THE NEED FOR FOUNDATIONAL SUPPLEMENTS
By Hank Liers, PhD and Fred Liers, PhD
Dear Reader,

We have been proponents of foundational nutritional supplements for more than 20 years. It was evident from the beginning that when individuals got the “basics” right, then amazing health and healing could follow. We recommend every person start with foundational supplements. We also refer to these basic supplements as “core” or “essential” supplements.

Foundational supplements provide significant levels of essential vitamins, minerals, and cofactors. Many years of nutritional research has proven them necessary for health. Basic nutrients must be obtained from external sources because the body cannot synthesize them. Ideally, the best “external source” of nutrients is the diet. Yet, foods available typically do not provide adequate amounts of essential nutrients.

For most of human history, dietary intake remained the only means to obtain nutrients. However, food sources adequate to provide essential nutrients were subject to factors limiting availability, such as seasonal variation or droughts, lack of transportation, and economic factors. As a result, many people in the past did not obtain nutritional support needed for good health.

Even today, most individuals do not meet nutritional needs through diet. This remains true even though we exercise considerable choice in our nutrient sources, and that knowledge exists to help us choose wisely. The failure to obtain basic nutrition results from lack of understanding (and misinformation) about nutrient sources supportive of health. It also relates directly to our modern food system that produces foods devoid of basic nutrients due to unsustainable agricultural practices and processing of foods.

It is unfortunate that most people do not obtain adequate levels of basic nutrients, especially given that nutrition pioneers (including Weston A. Price) long ago showed that inadequate dietary intake results in conditions of poor health and illness. Yet, these pioneers greatly contributed to our understanding of nutrition required for health. As a result, we have options when it comes to making wise choices that help us build health.

This booklet is a guide for selecting and using foundational supplements. It also explains the degree to which nutrients provided by foundational supplements are critically needed today. We include information about our foundational supplements. While the subject of basic nutrition is vast, we hope our booklet steers you in the right direction, and helps orient you on the path toward optimal health!

Best of Health,

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President
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www.IntegratedHealth.com, 1-800-228-4265
WHY YOU NEED FOUNDATIONAL SUPPLEMENTS

THE FOUR ESSENTIAL NUTRITIONAL SUPPLEMENTS YOU NEED TO CREATE GREAT HEALTH NATURALLY!

Many people ask, "Why do I need nutritional supplements?" or "How can I best obtain the nutrients I need?" The answers to these questions are important because they can make a significant difference for your health, quality-of-life, and vibrant living.

First, it is important to know that most people wait until a health problem develops, then if they hear about a supplement (or substance) that might help the problem, they take just that one supplement to resolve it. Other people attempt to take many or all the supplements they think could be helpful, a "shotgun" approach that defies common sense. Unfortunately, these approaches almost never solve the problem.

We suggest a different approach. After formulating highly effective supplements for more than 20 years, and helping thousands of customers create superior levels of health, we have experience with what works. In most cases, we first recommend taking four foundational formulas. They are “foundational” because they provide basic nutrients required for good health. They represent a starting point for improved nutrition.

The reason that foundational supplements are needed is not a mystery. There is plenty of evidence supporting the body’s requirements for them. This is because during the past 70 years, nutritional scientists deeply explored fundamental questions about essential nutrients the body needs to properly function, as well as substances the body needs from outside sources because it cannot synthesize them.

We recommend four basic types of foundational supplements (sometimes referred to “essentials” or “core formulas”) representing the culmination of our experience with supplements needed for health. These four supplements include: 1) a high-quality therapeutic multivitamin to provide high levels of the basic nutrients required for health, 2) essential fats that the body needs to perform many critical functions, 3) Vitamin C (with other antioxidants, especially bioflavonoids), which is required to sustain life, and 4) high-RNA superfoods, which supply critically needed nucleic acids (i.e., dietary RNA and DNA). There is less awareness among consumers about the benefits of dietary nucleic acids compared to other essential nutrients, but they are highly important for healing and health.

While we offer a very wide range of supplements, including many that support specific problems or conditions, we always recommend starting with foundational supplements because taking these four types of formulas helps build, support, and maintain the health of the body. In fact, these four foundational supplements are a major element of the HPDI Master Rejuvenation Program, which is our complete program for health and healing.

**FOUNDATIONAL SUPPLEMENTS PROVIDE THE MOST ESSENTIAL NUTRIENTS**

The reason that foundational supplements are needed is not a mystery. There is plenty of evidence supporting the body’s requirements for them. This is because during the past 70 years, nutritional scientists deeply explored fundamental questions about essential nutrients the body needs to properly function, as well as substances the body needs from outside sources because it cannot synthesize them.

The current scientifically accepted list of essential nutrients includes thirteen vitamins (see Table 1), more than twenty minerals, two essential fatty acids, nine essential amino acids, a source of calories (includes protein, carbohydrates, an fats), water, oxygen, and sunlight. We add to the list dietary nucleic acids (especially RNA) based on the research of Dr. Benjamin S. Frank. Daily values (DVs) are established for most of these substances, but represent only minimum amounts needed to avoid disease. Consequently, these values do not address amounts needed for optimal health.

Regarding optimal daily values, there is a vast body of research on nutrients, which in addition to our experience, provides insights into what might be optimal amounts of nutrients for health.

It is no surprise that optimal values for essential nutrients are nearly always significantly higher than established daily values. This is because minimal amounts of nutrients required for mere survival cannot sustain vibrant health. In fact, daily values are probably better described as “deficiency values” because these amounts hover dangerously close to actual deficiency levels (depending on the individual) and most likely describe a state of “subclinical deficiency” (if not actual deficiency), whereby actual deficiency symptoms are temporarily masked.

### TABLE 1 - DAILY VALUE FOR 33 NUTRIENTS

<table>
<thead>
<tr>
<th>NUTRIENT</th>
<th>DAILY VALUE</th>
<th>NUTRIENT</th>
<th>DAILY VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL FAT</td>
<td>65 g</td>
<td>THIAMIN (VITAMIN B1)</td>
<td>1.5 mg</td>
</tr>
<tr>
<td>SATURATED FATTY ACIDS</td>
<td>20 g</td>
<td>RIBOFLAVIN (VITAMIN B2)</td>
<td>1.7 mg</td>
</tr>
<tr>
<td>CHOLESTEROL</td>
<td>300 mg</td>
<td>NIACIN (VITAMIN B3)</td>
<td>20 mg</td>
</tr>
<tr>
<td>SODIUM</td>
<td>2,400 mg</td>
<td>VITAMIN B6</td>
<td>2.0 mg</td>
</tr>
<tr>
<td>CHLORIDE</td>
<td>3,400 mg</td>
<td>FOLATE</td>
<td>400 mcg</td>
</tr>
<tr>
<td>POTASSIUM</td>
<td>3,500 mg</td>
<td>VITAMIN B12</td>
<td>6 mcg</td>
</tr>
<tr>
<td>TOTAL CARBOHYDRATES</td>
<td>300 g</td>
<td>BIOTIN</td>
<td>300 mcg</td>
</tr>
<tr>
<td>DIETARY FIBER</td>
<td>25 g</td>
<td>PANTOTHENIC ACID</td>
<td>10 mg</td>
</tr>
<tr>
<td>PROTEIN</td>
<td>50 g</td>
<td>PHOSPHORUS</td>
<td>1,000 mg</td>
</tr>
<tr>
<td>VITAMIN A</td>
<td>5,000 IU</td>
<td>IODINE</td>
<td>150 mcg</td>
</tr>
<tr>
<td>VITAMIN C</td>
<td>60 mg</td>
<td>MAGNESIUM</td>
<td>400 mg</td>
</tr>
<tr>
<td>CALCIUM</td>
<td>1,000 mg</td>
<td>ZINC</td>
<td>15 mg</td>
</tr>
<tr>
<td>IRON</td>
<td>18 mg</td>
<td>COPPER</td>
<td>2.0 mg</td>
</tr>
<tr>
<td>VITAMIN D</td>
<td>400 IU</td>
<td>MANGANESE</td>
<td>2.0 mg</td>
</tr>
<tr>
<td>VITAMIN E</td>
<td>30 IU</td>
<td>CHROMIUM</td>
<td>120 mcg</td>
</tr>
<tr>
<td>VITAMIN K</td>
<td>80 mcg</td>
<td>MOLYBDENUM</td>
<td>75 mcg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SELENIUM</td>
<td>70 mcg</td>
</tr>
</tbody>
</table>
Foundational nutritional supplements provide important nutrients in amounts not easily available in the diet. This relates to the fact that our needs for nutrients have never been greater. Our needs are greater due to many factors, including diets high in nutrient-depleted and processed foods (e.g., refined carbohydrates), and low in fresh vegetables and fruits. This actually describes the so-called “Standard American Diet,” or “SAD,” which has been implicated for its negative health effects.

Some reasons dietary supplements are necessary include the facts that 1) most crops are grown in nutrient-deficient and/or depleted soils using methods of industrial agriculture that fail to replenish nutrients, and poison the soil (and therefore foods) with toxic pesticides, herbicides, and chemical fertilizers, 2) food processing methods damage, destroy, or remove many essential nutrients, 3) increased demands by the body due to greater needs for nutrients (relating to stress, pollution, greater needs for detoxification, and other factors endemic to modern society), 4) biochemical individuality resulting in greater needs for certain nutrients depending on the unique biochemistry (genetic profile) of an individual. Biochemical individuality means that someone may require many times the recommended US Daily Value for specific nutrients. Consequently, one person may need hundreds of times the amount of a nutrient compared to another person’s requirement.

A review of nutritional studies indicates that deficiencies of most nutrients among individuals range from 25%–95% depending on the nutrient (see Table 2, p. 7). Such major deficiencies are less surprising given studies indicating that nutrient losses from the processing of foods range from 20%–95%, and average 70%–80% (see Table 3, p. 8). In addition, mineral levels measured in plants grown in poor soils (a result of inadequate agricultural practices) are as low as 5% of the mineral levels measured in plants grown in nutrient-rich soils.

Complicating this picture is the fact that nutritional requirements change during the year due to environmental circumstances. Changing seasons, environments, air/water supply, etc. mean that an individual’s need for nutrients typically changes (e.g., more vitamin D needed in the winter, more nutrients needed to cope with pollution associated with urban environments or stress, etc.). Nutrient density of foods also varies by location and season.

The availability of nutrients in foods can vary substantially due to season, geographic factors, and growing methods.

All these factors add up to indicate the difficulty of ensuring optimal nutrient status without foundational supplements. Because the need for nutrients is greater than ever for most people, the need for nutritional supplementation is also greater than ever. Nutritional supplements provide an effective (and cost effective) means to ensure the high levels of nutrients required to build, sustain, and maintain optimal health.

### MAJOR REASONS ESSENTIAL DIETARY SUPPLEMENTS ARE NECESSARY

### MINIMUM REQUIREMENTS FOR SURVIVAL ARE NOT OPTIMAL AMOUNTS FOR HEALTH

An important consideration (often overlooked because nutritional research typically examines only one or two nutrients at a time) is that hundreds of nutrients act and interact in our bodies simultaneously. Considering that the recommended (i.e., minimum) amount of a single nutrient rarely represents optimal intake, adverse effects can significantly increase when a broad range of nutrients is present only in suboptimal amounts (i.e., when there exists a deficiency of optimal amounts of nutrients).

The function of the human body might be likened to an automobile factory. If a factory is designed to optimally produce 100 vehicles per day, then the factory must be supplied with at least minimum amounts of all essential raw materials to make this happen. In this case, incorrect amounts of raw materials, for example, 40 tires, 91 transmissions, 67 drive trains, 13 exhaust pipes, etc. would never allow optimal automobile production. It becomes evident that important relationships among parts must be honored for the entire system to function properly.

Like an automobile factory, the human body needs proper amounts of critical “raw materials” (i.e., basic nutrients) to perform optimally. However, the need to obtain appropriate “materials” in correct amounts of all essential raw materials to make this happen. In this case, incorrect amounts of raw materials, for example, 40 tires, 91 transmissions, 67 drive trains, 13 exhaust pipes, etc. would never allow optimal automobile production. It becomes evident that important relationships among parts must be honored for the entire system to function properly.

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### TABLE 2 - NUTRIENT DEFICIENCIES FROM NATIONAL SURVEYS AND CLINICIAN ESTIMATES

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>% Deficiency from National Surveys</th>
<th>Nutrient</th>
<th>% Deficiency from Clinician Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium</td>
<td>68%</td>
<td>Biotin</td>
<td>10%</td>
</tr>
<tr>
<td>Folate</td>
<td>10+%</td>
<td>Chromium</td>
<td>10%</td>
</tr>
<tr>
<td>Iron</td>
<td>57%</td>
<td>Copper</td>
<td>90%</td>
</tr>
<tr>
<td>Magnesium</td>
<td>75%</td>
<td>Manganese</td>
<td>85-90%</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>27%</td>
<td>Pantothenic Acid</td>
<td>20-30%</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>50%</td>
<td>Selenium</td>
<td>25%</td>
</tr>
<tr>
<td>Thiamin (Vitamin B1)</td>
<td>45%</td>
<td>Silicon</td>
<td>50-60%</td>
</tr>
<tr>
<td>Riboflavin (Vitamin B2)</td>
<td>34%</td>
<td>Vitamin D</td>
<td>30%</td>
</tr>
<tr>
<td>Niacin (Vitamin B3)</td>
<td>33%</td>
<td>Vitamin E</td>
<td>70%</td>
</tr>
<tr>
<td>Vitamin B6</td>
<td>80%</td>
<td>Vitamin K</td>
<td>20-40%</td>
</tr>
<tr>
<td>Vitamin B12</td>
<td>34%</td>
<td>Essential Fatty Acids</td>
<td>15%</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>41%</td>
<td>Zinc</td>
<td>95%</td>
</tr>
</tbody>
</table>

Source: FATS THAT HEAL, FATS THAT KILL BY UDO ERASMUS
amounts is arguably more relevant for the extremely complex human body. In this regard, scientific studies on nutrients perform a disservice when they fail to consider complex interactions among nutrients in the body required to support optimal function. Minimum levels of nutrients can only lead to minimum health. Following the analogy of an auto factory, the body cannot create optimal health from insufficient raw materials (nutrients).

In fact, we have an accurate picture of what levels of nutrients support optimal body function. We are aided in this knowledge by solid scientific studies. It is established that basic nutrients provided by foundational supplements confer immense benefits for health. Indeed, basic nutrients have proven remarkably effective for improving health, especially relative to their cost. Foundational nutritional supplements are far less costly than pharmaceutical drugs or the medical procedures used to treat health conditions related to nutrient deficiencies, which often can be prevented by dietary supplements.

In addition, there is the fact that natural nutrient substances exhibit extremely low toxicity. Most vitamins, for example, demonstrate low toxicity (even at levels significantly higher than official daily values). The 2008 Annual Report of the American Association of Poison Control Centers’s National Poison Data System (NPDS) published in Clinical Toxicology (47, 911-1084) indicates not a single fatality caused by nutritional supplements in the US that year. This underscores the safety of vitamins, minerals, herbs, and amino acids. While this figure may seem remarkable considering that more than half the US population takes daily nutritional supplements, it confirms the safety of natural nutrient substances. Indeed, essential nutrients are safe and effective precisely because they naturally work together within the body to create health.

Given the critical importance of essential nutrients for health and their safety and effectiveness, foundational supplements are an ideal means to get optimal levels of nutrients not readily available from other sources. The fact that a majority of individuals are deficient in at least some nutrients means that foundational supplements can play a major role in creating health.

The four basic types of foundational supplements provide nutrients most essential for health. Together the nutrients provided by these supplements can establish a strong foundation for health by providing optimal amounts of nutrients the body needs to create and sustain good health.

### INTRODUCING FOUNDATIONAL SUPPLEMENTS (OR THE “MOST ESSENTIAL” SUPPLEMENTS)

HPDI’s foundational supplement formulas (also known as “essentials” or “core formulas”) are four basic supplements (mentioned above) that establish a foundation for health by providing the nutrients needed to support overall good health. In fact, these “essentials” provide nutrients that are so fundamental to good health that we sometimes refer to them as “core” nutrients to indicate the central role they play in creating, sustaining, and maintaining health.

These foundational supplements are the most important supplements and superfoods. Even if you take no other dietary supplements, these four will best ensure you get basic nutrients required for good health. They should be part of every nutritional supplementation program because of the foundational nutrients they provide.

### HPDI ESSENTIAL SUPPLEMENTS: THE FOUR FOUNDATIONS

The four types of foundational supplements are multivitamins, essential fats, Vitamin C antioxidant formulas, and high-RNA REJUVENATE!™ superfoods. Taking all four types of foundational supplements provides the most complete nutrition. The best way to start is by selecting one of each of the four types and taking them daily.

1. **MULTIVITAMINS.** Select one or more multivitamin supplements (from the list below). Capsules often are better absorbed than tablets (especially if you are older or have compromised digestion). Yet, tablets are more economical than capsules, and may be more suitable for vegetarians/vegans.

   - **MIGHTY MULTI-VITE!™ (CAPS)**
   - **MULTI TWO (CAPS)**
   - **MULTI TWO (TABS)**
   - **MINI MULTI (VEGGIE CAPS)**
   - **KIDS CHEWABLE MIGHTY-MULTI (TABS)**

### TABLE 3 - NUTRIENT LOSS FROM PROCESSING

<table>
<thead>
<tr>
<th>MINERAL</th>
<th>LOSS %</th>
<th>NUTRIENT</th>
<th>LOSS %</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCIUM</td>
<td>60%</td>
<td>STRONTIUM</td>
<td>95%</td>
</tr>
<tr>
<td>CHROMIUM</td>
<td>40%</td>
<td>ZINC</td>
<td>78%</td>
</tr>
<tr>
<td>COBALT</td>
<td>89%</td>
<td>VITAMINS B1, B2, &amp; B3</td>
<td>72-81%</td>
</tr>
<tr>
<td>COPPER</td>
<td>68%</td>
<td>VITAMIN B6</td>
<td>72%</td>
</tr>
<tr>
<td>IRON</td>
<td>76%</td>
<td>PANTOTHENIC ACID</td>
<td>50%</td>
</tr>
<tr>
<td>MAGNESIUM</td>
<td>85%</td>
<td>FOLATE</td>
<td>67%</td>
</tr>
<tr>
<td>MANGANESE</td>
<td>86%</td>
<td>VITAMIN E</td>
<td>86%</td>
</tr>
<tr>
<td>MOLYBDENUM</td>
<td>48%</td>
<td>LINOLEIC ACID</td>
<td>95%</td>
</tr>
<tr>
<td>PHOSPHORUS</td>
<td>71%</td>
<td>ALPHA-LINOLENIC ACID</td>
<td>95%</td>
</tr>
<tr>
<td>POTASSIUM</td>
<td>77%</td>
<td>PROTEIN</td>
<td>33%</td>
</tr>
<tr>
<td>SELENIUM</td>
<td>16%</td>
<td>FIBER</td>
<td>95%</td>
</tr>
</tbody>
</table>

**SOURCE:** FATS THAT HEAL, FATS THAT KILL BY UDO ERASMUS
A high-quality, high-potency multivitamin is the single most important supplement you can take. A good multivitamin ensures you receive important nutrients not always available in optimal amounts in foods. Taking a multivitamin helps guarantee uptake of nutrients that are not readily available because modern diets have strayed far from traditional diets. In addition, modern lifestyles create far greater demands for critical nutrients even as many nutrients are increasingly less available from foods. Multivitamins help break the cycle of deficiency and degeneration.

Critical nutrients provided by a good therapeutic multivitamin formula include a wide range of essential vitamins, minerals, and cofactors. Such a formula will usually include trace minerals, fat-soluble vitamins (A, E, D, and K), coenzyme B vitamins, magnesium, or other nutrients known to be deficient in the diets of most individuals.

Important factors to consider when looking for a good multivitamin, include high-potency, forms, completeness, balance, assimilability (e.g., ease of uptake and rapid assimilation), ease of use (convenience), etc.

High-potency is important because for most nutrients, the so-called “daily value” is simply inadequate for most people. Most individuals need many times the daily value of vitamins for good health. This is because daily values are established based on minimum amounts required for sustain life (e.g., survival) rather than the optimal amounts needed for good health.
As noted, studies of biochemical individuality show that individuals may require many times greater amounts of specific nutrients than are needed by the average person. Because most vitamins (especially water soluble ones) are essentially non-toxic even in relatively large doses (i.e., hundreds or sometimes thousands of times the daily value), it pays to provide your body with larger amounts of critical nutrients that it may require because you may not be an “average” person.

Complicating this picture is the fact that individuals needs for specific nutrients vary widely. Thus, for example, one person’s need for vitamin C may be somewhat higher than average, yet the same person’s need for Vitamin D may be significantly higher than average. In addition, the need for Vitamin C for any given individual can vary widely depending upon the stresses (infections, tissue damage, emotional stress) experienced at any given time.

The proper forms of the nutrients are another critical factor. While forms have not always been a prime consideration (either of consumers or formulators), they are critically important. Forms are worthy of attention because we know that the form of a vitamin or mineral can make a major difference in terms of how it assimilated and used in the body.

For example, Krebs cycle bionutrients (i.e., mineral carriers, such as citrates, malates, alpha-ketoglutаратates, succinates, or fumarates) are known to be superior precisely because they are the forms naturally recognized and utilized in the body. This is because these forms are used in the Krebs cycle (or citric acid cycle) that is part of the metabolic pathway used to generate energy (ATP) from nutrients in foods. In contrast, elemental forms of minerals and/or forms that are not part of the Krebs cycle may be more difficult to assimilate because they must be converted into forms the body can use. The biological cost is reduced bioavailability, as well as cellular energy expense and time required for metabolic conversion. As you can see, forms matter for health!

Other important factors include completeness and balance. Completeness is important in a multivitamin because the body requires a wide range of nutrients working together to create and sustain health. Many multivitamins are neither complete nor balanced. This relates partly to the fact that multivitamins are often not designed with an understanding of nutrients, forms, or amounts needed for health. Consequently, many commonly available multivitamins incorporate less effective forms, inadequate amounts, and improper ratios of nutrients.

This reflects a general lack of understanding by formulators about how nutrients work together to build and sustain health. In contrast, supplements are available that provide completeness and balance.

HPDI offers several high-quality, balanced, and complete multivitamins providing easily assimilated forms of nutrients in optimal amounts. These include Hank & Brian’s Mighty Multi-Vite!, Multi Two caps or tabs, and Mini Multi (100% free of excipients). We recommend our capsule formulas because they are the easier to assimilate. However, our tablet formulas are both effective and cost-effective. The Mini Multi capsule contains no additives and is designed especially for chemically and environmentally sensitive individuals. In addition, children benefit greatly from a multivitamin, and for them we offer our chewable Kids Mighty-Multi!.

Essential fats are considered “essential” because they are needed for biological processes (i.e., they are required to sustain life) rather than acting only as a food-based source of energy (as do many other non-essential fatty acids). Humans, therefore, must ingest essential fatty acids both for survival and for good health.

HPDI ESSENTIAL #2: COMPLETE ESSENTIAL FATS

Many people understand the need to take supplemental multivitamins. The need for essential fatty acids (EFAs) has gained increased attention recently, and it is no less important. More people are consuming fish, fish oils, and vegetarian sources of essential fats, including chia seeds. However, the need for supplementing diet with essential fats to ensure adequate daily intake has never been greater than today.

There are two basic essential fats: alpha-linolenic acid (omega-3) and linoleic acid (omega-6). Other fats are sometimes included as being essential fats, including gamma-linolenic acid (GLA), an important omega-6 fatty acid, and eicosapentanoic acid (EPA) and docosahexanoic acid (DHA), important omega-3 fatty acids. Although these other fats can be made in the body from alpha-linolenic acid (ALA) and Linoleic acid (LA), it is much more efficient to provide them directly.

Essential fats are considered “essential” because they are needed for biological processes (i.e., they are required to sustain life) rather than acting only as a food-based source of energy (as do many other non-essential fatty acids). Humans, therefore, must ingest essential fatty acids both for survival and for good health.

Essential fats play multiple roles in the body and serve many different functions. These functions include being modified to make substances that affect pain and inflammation; regulating steroid production and hormone synthesis; regulating pressure in the eyes, joints and blood vessels; mediating the immune
response; regulating smooth muscle for oxygen transport from red blood cells to tissues; are necessary for kidney function and fluid balance; preventing clumping of red blood cells; regulating mood and depression, and regulating nerve transmission.

Every cell and organelle within the cells are encased and protected by membrane made of phospholipids. A major component of these phospholipids are essential fatty acids that control membrane fluidity and the ability to pass important nutrients into the cells and toxins out of the cells. Without adequate essential fats the cell membranes can become rigid and dysfunctional.

We offer several essential fats products, including Hank & Brian’s Essential Fats Plus E and Omega Plus. Both of these products contain EPA and DHA from highly purified fish oils, GLA from cold-processed borage oil, and full spectrum Vitamin E consisting of all eight natural forms of tocotrienols and tocopherols. These mixed forms of Vitamin E perform many beneficial functions in the body (such as lowering cholesterol and clearing plaque out of blood vessels) and also protect the essential fats from oxidizing in the capsule and in your body. The ratio of EPA to GLA in these products is 4:1, which based upon research is considered the ideal ratio for optimal effects in the body. Essential Fats Plus E also contains astaxanthin, a carotenoid, that is an extremely powerful fat-soluble antioxidant.

The fish oils in our essential fatty acid supplements are molecularly distilled for ultra-high purity. Every batch of fish oil is tested to ensure freshness and guaranteed to contain insignificant levels of heavy metals, PCBs, pesticides, and other organic chemical contaminants. These supplements do not contain hydrogenated oils, artificial colors, or artificial preservatives.

We also offer chia seeds, one of nature’s best plant sources of alpha-linolenic acid (ALA) and linoleic acid (LA). This is an excellent alternative source of EFAs for vegetarians, vegans, and individuals not inclined to use fish oil products.

### HPDI ESSENTIAL #3: VITAMIN C WITH ANTIOXIDANTS

Vitamin C is legendary for its healing capacities. Yet, it is notable that despite numerous studies and accolades by nutritionists, it remains underutilized by mainstream medicine and is completely under-appreciated for the healing powerhouse it represents for human health.

Vitamin C is a foundational nutrient because of its important role in creating and sustaining optimal health. Vitamin C not only is a potent antioxidant, but also a powerful immune builder/anti-viral, cholesterol controller, and connective tissue builder and strengthener. In fact, no other vitamin or nutrient can take its place in terms of what it can contribute to human health, longevity, and well-being.

Ever since Linus Pauling’s *Vitamin C and the Common Cold*, Vitamin C has held a place of esteem among nutritional scientists and consumers of Vitamin C products. Pauling went on to present further studies and to write his bestseller *How to Live Longer and Feel Better*. Vitamin C plays a major role both in his discussion of vitamins and in the supplement regimens he recommends.

In nature, Vitamin C is always combined with bioflavonoids. Bioflavonoids (such as rutin, quercetin, catechins, anthocyanidins, and oligomeric proanthocyanidins (OPCs)), work synergistically with Vitamin C to create powerful antioxidant effects, counteract inflammation, and strengthen connective tissues. In addition, Vitamin C and bioflavonoids combine with other antioxidants (including glutathione, R-lipoic acid (R-LA), and selenium) in a process called “redox cycling.”

In this process, antioxidants protect and “spare” each other, thereby allowing for significantly increased antioxidant protection in the body.

We offer a variety of Vitamin C products, including formulas with bioflavonoids. Our Vitamin C formulas include PRO-C, OPC-C, Buffered Vitamin C tabs, Buffered Vitamin C powder, and Synergy C. We typically recommend taking a buffered Vitamin C product to prevent acidosis (as can happen with non-buffered ascorbic acid) and help maintain proper pH levels in the body. Furthermore, we buffer our Vitamin C products using both magnesium and calcium because magnesium is often the master nutrient in the metabolism of calcium. Our Vitamin C products include some of the most innovative formulas available.
PRO-C™ is our signature encapsulated Vitamin C antioxidant formula that contains 500 mg of buffered Vitamin C; grape extract (from seed, skin, and stem); green tea extract; NAC; reduced glutathione; R-lipoic acid; selenium, and other synergistic nutrients. It is best to take a formula like PRO-C™ that provides substantial levels of antioxidants. This is because antioxidants make Vitamin C more effective (and vice versa) and the combination of these nutrients more effectively quenches free radicals.

OPC-C™ contains 500 mg of buffered C plus 25 mg grape seed, skin, and stem extract. This is another superb formula that provides Vitamin C plus antioxidants from grape extract (from seed, skin, and stem extract). OPC-C™ does not contain green tea extract or as many antioxidants as PRO-C™, but it supplies both therapeutic levels of Vitamin C plus substantial antioxidant protection.

Our buffered Vitamin C products (Buffered Vitamin C tabs and powder) provide a cost-effective means to obtain therapeutic levels of Vitamin C. However, taking buffered Vitamin C without additional antioxidants does not provide the synergy afforded by bioflavonoids, polyphenols, and antioxidants found in PRO-C™ and OPC-C™. We therefore recommend our most basic buffered Vitamin C products (tabs and powder) as effective adjuncts to our complete Vitamin C Antioxidant with formulas.

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I just wanted to let you know that since July when I started on your supplements (Mighty Multi-Vite!, PRO-C and Essential Fats plus E) and REJUVENATE!™ my skin has never looked better!

Since health is like beauty - it shines from the inside out
I can only imagine what these vitamins are doing on the inside!

Thanks again for your fantastic products!

- Stefanie Lischer, RN, MAOM, LAc
Tucson, Arizona

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HPDI ESSENTIAL #4: REJUVENATE!™ SUPERFOODS
FOR DIETARY NUCLEIC ACIDS

REJUVENATE!™ superfoods are the most recent addition to HPDI’s foundational supplements. Our development of high-RNA superfoods was inspired by the work of Dr. Benjamin S. Frank. After more than twenty years of clinical research, Dr. Frank notably asserted in his book *Nucleic Acid Nutrition and Therapy* that nucleic acids are “essential nutrients of human beings,” as distinct from non-essential, accessory nutrients. He considered nucleic acids and nucleotides an essential dietary category, i.e., as being nutrients just as essential for humans as vitamins, minerals, proteins, carbohydrates, and lipids.

Dr. Frank acknowledged the body’s capacity to synthesize some nucleic acids, yet cited marked improvements in degenerative conditions as the clearest evidence for nucleic acids as essential nutrients that must be obtained from the diet or dietary supplements. In particular, he noted the health effects resulting even from relatively small intakes of nucleic acids (e.g., energizing effects, anti-anoxia effects, rejuvenation, and greater vitality). Dr. Frank found he could not obtain such improvements in his subjects by increasing only the intake of vitamins, minerals, proteins, or other essential nutrients.

Dr. Frank was the first scientist to conclude that nucleic acids are essential nutrients, as distinct from other micronutrients. He wrote: “[N]ucleic acids are an essential nutrient in our daily diets, and...optimal health and reduced aging are clearly related to their intake, more than to any other nutrient. Nucleic acids in our diets are of paramount importance for the repairing of molecular and gross tissue degeneration, and for combating the process of aging by simple, effective and essentially non-toxic, natural means.”

In addition, Dr. Frank describes the processes by which nucleic acids dramatically increase cellular energy. Nucleic acids boost energy levels by significantly increasing production of the “high-energy” molecule ATP (adenosine triphosphate). The body requires the energy from ATP for many purposes, including cellular and tissue repair, metabolism, digestion, building a strong immune system, and many other processes.
Our observations and experience confirm Dr. Frank’s conclusion that dietary nucleic acids are essential nutrients required for health. We developed our Rejuvenate!™ superfoods to provide dietary nucleic acids in sufficient quantity to meet the body’s needs and support optimal health. We receive many letters from our customers about the benefits they’ve received from using our high-RNA Rejuvenate!™ superfoods.

All four Rejuvenate!™ superfoods contain at least 340 mg of RNA/DNA (per serving) from a variety of vegetable sources. Including chlorella, nutritional yeast, yeast RNA/DNA extracts, spirulina, and chlorella growth factor. In addition, they all provide nutrients such as vitamin B12, folinic acid, magnesium, and vitamin C that support the body in its efforts to internally build nucleic acids. Furthermore, they all contain superfoods that provide additional key nutrients and help to optimize metabolism and health. In order to determine which Rejuvenate!™ Superfoods maybe best for you, please visit our website, or call us.

Chlorella

REJUVENATE!™ PLUS and REJUVENATE!™ Berries & Herbs are the most popular, best-tasting, and most nutritionally complete. They offer high levels of protein, a complete multivitamin, some essential fats, fiber, and antioxidants.

REJUVENATE!™ Berries & Herbs contains no greens and is known for its delicious berry flavor.

REJUVENATE!™ PLUS is our “sweet greens” formula combining great taste, superior nutrition, and fewer greens than our original formula. This adds up to delicious flavor, smooth texture, and reduced rates of detoxification (compared to original REJUVENATE!™).

REJUVENATE!™ (original greens) is especially useful for rapid detoxification (because it contains the highest levels of chlorella), and does not contain added protein or a multivitamin complex.

REJUVENATE!™ PRO is similar to original greens (as it contains chlorella and spirulina), yet delivers superb berry taste plus added protein, antioxidants, and B vitamins.

We consistently find that one of greatest means for success in creating health using dietary supplements is to ensure you take all four types of foundational formulas. For example, many people take one or two foundational supplements, for example, a multivitamin, essential fats, or Vitamin C plus bioflavonoids. But few people take all of them daily. When you take all four types of the foundational supplements daily (including a Rejuvenate!™ superfood), the results will speak for themselves. This is because our foundational supplements work together synergistically to leverage each other in ways that far exceed the effects that may be expected when taken individually or as less than a complete group.

The best news with respect to dietary nucleic acids (especially RNA) is that while they are essential nutrients, their inclusion in our foundational supplement program powerfully leverages their effects by facilitating greater synergy among all nutrients available to the body via foundational supplements. This synergy means the total package of nutrients delivered by all four types of foundational supplements combined delivers far more health-building nutrition than any single foundational formula delivers individually. That’s synergy in action. The means by which all four types of foundational supplements succeed in creating and contributing to powerful health relates less to the fact that each singly provides an essential piece of the nutrition puzzle. Success relates instead to the fact that when all foundational formulas are taken together, their healthy benefits multiply and greatly exceed the benefits provided by individual formulas. This is a primary reason we emphasize foundational nutritional supplements as a starting place for the creation of optimal health.

When I first ordered PRO-C™ and Mighty Multi-Vite!™, I noticed the difference in my energy level and stamina right away. I really like them and how easy they are on my “somewhat sensitive” digestive system. Thank you Dr. Liers and always helpful staff!

- Carolyn Danse
Rogers, Arkansas
Example of Nutritional Benefits provided by Foundational Supplements

Foundational supplements provide significant levels of essential nutrients. Table 4 compares levels of 35 nutrients provided in the Foundational Program to the Daily Value (DV).

HPDI’s most commonly used foundational supplements are selected for this comparison. Nutrient values are based on a daily serving. A daily serving is 4 capsules of Mighty Multi-Vite!™, 3 capsules of PRO-C™, 6 capsules of Omega Plus, and 2 scoops of Rejuvenate!™ Berries & Herbs (B & H).

In this comparison chart, we add the nutrients (for which there is a Daily Value) in all four foundational supplements to determine “Total in Program.” The final column indicates the ratio of “Total in Program” to DV.

Explanatory Notes

1. When values are not available, they are denoted as “NA.”

2. Daily Values are not established for omega-3 and omega-6 essential fats. We use “Adequate Intake” (AI) figures established by the Foods and Nutrition Board of the National Academy of Sciences.

3. Nutrients with a low Program Ratio (or listed as “NA”) must be obtained from the diet. These nutrients include total fat, protein, fiber, essential fats, and macrominerals.

4. Ratio to DV varies by nutrient. Desirable ratios for trace minerals range from 1 to 5, water-soluble vitamins range from 10 to 75, and fat-soluble vitamins range from 2 to 10.

5. There are other important nutrients in the Foundational Program for which a DV is not established. These include bioflavonoids, antioxidants, RNA, herbs, and other nutrients.

TABLE 4 - RATIO OF NUTRIENTS PROVIDED BY FOUNDATIONAL PROGRAM TO DAILY VALUE (DV)

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Daily Value - DV</th>
<th>Mighty Multi-Vite!</th>
<th>Pro - C Omega Plus</th>
<th>Rejuvenate! B &amp; H</th>
<th>Total in Program</th>
<th>Program Ratio to DV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat</td>
<td>65 g</td>
<td>0</td>
<td>0</td>
<td>1.0</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Saturated fatty acids</td>
<td>20 g</td>
<td>0</td>
<td>0</td>
<td>0.2</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>300 mg</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sodium</td>
<td>2,400 mg</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Chloride</td>
<td>3,400 mg</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Potassium</td>
<td>3,500 mg</td>
<td>99</td>
<td>0</td>
<td>0</td>
<td>&gt;100</td>
<td>&gt;199</td>
</tr>
<tr>
<td>Total carbohydrates</td>
<td>300 g</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Dietary fiber</td>
<td>25 g</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Protein</td>
<td>50 g</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>5,000 IU</td>
<td>7,500</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7,500</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>60 mg</td>
<td>250</td>
<td>1,500</td>
<td>0</td>
<td>433</td>
<td>2,183</td>
</tr>
<tr>
<td>Calcium</td>
<td>1,000 mg</td>
<td>100</td>
<td>69</td>
<td>0</td>
<td>80</td>
<td>249</td>
</tr>
<tr>
<td>Iron</td>
<td>18 mg</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>400 IU</td>
<td>200</td>
<td>0</td>
<td>0</td>
<td>1,000</td>
<td>1,200</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>30 IU</td>
<td>200</td>
<td>0</td>
<td>8</td>
<td>90</td>
<td>298</td>
</tr>
<tr>
<td>Vitamin K</td>
<td>80 mcg</td>
<td>200</td>
<td>0</td>
<td>0</td>
<td>500</td>
<td>700</td>
</tr>
<tr>
<td>Vitamin B1 / Thiamin</td>
<td>1.5 mg</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>4.5</td>
<td>29.5</td>
</tr>
<tr>
<td>Vitamin B2 / Riboflavin</td>
<td>1.7 mg</td>
<td>25</td>
<td>1</td>
<td>0</td>
<td>5.1</td>
<td>31.1</td>
</tr>
<tr>
<td>Vitamin B3 / Niacin</td>
<td>20 mg</td>
<td>60</td>
<td>0</td>
<td>0</td>
<td>60</td>
<td>120</td>
</tr>
<tr>
<td>Vitamin B6</td>
<td>2.0 mg</td>
<td>40</td>
<td>1</td>
<td>0</td>
<td>6.0</td>
<td>47</td>
</tr>
<tr>
<td>Folate</td>
<td>400 mcg</td>
<td>800</td>
<td>0</td>
<td>0</td>
<td>800</td>
<td>1600</td>
</tr>
<tr>
<td>Vitamin B12</td>
<td>6 mcg</td>
<td>200</td>
<td>0</td>
<td>0</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Biotin</td>
<td>300 mcg</td>
<td>500</td>
<td>0</td>
<td>0</td>
<td>900</td>
<td>1,400</td>
</tr>
<tr>
<td>Pantothenic acid</td>
<td>10 mg</td>
<td>65</td>
<td>0</td>
<td>0</td>
<td>43</td>
<td>108</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>1,000 mg</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Iodine</td>
<td>150 mcg</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Magnesium</td>
<td>400 mg</td>
<td>100</td>
<td>69</td>
<td>0</td>
<td>168</td>
<td>337</td>
</tr>
<tr>
<td>Zinc</td>
<td>15 mg</td>
<td>20</td>
<td>6</td>
<td>0</td>
<td>NA</td>
<td>26</td>
</tr>
<tr>
<td>Copper</td>
<td>2.0 mg</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>NA</td>
<td>2</td>
</tr>
<tr>
<td>Manganese</td>
<td>2.0 mg</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>NA</td>
<td>5</td>
</tr>
<tr>
<td>Chromium</td>
<td>120 mcg</td>
<td>200</td>
<td>0</td>
<td>0</td>
<td>NA</td>
<td>200</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>75 mcg</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>NA</td>
<td>100</td>
</tr>
<tr>
<td>Selenium</td>
<td>70 mcg</td>
<td>75</td>
<td>30</td>
<td>0</td>
<td>NA</td>
<td>105</td>
</tr>
<tr>
<td>Omega 3 (EPA/DHA/ALA)</td>
<td>1.6 g</td>
<td>0</td>
<td>0</td>
<td>0.6</td>
<td>0.54</td>
<td>1.14</td>
</tr>
<tr>
<td>Omega 6 (LA)</td>
<td>15 g</td>
<td>0</td>
<td>0</td>
<td>0.21</td>
<td>0.36</td>
<td>0.57</td>
</tr>
</tbody>
</table>
THE HPDI DIFFERENCE
WHAT MAKES OUR SUPPLEMENTS SO EFFECTIVE?

HPDI offers health-conscious individuals and health care practitioners the most effective supplements available. To accomplish this goal, we focus our expertise on four areas: superior design, top-quality ingredients, avoidance of harmful ingredients, and reliable manufacturing.

SUPERIOR DESIGN

We formulate our supplements based upon strong basic research and clinical studies. Our supplements are designed carefully to include ingredients demonstrated to be effective in clinical trials and research studies. We include sufficient amounts of key nutrients in order that individuals taking our supplements can obtain for themselves the positive results found in clinical trials and studies.

In our efforts to help people achieve optimal health, we include far greater amounts of many vitamins, minerals, and supporting nutrients than typical daily values.

Our formulas are balanced across the product line, so that you will not get either an excessive amount of any ingredient or an inadequate amount of important substances known to be important for balance in the body. We avoid a “shotgun” approach in formulation in which every possible ingredient known to be useful for a condition is included in a product. This approach can lead to imbalances in an overall supplement program.

We maintain knowledge of the latest nutritional research and clinical studies, and also maintain strong personal contacts with knowledgeable authorities in the field. We improve our formulas whenever possible.

HIGHEST-QUALITY INGREDIENTS

We emphasize the highest-purity and highest-quality human-grade ingredients. In fact, we use only the purest ingredients available (often USP or Pharmaceutical grades) and specify a guaranteed or standardized potency whenever possible. We purchase our raw materials from reliable suppliers dedicated to providing the highest-quality ingredients.

Our products are designed not to target price points, but to achieve the best results. For example, we choose whenever possible to use coenzyme forms of vitamins in our formulas that may cost ten times more than the usual forms used by vitamin manufacturers. Coenzyme forms of vitamins are the forms that are used in the body and are usually found in food.

We use nutrient carriers that are best recognized and utilized in the body. We avoid sulfates, chlorides, carbonates, and oxides. As appropriate, we use Krebs cycle bionutrients (citrates, alpha keto-glutarates, succinates, fumarates, and malates), amino acid chelates (arginates, glycines, aspartates, lysinates, etc.), and body-specific carriers (picolinates, polynicotinates, sebacates, etc.).

Our supplement formulas give the body options by providing multiple mineral carriers. For example, we often use both Krebs cycle and amino acid carriers.

We formulate and package products containing fatty acids in ways that best protect them from oxidation both in the bottle and in the body. This may include the use of a gelcap, Vitamin E, ascorbyl palmitate (fat-soluble Vitamin C), rosemary, or a cellulose-coated tablet to keep out moisture and oxygen. Also, our manufacturers generally include desiccants in the bottles of capsules and tablets in order to retain freshness.

AVOIDING HARMFUL INGREDIENTS

We exclude or minimize fillers, carriers, excipients, food antigens, preservatives, coloring agents, etc. Our products exclude wheat, gluten, corn, dairy, eggs, yeast, simple sugars, preservatives, artificial colorings, and artificial flavorings. In addition, we exclude (with just a few necessary exceptions) rice, rye, barley, oats, soy, tomatoes, dairy, and wax. Also, we exclude dicalcium phosphate, rice powder, and synthetic fillers such as povidone.

When absolutely necessary, we only allow GRAS approved USP-grade microcrystalline cellulose, silica, and magnesium trisilicate as fillers and flow agents. We avoid all lubricants with the exception of magnesium stearate or stearic acid in small amounts (<2%) when necessary for successful manufacturing of tablets.

TRUSTWORTHY MANUFACTURING

We build relationships with trustworthy manufacturers and suppliers. We conduct business only with manufacturing companies that understand HPDI’s philosophy (e.g., our approach to product formulation), pay close attention to our guidelines, have excellent reputations for using good-manufacturing practices (GMPs), and have been GMP certified by independent third-party certification agencies (such as NSF).

We have worked with each of our manufacturers for over ten years. Our products are produced by manufacturers of superior-quality supplements following FDA manufacturing guidelines.

I have been using Health Products Distributors’ nutritional supplements in my family medical practice since 1990. I cannot speak highly enough of the excellent quality of these products and their continued benefits to my patients throughout the years. Every product is meticulously designed based on the best current nutritional science and highest-quality ingredients.

Although our practice utilizes over a hundred different nutritional and herbal vendors, we rely on HPDI’s products more than any other nutritional supplement company for the quality integrative medical care of our patients.

- William G. Kracht, DO, FAAFP
Quakertown, Pennsylvania
FOUNDATIONAL SUPPLEMENTS
THE RIGHT WAY TO START AND THE RIGHT WAY TO STAY

Taking foundational supplements is an ideal starting point for individuals who want to ensure optimal intake of essential nutrients and improved nutritional status for health. They are also the best supplements to continue taking to maintain nutrient status and optimal intake over time. In general, we have found that personal supplement regimens work best when they are based on foundational supplements.

Our system of foundational supplements allows for the addition of other supplements, especially those intended to address specific health conditions, problems, or issues. After having established intake of the nutrients most essential for health, any other supplements you take are likely to perform better and meet with greater success. And if you maintain your intake of foundational formulas, then it’s less likely you will need additional supplements, or your need for them may be reduced.

We take special pride in our foundational supplements, which represent the cornerstone in our philosophy of nutritional supplementation. We have seen their immense benefits for ourselves and for our customers. We hope you, too, will enjoy their benefits for your health, happiness, and well-being.

NUTRITIONAL REQUIREMENTS

• 13 VITAMINS (see Table 1)
• 20 MINERALS (daily value minerals + vanadium, boron, silicon, nickel, cobalt, sulfur)
• 2 ESSENTIAL FATTY ACIDS (Omega-3 and Omega-6 essential fats)
• 9 ESSENTIAL AMINO ACIDS (methionine, tryptophan, lysine, histidine, isoleucine, leucine, phenylalanine, threonine, valine)
• A SOURCE OF NUCLEIC ACIDS (RNA/DNA)
• A SOURCE OF CALORIES (carbohydrate, fat, protein)
• WATER
• OXYGEN
• SUNLIGHT

Dosage amounts and frequencies are listed on the labels of each foundational supplement. In general, adult dosages vary somewhat depending on the size and/or weight of the individual. Children’s dosages can be substantially lower, depending on the nutrient. Notably, our Chewable Kids Mighty-Multi is designed for a dose of two tablets per 10 pounds of body weight. It also is suitable for adults who prefer chewable vitamins. We recommend a maximum of ten per day for adults.

Q: Can I obtain all nutrients I need from foundational supplements?
A: Most vitamins, minerals, and essential fats can be obtained from foundational supplements. However, nutrients that must be obtained separately include a source of calories (including protein, carbohydrates, and some fats), water, oxygen, sunlight, and certain macrominerals.

FREQUENTLY ASKED QUESTIONS

Q: How much do I need to take of each foundational supplement? How often?
A: For Vitamin C, take at least 2 grams, but preferably 4 grams or more per day. Individuals vary in their daily requirements for Vitamin C. Dr. Linus Pauling suggests you take between 6 grams and 18 grams per day.

Dosage amounts and frequencies are listed on the labels of each foundational supplement. In general, adult dosages vary somewhat depending on the size and/or weight of the individual. Children’s dosages can be substantially lower, depending on the nutrient. Notably, our Chewable Kids Mighty-Multi is designed for a dose of two tablets per 10 pounds of body weight. It also is suitable for adults who prefer chewable vitamins. We recommend a maximum of ten per day for adults.

Q: I already take three foundational supplements, including a multivitamin, essential fats, and Vitamin C with antioxidants. What additional benefits can I gain from a high-RNA superfood like REJUVENATE™?
A: We recommend high-RNA superfoods as foundational supplements because nucleic acids provide numerous benefits not offered by vitamins, minerals, essential fats, or antioxidants. Nucleic acids facilitate rapid healing, energy (ATP) production, detoxification, metabolism, and overall rejuvenation in the body.

REJUVENATE™ superfoods not only provide nucleic acids, but also many nutrients that optimize their utilization and boost nutrition. The inclusion of these other nutrients makes them functional foods that are nutritionally complete. In addition, nucleic acids and supporting nutrients significantly enhance the nutrition provided by other foundational supplements. REJUVENATE™ superfoods thereby work together with other foundational supplements to create and maintain optimal health.

SELECTED REFERENCES

Frank, Dr. Benjamin S. Dr. Frank’s No-Aging Diet: Eat and Grow Younger: Dial Press, 1976.

FOR MORE INFORMATION CALL 1.800.228.4265
VISIT WWW.INTEGRATEDHEALTH.COM
foundational supplements
A Complete Nutritional Supplement System

**Foundational Supplements** provide the four essential nutritional cornerstones supporting health’s firmest foundations. They provide the full range of nutrients proven by science to support excellent health.

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**MULTIVITAMINS**
Critical nutrients provided by our multivitamins include a full spectrum of essential vitamins, minerals, and cofactors. These include trace minerals, fat-soluble vitamins (A, E, D, and K), coenzyme B vitamins, magnesium, and other nutrients often missing in modern diets.

*Hank & Brian’s Mighty Multi-Vite, Mini Multi, Multi Two (caps & tabs), Kid’s Mighty-Multi*

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**VITAMIN C / ANTIOXIDANTS**
Combined with other antioxidants and polyphenols, Vitamin C is crucial for robust health. These nutrients are immune builders, antimicrobials, detoxifiers, connective tissue builders, and stimulate key endogenous enzymes via Nrf2.

*PRO-C, Ultimate Protector, Synergy C, OPC-C, Buffered C 1,000, Buffered C Powder*

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**ESSENTIAL FATS**
Essential fatty acids are necessary for vibrant health. They support healthy joints, blood vessels, immunity, oxygen transport to tissues, kidney function, and other biological processes.

*Essential Fats Plus E, Omega Plus*

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**HIGH-RNA SUPERFOODS**
Dietary nucleic acids are essential nutrients required for health as proven by Dr. Benjamin Frank. We developed our Rejuvenate™ superfoods to provide dietary nucleic acids (RNA/DNA) in sufficient quantities to support optimal health.

*Rejuvenate!, Rejuvenate! PLUS, Rejuvenate! Berries & Herbs*

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**FOR MORE INFORMATION**

Our office is open Monday through Friday 9:00 to 11:45 am and 1:00 to 4:30 pm (AZ Time).

Our mailing address is HPDI, PO Box 5600, Oracle, AZ 85623.

You may place orders or request information by phone, fax, e-mail, mail, or by visiting our website, www.IntegratedHealth.com.

New professional customers desiring wholesale pricing must first submit an application for approval. Please call us (800-228-4265) to request an application.
Hank Liers, PhD, is the founder and CEO of HPDI. He has been deeply involved in the research and design of many advanced nutritional products for more than 20 years.

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