#### Choosing a Basic Supplement Plan to Support Optimal Health.

In a perfect world, no one would need supplements. But given the stress of our modern life, the poor quality of our food supply, and the high load of toxins on our brains and bodies, most of us need a basic daily supply of the raw materials for all our enzymes and biochemistry to run as designed.

Nutrients work as a team and there is a basic workhorse team needed for everyone. Additional supplements may help people with specific imbalances or provide added support for certain times in our life cycle that increases our needs for some nutrients, pregnancy for example.

The products available on our site highlight the basic supplements the average person needs to support good health. The following is an overview of the basic raw materials.

- A high-quality, high-potency, highly bio-available broad spectrum multivitamin, which contains all the basic essential vitamins and minerals
- 2. Calcium and Magnesium
- 3. Vitamin D3
- 4. Omega-3 fatty acids (EPA and DHA)
- 5. Methylation factors: folate, B6 and B12. Often special activated forms of these nutrients are needed to be most effective for brain health

 Probiotics or beneficial bacteria to improve your digestion, reduce food allergies, and reduce gut inflammation.

## Not all Supplements are Created Equally

It is important to find safe, high-quality, and effective nutritional supplement products.

Finding the best products to support health can be a difficult task. The lack of adequate government regulations, the dizzying number of products on the market, and the large variations in quality all create a minefield of obstacles for anyone trying to find the right supplement, vitamin, or herb.

Be aware that all brands are not created equally. Quality is up to the manufacturer because of limited regulations regarding manufacturing. Certain companies are more careful about quality, sourcing of raw materials, consistency of dose from batch to batch, the use of active forms of nutrients, not using fillers, additives, colorings, etc. When choosing supplements it is important that you choose quality products.

While we do not officially endorse or have any consulting or employee relationship with any supplement companies, we do believe a few have risen to the top of the supplement industry and can be safely used to help support and enhance your health. When choosing supplements, make sure to consider the following factors:

- Manufacturers who use GMP (good manufacturing practices) for drug or supplement standards from an outside certifying body.
- Third-party analysis for independent verification of active ingredients and contaminants.
- Products that have some basis in basic science, clinical trials, or have a long history of use and safety.
- Use of clean products, free of preservatives, fillers, binders, excipients, flow agents, shellacs, coloring agents, gluten, yeast and lactose and other allergens.

Each person must be cautious and evaluate companies and products for themselves. Be sure to pick quality supplements as you acquire the list of vitamins outlined below. It is optimal to work with a trained dietitian, nutritionist, or nutritionally oriented physician or health care practitioner to select the best products.

# **Basic Nutritional Support**

Ninety-two percent of Americans are deficient in one or more essential vitamins and minerals, and 80% of Americans are deficient in vitamin D, and over 99 percent of Americans are deficient in the essential omega-3 fatty acids.

Therefore, we recommend that people take a basic multivitamin and mineral, as well as calcium and magnesium, extra vitamin D, omega-3 fats and probiotics as the foundation for good health. Because methylation is so important for the brain and nearly every other function of the body, we recommend methylation nutrients (B6, B12 and folate) in addition to what is in your multivitamin as outlined below.

#### Vitamins recommended to be taken daily.

Here is a guide to get started on a comprehensive supplement plan.

### Multivitamin and Mineral

A good multivitamin and mineral generally contains the following:

Mixed carotenes (alpha, beta, cryptoxanthin, zeaxanthin, and lutein)
15,000-25,000 U

- Vitamin A 1000-2000 U preformed retinol
- Vitamin D<sub>3</sub> 400 U-800 U
- Mixed tocopherols (vitamin E, including d-alpha, gamma, and delta) 400 U
- Vitamin C (as mixed mineral ascorbates) 500-1000 mg
- Vitamin K<sub>1</sub> 30 mcg
- B<sub>1</sub> Thiamine 25-50 mg
- B<sub>2</sub> Riboflavin 25-50 mg
- B<sub>3</sub> Niacin 50-100 mg
- B<sub>6</sub> Pyridoxine 25-50 mg (ideally including pyridoxyl-5-phosphate)
- Folic acid (ideally as mixed folic acid L-methylfolate) 800 mcg
- B<sub>12</sub> 500-1000 mcg (ideally as methylcobalamin)
- Biotin 150 mcg to 1000 mcg
- Pantothenic acid 100-500 mg
- lodine 25-75 mcg
- Zinc (as amino acid chelate) 10-30 mg
- Selenium 100-200 mcg (ideally as selenomethionine)
- Copper 1 mg (should be avoided if you have autism or ADHD)
- Manganese 5 mg
- Chromium (ideally as chromium polynicotinate) 100-200 mcg
- Molybdenum 25-75 mcg
- Potassium 50-100 mg
- Boron 1 mg
- Vanadium 50mcg

- Inositol 25-50 mg
- Choline 100-200 mg
- Iron (as chelate) 8-12 mg (only for menstruating women)

Keep in mind that this usually requires the intake of 2-6 capsules or tablets a day to obtain adequate amounts. Some people may have unique needs for much higher doses that need to be prescribed by a trained nutritional or Functional Medicine physician.

You may not get exactly these amounts, forms, or ratios of ingredients in your multivitamin. Remember these are optimal guidelines and the exact forms and amounts of nutrients in a vitamin depend on the company that formulates it. So don't be rigid. These are overall guidelines.

If you have problems swallowing supplements, you can try capsules instead of tablets. Or you can crush them, open them and sprinkle them in food, or put them in shakes. There are also powdered and liquid forms of nutrients. Some nutrients can even be given as topical creams such as magnesium, or zinc.

There is something for everyone, even infants and children.

The following products we recommend as good multivitamin and mineral

supplements. If you click on the product it will link you to our on-line store where

you can read more about the product and place an order.

### Adults: (add company names?)

- MultiThera 1 (capsule or tablet)
- VitaTab chewable
- Vitaprime
- Ultranutrient
- Wellness Essentials for Men
- Wellness Essentials for Women

#### Prenatal:

Wellness Essentials for Pregnancy

### Children:

Vitaspectrum

### Balanced Absorbable Calcium and Magnesium

In addition to a multivitamin and mineral you will need to consider taking additional calcium and magnesium supplements for additional bone and muscles support. The amounts noted are the total daily requirements. What you will need depends on what is in your multivitamin. If your multivitamin contains 500 mg of calcium and 250 mg of magnesium, then you will need less from your calcium and magnesium supplement.

We recommend the following guidelines when choosing a calcium/magnesium supplement:

- Calcium citrate, 600–800 mg.
- Magnesium amino acid chelate (aspartate, glycinate, ascorbate, taurate, or citrate), 400–600 mg.

Some products we recommend are:

- OsteoThera
- Chewable Calcium
- Magnesium Citrate 150 mg
- Magnesium glycinate 120 mg

Special Considerations for Calcium and Magnesium

 There are risks associated with too much calcium from supplements so don't go over the amount recommended. It is optimal to obtain most of your calcium from your diet (greens, sardines with bones, sesame seed tahini). The amount often quoted by doctors of 1500 mg a day is the TOTAL requirement, not that to be taken in supplements.

- Some with severe magnesium deficiency may need more. Some may need less. If you are concerned you may be severely deficient, discuss the details with your doctor
- Diarrhea is often a sign that you are getting a little too much magnesium. If this occurs, just back off on the dose, or this can be avoided if you switch to magnesium glycinate
- Avoid magnesium carbonate, sulfate, gluconate or oxide. They are poorly absorbed (and the cheapest and most common forms found in supplements)
- People with kidney disease or severe heart disease should take magnesium only under a doctor's supervision

### Vitamin D3

Vitamin D deficiency is epidemic with up to 80 percent of modern humans being deficient or suboptimal in their intake and blood levels. Therefore you should consider taking additional vitamin D to what is in your multivitamin.

For maintenance we recommend:

• Vitamin D3, 2000 IU (This is **in addition** to what is in your multi-vitamin, because so many people are significantly vitamin D deficient)

### We recommend the following products:

- Vitamin D3, 1,000IU capsule
- Vitamin D3, 1,000IU liquid

However, there are many things to keep in mind as you take vitamin D.

### **Special Considerations for Vitamin D**

### 1. Take the right type of vitamin D.

- Take only vitamin D3 in the active form (cholecalciferol). Look for this type.
- Many vitamins and prescriptions of vitamin D have vitamin D2, which is not biologically active.

### 2. For deficiencies you may need more vitamin D

For correcting deficiency you can safely take 5,000-10,000 U a day for 3 months, but only under a doctor's supervision. Some people may need higher doses than my daily recommendations over the long run to

maintain optimal levels because of genetic differences in vitamin D receptors, living in northern latitudes, indoor living, or skin pigmentation.

### 3. Monitor your vitamin D status.

Monitoring your vitamin D blood level (25 OH vitamin D) is necessary to be sure you are not on too little or too much. It should be part of every check up with your doctor. For some individuals it may be pertinent to also check your 1,25 OH vitamin D levels to rule the cause of a vitamin D deficiencies.

- The ideal range is 50-80 ng/mL
- If you are taking high doses (10,000 U a day) your doctor must do a blood test to check your calcium, phosphorous, and parathyroid hormone levels every 3 months.

### 4. Give Time to Fill Up Your Tank

- It may take up to 6-10 months to fill up the tank for vitamin D if you are deficient. As mentioned above, you may need 5000 to 10,000 U a day to get to this level. Don't do this without your doctor's supervision.
- Once you are at optimal levels you can lower the dose to 2000 U a day for maintenance.

### **Omega-3 Fatty Acid Supplement**

We recommend that everyone supplement his or her dietary intake of omega-3 fatty acids. These brain-building, anti-inflammatory essential nutrients are difficult to come by in our modern diet, and many of the good sources such as fish are contaminated with toxins. The data support the benefits for everyone young or old. Try the following:

 Fish oil with approximately 1,000 mg twice a day containing a ratio of EPA/DHA 300/200, once in the morning and once in the evening. Liquid forms are more concentrated and usually only require a dose of a teaspoon daily. Liquids can also be used with children but most require half the dosage of an adult. (This must be from a reputable company that certifies purity from heavy metals and pesticides.)

#### Some products we recommend are:

#### Adults:

- EPA/DHA extra Strength Enteric Coated
- ProOmega gels Lemon
- ProOmega Liquid

#### Children:

Arctic D Cod Liver Oil-Lemon

### Mighty Methylators and the B Complex vitamins

Among the most important ingredients for healthy energy levels, cognitive function, and memory are the nutrients needed for methylation. That is why we usually recommend additional methylation supplementation to those already in a multivitamin with many people.

These nutrients can be obtained in an additional high-quality B complex vitamin or taken individually. Our B vitamins are quickly depleted from any type of stress. And all play one role or another in our bodies complex chemistry.

We generally recommend special active forms, of folate, B6, and B12. We believe they are needed because of our genes, our lifestyle, medication use, or unique biochemistry..

For most, the following list of additional methylation vitamins will do just fine. The exact dose needed will vary from person to person but these general guidelines apply to most.

- Folate (also referred to as folic acid), 800 mcg with at least 400 mcg coming from the active form or 5-MTHF (or L-methylfolate)
- B6 or Pyridoxine, 50 mg.

• B12, 1000 mcg with least half coming in the form of methylcobalamin.

#### We recommend the following brands:

- B-complex Plus
- Homocysteine Supreme

#### Special Considerations for B Complex Vitamins

- Some people may need up to 250mg of B6 or even a special "active" B5 called pyridoxyl-5-phosphate to be most effective.
- Absorption of B12 can be impaired with aging, digestive disorders, and common medications (acid blockers) so occasionally B12 shots may be required
- Sublingual or under the tongue forms of B12 may also be effective

### Probiotics

These are essential, necessary ingredients for support of intestinal health. Our poor-quality diet, overuse of medication, and stress all alter our normal, healthy intestinal flora or bacteria. Supplementing with these beneficial bacteria is often needed for long-term health given all the stresses on our guts.

There are many different strains and varieties of probiotics. Some have extensive research behind them, others years of clinical experience. The key things to look for are:

- 1. What strains of organisms are there in the supplement you choose?
- 2. How many CFU or organisms per dose?
- 3. Are they fresh?

Here are our recommendations:

 10-20 billion organisms taken on an empty stomach or with food twice a day, once in the morning and once in the evening.

### We recommend the following products:

#### Adults:

- Therbiotic complete
- ABx Support

#### Children:

Therbiotic Infant Formula

#### **Special Considerations for Probiotics**

 Preparations include freeze-dried bacteria packaged in powders, tablet, or capsule form.

- It is important to take a combination product with multiple species of organisms.
- If you are dairy sensitive, seek out dairy free brands as many are grown on dairy mediums.

# **Special Guidelines for Taking Supplements**

When taking all of these supplements, there are a few things to keep in mind.

- The dosages outlined are the MAXIMUM total daily amount we recommend taking without doctor supervision (with the exception of vitamin D). That means if you are getting B12 from several sources (your multivitamin and a separate B12 tablet) the total you should take every day from all sources is 1,000 mcg—no more.
- 2. Generally take all your vitamins with food—optimally with the meal or just before. People who take them after a meal may find they just sit on top of their food and upset their stomach. If you still have an upset stomach when taking your supplements, find a doctor who can help to correct any digestive problems, which are often the source of intolerance.
- Take fish oil just before meals to prevent any fish taste from coming up. Or keep the in the freezer so the capsule is in your intestine before it dissolves.

### Some "EXTRAS":

There are those with special conditions that may benefit from higher amounts of specific nutrients:

**Blood sugar support:** Some nutrients like chromium, vanadium and alpha lipoic acid have shown to support healthy blood sugar levels. The following product provide many of these nutrients.

- Metabolic Synergy
- Wellness Essential for BS Support?

**Immune Support:** Various vitamins and minerals like vitamin C, zinc and selenium along with various herbs and mushrooms have immune enhancing effects on the body. We like the following blend offers these various nutrients in one product. Add caution re: long term use?

- ImmuCore
- Immunotone Plus

**Antioxidants:** Many of us are under increased oxidative stress from exposure to pollution and toxins in our food and water as well as psychological stress. Several nutrients are know for their antioxidant properties and help to keep oxidative stress in balance.

- Buffered Ascorbic acid (capsules and powder)
- High Gamma High Delta Vitamin E
- E Complex 1:1

**Heart/Mitochondrial Function:** Research has shown that there are multiple nutrients and molecules that ensure that are cells run well and that we produce energy efficiently. For various reasons, many of us are suffering from compromised mitochondrial function which often presents as muscle fatigue and pain. One of those key nutrients that plays a critical role in energy production is known as CoEnzyme Q10. Speak with your doctor to see if you may benefit from supplementation with CoQ10.

- Vitaline CoQ10 100mg, Tropical Fruit
- Vitaline CoQ10 200mg, Chocolate
- Vitaline CoQ10 200mg

**Joint Health:** In addition to adequate exercise and a low inflammatory, whole food diet, some supplements have been show to be useful in the protection and support of healthy cartilage. Two in particular are known as glucosamine and chondroitin sulfate.

• Glucosamine/Chondrotin

**Foods:** A balance whole foods diet is always the preferred way to get the majority the nutrients your body needs. Some food bars are composed of whole

food ingredients that provide a convenient way to carry with you and ensure you stay well nourished through the day.

- OrganiX Bars, green bar
- OrganiX Bars, Omega 3, bar
- OrganiX Bars, Spice bar

Digestive Health: ? enzymes (Vitalzymes)