**SUPPLEMENTS FOR YOUR NERVOUS SYSTEM**

***Disclaimer:*** *Dietary supplementation should NOT be initiated without the supervision of a qualified physician. Check with your doctor before you begin. Several of these supplements may have adverse effects.*

**Vitamin E**

• Powerful antioxidant that reduces levels of free radicals and oxidative stress

• Protects against side effects: numbness, tingling, burning and pain

**B Complex**: B1 (thiamine), B2 (riboflavin), B3 (niacin), B5 (pantothenic acid), B6 (pyridoxine), B7 (biotin), B9 (folic acid), B12 (cobalamins)

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| • B12 deficiency results in damage to protective covering of nerves |
| * Decrease in pain (B1/B6/B12)
 | * Folic acid (B9): maintenance of nerve cells
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**Alpha‐Lipoic Acid**

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| • Benefit in diabetic neuropathy (less pain, burning and numbness) |
| * Further studies needed for safety/efficacy of ALA in prevention/treatment of chemotherapy induced neuropathy
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**Glutamine**

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| • A neutral nonessential amino acid though to have neuroprotective effects (particularly with Paclitaxel) |
| * More research needed to assess efficacy of glutamine
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**Glutathione**

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| • Tripeptide thought to prevent neurotoxicity |
| * Efficacy seen in 50 advanced gastric cancer undergoing cisplatin‐based chemotherapy
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**Magnesium/Calcium**

• Improvements in neurotoxicity following infusion; helps with cramping

• Caution: may cause diarrhea in large doses

* Need more research to evaluate use as prevention/treatment of chemotherapy induced neuropathy

**N‐Acetylcysteine (Amino Acid)**

* Powerful antioxidant: Animal studies have shown inhibition of diabetic neuropathy and protection against neuropathies caused by chemotherapy drugs

**Omega‐3 Fatty Acids**

* High quantities in cold-water fish (salmon) and widely consumed for anti‐inflammatory powers
* Essential fatty acids and important component of cell membranes, myelin sheath that protects nerves
* Studies show ability to reduce demyelination of nerves and neuropathic pain

*\*\*Cancer Wellness Center - May 13, 2010 - Anne Leavell, MS, RD, LDN, CDE - Department of Neurology, Northwestern Medical Faculty Foundation*