# Lab Tests for Seniors

## **First Level Testing**

### **Nutrient Deficiency or Excess**

Assess Digestion Especially HCL B12/Folate **B6** (See Tuesday Minute on B6) the list. Folic Acid, B12, Betaine, B6 Vitamin D

### **Method of Testing**

Symptoms of hypochlorhedria can be assessed with various questionnaires. Subjective indications like gas, burping, loss of taste for protein, etc. will be present. Lab tests to consider are **Serum Globulin** levels over 2.8, Serum Gastrin levels less than 50, and Serum **Phophorous** below 3.0. **BUN** over 15.\*\*\* Patients can be sent to drawing stations using services like Professional Co-op Services (PCS) 866-999-4041 for package/discount. See links below.

Optimal levels for MCV are 82-89.9 Optimal levels for MCH are 27.0-31.9 If MCV levels are over 90 and MCH over 32.0, consider B12/folic acid deficiencies; if one test is low, possible; if both are low, probable. Methylmalonic Acid (MA) is the gold standard for B12 deficiency. Homocysteine will help confirm folate if Methylmalonic Acid is normal; or just supplement with B12-2000 Lozenge, 1 tablet 3 times a day.

When **MCV** is less than 82 and **MCH** is less than 27.0 and iron and ferritin levels are normal, and internal bleeding has been ruled out, consider other nutrients needed to make healthy RBCs... B6 is the next one on

**Homocysteine** less than 10.00 is optimal.

**25-hydroxyl vitamin D**, optimal keep rising as new research is released new blood level appears to be between 50-80 ng/ml.

Fasting Insulin Levels

**Fasting Insulin** Levels for optimal functioning should be less than 10.

Professional Co-op Services has a panel that will include everything above. The test is called the **Opti-Cardio Panel plus Insulin**. The code is 349751. This is a complete chemistry panel with a CBC and differential as well as the Insulin, Hb A1c, TIBC & %Iron Saturation, Ferritin, C-Reactive Protein (High Sensitivity), 25-hydroxy vitamin D, Homocysteine and Fibrinogen. You can contact professional co-op services for CPT-Codes and further testing information at 866-999-4041. The beauty is that you can send your patients to one of over 1700 drawing stations and don't have to worry about time consuming regulations and possible conflicts with your schedule.

\*\*\*Optimal lab values taken from Balancing Body Chemistry With Nutrition, "More Than Just a Bunch of Numbers – Making Sense of Blood Chemistry Results." March 2018 Edition

# Second Level Testing

Hormone Testing	DHEA, progesterone, testosterone, estradiol, and cortisol. Different labs offer saliva, 24 hour urine, and blood. There is great controversy on the best mediums to use and optimal levels are beyond the scope of this handout. Healthy hormones are critical for healthy brain function.
Heavy Metal Screening	Porphyra-zyme challenge for 4 days, 6 tablets t.i.d. Start collecting the 24 hour urine sample on the morning of the fourth day of taking Porphyra-zyme. We are looking for all the heavy metals and particularly looking at elevated copper levels. Dr's Data 800-323-2784.
Comp. Stool Digestive Analysis	Looking for digestive influences and gut dysfunction. Dr's Data 800-323-2784 will perform this as well as other gut tests.
Amino Acids	Use blood or urine. The blood gives the "right now" homeostasis picture, and the urine will reflect metabolites and other excretion byproducts. To be discussed at a later date. Dr's Data 800-323-2784.

Name:

Date:

B12 Supplementation or Elevated Homocysteine Re-evaluation Date:\_\_\_\_\_

#### **Supplemental Support:**

This recommendation is not meant as a diagnosis or to replace the advice of your health care practitioner, rather it is supportive in helping you return to health and vitality.

<u>B12-2000 Lozenges</u> -	1 tablet <u>dissolved</u> (not swallowed) slowly in the mouth three (3) times daily
<u><b>ProMulti-Plus</b></u> - Broad source multivitamin. High in B vitamins, minerals and phyto-nutrients to reduce inflammation and cofactors necessary to make healthy digestive enzymes	2 with each meal

HCL Plus -HCL support as well as a source of betaine, which is another tool to reduce homocysteine 2-3 taken in the middle of each meal. Increase as physician directs

#### Notes:

B12 works with folic acid in the synthesis of the building blocks for DNA and RNA. It is essential for the integrity of the nervous system as well as energy production. B12 deficiency affects the peripheral nerves and in later stages the spinal cord. Tingling and numbress in the extremities, loss of vibratory and position sensation, abnormalities of gait, age related hearing loss, muscle spasticity, irritability, depression, loss of concentration, memory loss, and dementia are just a few of the signs of B12 deficiency.

Animal products are the principal food sources of vitamin B12. The richest dietary sources are the liver, brain and kidney. Other sources include egg yolks, clams, oysters, sardines, salmon and heart. Lower amounts are present in fish, beef, lamb, pork, chicken, cheese and milk. Plant sources of B12 do not have the same biological activity for humans and as a result most vegetarians are low in B12 and should supplement.