence that glucosamine sulfate prevents osteoarthritis in healthy persons or in persons with knee pain but normal radiographs Avoid if allergic to shellfish!
Flavonoids	Eat fresh vegetables and fruits daily	Flavonoids may provide some neuroprotective benefits by helping to reduce inflammation in the body. Resveratrol in red wine also helps with inflammation. Drinking two glasses of chocolate skim milk/day may also help according to recent research from Spain.

Some ataxias may be caused by certain micronutrient deficiencies, such as a deficiency in vitamin E. Such deficiencies are diagnosed by blood tests performed by your physician. If your form of ataxia is caused by a specific deficiency, then your physician may recommend treatment with larger doses of that micronutrient. However, if you have not been diagnosed with a specific deficiency, taking mega doses of any micronutrient may be harmful rather than helpful and should not be undertaken without advice from your physician. Ataxia patients may wish to avoid herbal or other micronutrients unless your physician specifically recommends them for you to help with fatigue or sleeplessness, which sometimes accompanies ataxia.

All brands of multivitamins and supplements are not created equal. Some brands have failed independent tests for purity or potency. Price alone may not be a good indicator of quality. Some national store brands are rated as good quality, some others not. Many discount brands fail to meet quality standards. Look for Good Manufacturing Practices (GMPs) or U.S. Pharmacopeia standards-quality in a micronutrient supplement. ConsumerLab.com, Consumer Reports, or your nutritionist can help in choosing a reliable brand.

**WHAT ABOUT PRESCRIPTION AND OVER-THE-COUNTER MEDICATIONS?**

Ataxia patients should generally avoid prescription and over-the-counter drugs that cause fatigue or weakness. Consult with your treating physician before taking any medications and supplements; especially those that you plan to take for an extended period.

**WHAT IS GLUTEN ATAXIA?**

Patients with celiac disease may develop cerebellar ataxia. Cerebellar ataxia in patients with celiac disease does not appear to be the result of poor nutrition, although celiac disease patients do often suffer from poor nutrition due to the inflammation of the lining of the gut tissue that prevents absorption of nutrients and vitamins. It is the allergy to gluten that is presently believed to be responsible for ataxia. A test for gliadin antibodies, which are proteins in the blood that react with gluten components, is necessary to determine if gluten allergy is a factor in your particular ataxia. Often, a strict gluten-free diet is recommended for people who have high gliadin antibodies and ataxia.

Before beginning a gluten-free diet, consultation with a nutritionist recommended by your physician is important. Usually a trial of the gluten-free diet is recommended for at least six months before reevaluation and possible continuation of the diet. Maintaining a gluten-free diet requires a continuous commitment by patients and their families as gluten is found in many of our favorite foods.

**HOW CAN THE NATIONAL ATAXIA FOUNDATION HELP?**

The National Ataxia Foundation (NAF) is interested in all forms of hereditary ataxias and sporadic ataxia. The treatment and prognosis of ataxia, due to causes such as stroke or tumor, depends primarily on the treatment of the underlying cause. While each year more and more is understood about the various forms of ataxia, presently there is no known cure for the hereditary and sporadic ataxias. NAF has been in the forefront for over 55 years funding promising world-wide research to find answers.

The National Ataxia Foundation is committed to education about ataxia, service to individuals affected with the various forms of ataxia and promoting research to find the causes, better treatments or a cure for ataxia. NAF can help by providing information for you, your family and your physician about ataxia.

If you have any additional questions or if we can be of any assistance, please see contact information below:

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*If you take warfarin (a blood thinner), you should know that vitamin K or foods containing vitamin K could affect how the drug works. Ask your health care provider how much vitamin K or vitamin K-containing foods you should consume.*

*\*SCAI is a disorder resulting from the defective gene Ataxin-1 misfolding of the protein produced by the gene. Dr. Nicolas Bazan of Louisiana State University found that the omega three fatty acid, docosahexainoic acid, protects cells from this defect.*

*For each micronutrient, the Food and Nutrition Board of the Institute of Medicine establishes a recommended dietary allowance (RDA) or adequate intake (AI). For RDA/AI for older adults, see <http://lpi.oregonstate.edu/infocenter/olderadulteyedisorders.html>.*

*Taken from the University of Minnesota Ataxia Center Website <http://www.ataxiacenter.umn.edu/aboutataxial/sporadicwheat/home.html>*