Tuesday Minute

Chronic Fatique - Mitrochondrial Support

Expanded Notes from "<u>Chronic Fatigue Syndrome and Nutritional Interventions</u>" webinar presented by Alex Vasquez, BS, DC, ND, DO

Whatever condition Dr. Vasquez treats he always uses the acronym FINDSEX.

<u>F</u> stands for Food, and his basic <u>5 Part Wellness Protocol</u>

I stands for Infection particularly dysbiosis or hidden infections,

N stands for Nutritional Immunomodulation,

D for Dysfunctional Mitochondria,

<u>S</u> for Style of Living, Spinal Health, Sleep, Sweat, Spiritual Health, etc,

<u>E</u> stands for Endocrine or hormone balance and

X for Xenobiotics or toxins.

F - Treat with a phytochemically rich diet, low carbohydrate plant based diet. This increases phytonutrient density, anti-inflammatory, antioxidants and the fibers feed the healthy bacteria which reduce cytokines produced in the gut thereby reducing inflammation. A basic menu for mitochondrial repair, think ProMulti-Plus, 2 capsules, three times a day as your multi; Optimal EFAs for combination fatty acid therapy 1 tbsp or 6 capsules; Lipoic Acid,1-3 capsules, two times a day; and CoQ-Zyme 100 Plus, 1 capsule, three times a day. See products below to add further specificity.

I - Eradicate the gram negative bacteria (see SIBO link) Dr. Vasquez mentioned the following: A.D.P. 3 tablet, four times a day or 4 tables, three times a day; FC-Cidal 2 capsules, three times a day; Dysbiocide 2 capsules, three times a day; Iodizyme-HP one tablet per day.

N - Heal the gut to assure that the LPS or the antibodies associated with them cannot enter the blood stream. Dr. Vasquez uses 20-30 grams of whey protein isolate from Biotics as well as 18-30 gram of L-Glutamine. As a drink this can be taken throughout the day.

N - ProMulti-Plus provides the B vitamins and trace elements very important as a base and to support Krebs cycle and mitochondrial health.

N - Optimal EFAs Liquid, 3000 mg; DHA for mitochondrial and gut membranes, 1 Tbsp therapeutically and 1 tsp for maintenance.

D - CoQ-Zyme 100 Plus, 100-300 mg (CoQ-Zyme 100 Plus, 1-3 capsules per day); number one mitochondrial supplement.

D - Lipoic Acid, 300-400 mg twice a day (Lipoic Acid, 3 capsules, twice a day ;) one of three supplements that are necessary to increase intracellular glutathione. short half life up to 600 mg three times a day used with diabetic neuropathy. Dr. Vreeland uses 100 – twice a day to protect BBB and 100 mg every 3 hours to chelate mercury. He uses this five days on and two days off... very successful.

D - Vitamin C as ascorbate, 2,000-6,000 mg; supports the electron transport chain for energy in the mitochondria. One of three supplements used to increase glutathione. Mixed Ascorbate Powder has 2800 per rounded teaspoon and mixes well with fruit or vegetable juice. Mixed Ascorbates can also be used at higher doses as therapeutic diarrhea to clear out the bugs fast. 2-3 heaping Tbsp with juice. Dr. Vasquez suggests: a cup of coffee... 30 min later C flush... 30 minutes later coffee again. You can see further suggestions on flushing with vitamin C. (The Vitamin C Flush)

D - Mixed tocopherols 800 IU; 400 IU are in ProMulti-Plus. Increasing systemic antioxidants spares glutathione. To increase to 800 IU consider high gamma, 1 twice a day; or E-Mulsion 200, 1 capsule, twice a day in addition to ProMulti-Plus.

D & I - Selenium 200-800mcg; Se functions as an antioxidant, supports glutathione and has antiviral effects (200mcg in ProMulti-Plus); Se-Zyme Forte is a vegetable cultured selenium and contains 100 mcg per tablet.

D & I - NAC (N-Acetyl-L-Cysteine) 500-1000 mg twice a day; one of three supplements used to increase glutathione. Antioxidant has antiviral effects and is a natural heavy metal chelator. NAC discourages parasites which hate the presence of sulfur in the bowel.

D - Acetyl L-Carnitine 1000 twice a day; increases mitochondrial function.

I - Minimize herpes replication - NAC, selenium, etc. like IAG.

X - Detox organic and metal toxin: Chlorella Caps, 2-3 capsules, three times a day between meals; or Porphyra-Zyme, 2-6 tablets, three times a day between meals. It is my experience that this dose should start at 2 tablets, three times a day between meals and increase gradually as it is a very effective chelator and the removal of heavy metals can sometimes temporarily aggravate existing conditions.

N - Potassium-HP with Magnesium, 1 tsp mixed with juice to alkalize the system which results in:

1) An increase in mood due to increase in endorphins when alkalized.

2) Less pain increased endorphins.

3) Retain intracellular magnesium, increases 11%. Magnesium is essential for healthy mitochondrial function, makes the Krebs cycle work better. If you take magnesium in an acidic environment you won't retain it due to the need for acid buffer (magnesium is a great buffer).

4) The mineral ascorbate form of vitamin C is another major alkalizing factor. See <u>The Vitamin</u> <u>C Calibration Test or Vitamin C. Flush</u>.