

Patient Education

***Neuromuscular Clinic for Swallowing and Speech Disorders
Muscular Dystrophy Clinic***



Vitamin Therapy for ALS

*How Vitamins and Supplements May Help
Patients with Amyotrophic Lateral Sclerosis*

Introduction

There is increased awareness of the role of oxidative stress and free radicals in Amyotrophic Lateral Sclerosis (ALS). In some patients with familial ALS, there is mutation on the gene Superoxidase dismutase (SOD) which codes for the enzyme SOD1. The SOD1 enzyme detoxifies free radicals which can cause damage to motor nerve cells. It is thought that antioxidants (Vitamins A, C, E, and Selenium) may protect motor nerve cells from damage by these toxic free radicals. In animal (transgenic mice model) studies, Vitamin E and Selenium were shown to slow progression of symptoms but they did not prolong survival. Studies are being done now to find out if antioxidants can help people with ALS.

Supplements such as creatine may help to improve energy. Creatine is found in meat and fish. It is available in supplement form, but is not FDA (Food and Drug Administration) approved. Research shows that creatine supplements can increase muscle phosphocreatine content, which is absorbed by muscle cells and becomes an energy reserve. It creates an energy reserve that is needed in transitions from rest to exercise, especially very intense, explosive exercise (this type of exercise is not recommended for people with ALS).

Antioxidant Vitamins

Vitamin A 5,000 IU/day or 10,000 IU every other day
Best food sources: Liver, eggs and fortified foods, and provitamin A carotenoids (such as beta-carotene), which are found in green leafy vegetables as well as in orange and red fruits and vegetables



Questions ?

Neuromuscular Clinic
for Swallowing and
Speech Disorders:
Call (206) 598-4022

Your questions are
important. Call your
doctor or health care
provider if you have
questions or concerns.
UWMC Clinic staff are
also available to help at
any time.

Other clinics that can
provide information are:

Rehabilitation Medicine/
Muscular Dystrophy
Clinic:
(206) 598-4295

Pulmonary Medicine
Clinic:
(206) 598-4615

Vitamin E 800 IU/day

Best food sources: Almonds and other nuts, leafy greens, sunflower and other seeds, whole grains, safflower and sunflower oils

Vitamin C 1000 mg/day

Best food sources: Citrus fruits, potatoes, strawberries, green leaf vegetables.

Selenium 200 mcg/day

Best food sources: Seafood, liver, meats, and grains

Coenzyme Q10 100 mg, 3 times a day

Supplements

Creatine 5 grams/day

Drink at least 2 quarts of liquid a day when taking supplements.



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