

# WHY WE NEED VITAMINS

Fruits and vegetables are important. But are you really getting enough each day for them to be effective? Here, you will discover three of MMSN's highest quality vitamin supplements and who they work best for. By Dr. Phil Harvey, PhD, RD, FACN

**F**oods are the best source of nutrients, including vitamins and minerals. However, the vast majority of Americans do not get all of the essential nutrients they need from their diet because they either cannot or do not eat enough food or cannot or do not eat a variety of healthy foods. Few individuals eat a perfect diet and how many of us eat 5 to 9 servings of fruits and vegetables daily as recommended by the U.S. Department of Agriculture? Studies have indicated that vitamin and mineral deficiencies are common, especially in "at risk" groups including children and teenagers, pregnant and lactating women, the elderly, vegetarians, people who experience chronic stress, individuals with eating disorders, those taking over-the-counter or prescription medications (drug-nutrient interactions), individuals with specific diseases, etc.

Vitamin and mineral deficiencies can lead to serious health problems. There is an overwhelming amount of scientific evidence that vitamin and mineral supplementation is beneficial for good health and athletic performance. In fact,

the June 2002 issue of the Journal of the American Medical Association (JAMA) reported, "Most people do not consume an optimal amount of all vitamins by diet alone. Pending strong evidence of effectiveness from randomized trials, it appears prudent for all adults to take vitamin supplements." So you can see, supplementation with a high quality vitamin and mineral supplement is not an option, but it is necessary for good health.

For athletes, the need for supplementation may be even greater than the general public. The reason is quite simple. Athletes lose more essential nutrients like sodium, potassium and magnesium through sweat, especially in hot and humid conditions. Due to increased oxygen consumption, athletes are also more likely to suffer from oxidative stress, making the need for antioxidants that much more important. Athletes also require supplements that help with reducing post-exercise inflammation, strengthen the immune system and aid in recovery and healing. These demands on an athlete's body generally cannot be met by



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## MAX MUSCLE'S LAW #8

### THE LAW OF HEALTH

#### MAX COMPLETE

- New formulation includes the powerful phytonutrients Spirulina, Aloe Vera and Chlorella, known as natural green superfoods†
- Clinical studies have shown Aloe Vera enhances the bioavailability of vitamins C, E and B<sub>12</sub>†
- One serving of Max Complete contains 100 percent or more of the daily values of Calcium, Vitamin D, Folic Acid and Iron in addition to 20 other essential vitamins and minerals†
- Easy-to-swallow capsules are a convenient way to get the nutrients you need†



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† These statements have not been evaluated by the Food & Drug Administration.  
This product is not intended to diagnose, treat, cure or prevent disease.

#### SUPER VITAMIN & MINERAL COMPLEX

MAX COMPLETE IS A VITAMIN AND MINERAL "HEALTH INSURANCE" OFFERING A PROACTIVE HIGH-PERFORMANCE AND WELLNESS-BASED FORMULA.†

food alone because athletes may not be eating the wide variety of foods necessary to provide all the essential nutrients (especially the major, trace and ultra-trace minerals such as calcium, magnesium, manganese, boron, vanadium, selenium, zinc, copper and others).

Max Muscle Sports Nutrition (MMSN) offers a comprehensive and superior line of vitamin and mineral supplements designed either for elite athletes, weekend warriors or individuals who want the peace of mind that they are getting the highest quality supplements available. MMSN carries an extensive line of individual vitamins and minerals along with mineral combinations and multiple vitamin and mineral supplements under the Max Nutraceutical brand. These science-based supplements can be an integral part of any supplemental nutrition program and offers a variety of delivery options, sizes, gender and age specific needs and formulas appealing to all populations. This article, however, will focus on MMSN's highly popular vitamin/mineral supplements Max Vit-Acell, Max Complete and Pro-Vite.

## It's in the Liquid

MMSN's Max Vit-Acell was designed for any adult looking for a comprehensive, fast-acting and great-tasting liquid dietary supplement. This superior liquid supplement uses a patented delivery system called EMUSOL Micellization in which small bubble-like structures (called micelles) surround fat-soluble nutrients such as vitamins A, D, E and K along with lecithin, making absorption and digestion of these nutrients five times faster and far more effective. Vit-Acell nourishes your body far

quicker than tablets, capsules or soft gels that need time to break down and release the nutrients for absorption. A liquid delivery system is also beneficial for individuals who do not prefer or have difficulty swallowing pills.

With 100 percent or more of the Daily Values (DV) of 11 essential vitamins and more than 60 major, trace and ultra trace minerals, which are difficult to obtain by diet alone, Vit-Acell has all the ingredients you absolutely must have to support athletic performance, muscle growth and recovery, as well as great for overall energy and health. For healthy joint support, Vit-Acell provides 500mg of glucosamine sulfate 2KCl per serving and 2g of glycine for growth hormone support and as a precursor for the synthesis of creatine. Vit-Acell also contains a Proprietary Liquid Herbal Extract featuring green tea leaf, ginkgo biloba and Panax (Korean) ginseng.

Green tea leaf contains EGCG (epigallocatechin gallate), which possesses potent antioxidant activity that can protect our cells from oxidative damage of harmful molecules called free radicals. EGCG is vital in the support of healthy liver function and the elimination of waste and supports a healthy immune system.

Ginkgo biloba, known for protecting against oxidative damage to the brain, also improves blood flow to the brain, delivering the nutrients, fuel and oxygen necessary to support memory and overall cognitive function. Ginkgo biloba also promotes overall healthy circulation.

Panax (Korean) ginseng is one of the oldest and most versatile herbs that assists the body in adapting to physical and emotional stress. Panax ginseng promotes endurance and stamina during exercise. In men, it supports male reproductive health by stimulating testosterone levels. Panax ginseng also promotes

memory and learning, supports immune function and cardiovascular health and is a great addition to the Vit-Acell formula.

Vit-Acell also contains grape seed extract, which is another powerful anti-oxidant that protects cells from free radical damage and supports overall circulatory health. Additionally, Vit-Acell contains 3 major digestive enzymes, including trypsin, malt diastase and papain. These enzymes are added to enhance digestion and further increase absorption.

This high quality liquid vitamin supplement flies off the shelves in MMSN stores all over the United States in large part because it not only contains vitamins and minerals necessary for good health and daily cellular regeneration, it is also supports energy and recovery complex, is a formidable joint care formula, and is a powerful guardian against free radicals. With its pleasant orange citrus flavor, both your body and mind will immediately feel the energy difference with Vit-Acell.

## You Complete Me

Max Complete is a unique hybrid of both essential vitamins and minerals fortified with the powerful food-based green foods, spirulina, chlorella and aloe vera. It contains all 25 essential vitamins and minerals with 100 percent DV as well as biotin, molybdenum, manganese, iodine and pantothenic acid. Max Complete also provides the majority of calcium and phosphorus needed per day to support healthy bones and muscles provided in six easy-to-swallow capsules for rapid absorption. Additionally, the capsules may be taken throughout the day to individualize delivery and absorption times, coinciding with periods in which additional vitamins and minerals are needed, such as immediately following heavy exercise.

To emphasize the importance of one essential nutrient found in Max Complete, a study published in the July 19 issue of the New England Journal of Medicine estimates that one billion people in the world are vitamin D deficient or insufficient. Vitamin D is vital for calcium and phosphorous absorption, without which our bones would become thin or brittle. Without vitamin D, only 10 percent to 15 percent of dietary calcium and about 60 percent of dietary phosphorus can be absorbed in the body. Max Complete not only contains 100 percent DV of calcium and vitamin D, but other

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supportive nutrients for optimal calcium absorption like zinc, manganese, magnesium and copper.

**Max Complete is formulated to support overall health and well-being. Consider this proactive, high performance and wellness-based formula your vitamin and mineral "health insurance."**

Max Complete is unique in that it contains spirulina, chlorella and a highly concentrated form of aloe vera. These are known "superfoods" that possess powerful phytonutrients, antioxidants and additional ultra-trace minerals. Spirulina and chlorella are freshwater blue green algae that contain a rich blend of health protective nutrients and phytonutrients that work in synergy to support continuous energy throughout the day. The aloe vera powder (*Barbadensis Miller*) found in Max Complete is certified for content and purity by the International Aloe Science Council (IASC). Aloe vera is a powerful complement to Max Complete because, as two recent bioavailability studies have shown, it enhances the absorption of vitamins C, E and B12.

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### Time to Go Pro

If you are interested in taking an elite or professional-grade formula, Pro-Vite Ultra High-Potency Sports Formula is for you. Pro-Vite is a scientifically engineered dietary supplement containing an advanced and comprehensive spectrum of ultra-high-potency multi-vitamin/multi-minerals along with a nutraceutical/antioxidant blend, an enzyme blend and a proprietary amino acid blend to support sustained energy production for the most demanding athlete. Pro-Vite is a 100 percent pure and perfectly



balanced formula that delivers 65+ nutrients in their most effective biochemical forms and potency levels. Pro-Vite features 31 essential vitamins and minerals, including high potency B-complex vitamin cofactors to support the cellular enzyme systems involved with energy metabolism. It also contains 800mcg (200 percent DV) of folic acid, 100mcg (1,667 percent DV) of vitamin B-12 and 2,000mcg (666 percent DV) of biotin. The major, trace and ultra-trace minerals found in Pro-Vite include calcium, magnesium, zinc, manganese, copper and boron for optimal bone health along with magnesium and potassium.

The nutraceutical/antioxidant blend in Pro-Vite is unsurpassed in providing 14 powerful ingredients that specifically scavenge reactive oxidative species (ROS) metabolites produced especially during and following high intensity exercise. (ROS are highly reactive oxidants causing cellular damage to all tissues of the body specifically affecting the DNA, proteins and lipids.)

The antioxidants found in the blend include CoQ10, alpha-lipoic acid (ALA), N-acetyl cysteine (NAC), resveratrol (trans), reduced glutathione and green tea EGCG. These are critical in supporting the body's defense systems to protect cellular components against ROS.

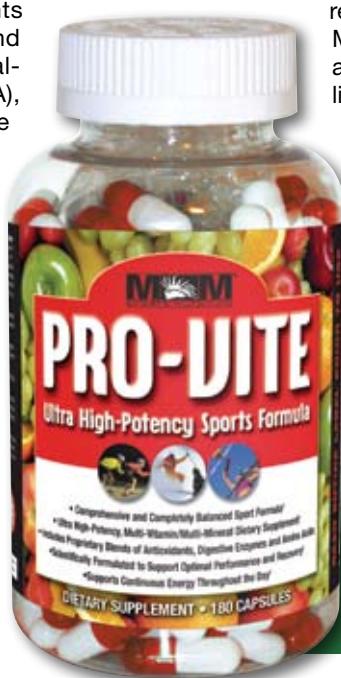
Pro-Vite's enzyme blend includes a broad spectrum of digestive enzymes to assist the body's own enzyme systems to

expedite the breakdown of the energy nutrients, carbohydrates, proteins and fats in the intestines. Additionally, Pro-Vite contains 2,000mg (2g) of all 20 amino acids to support protein synthesis and recovery following exercise. Pro-Vite is provided in six easy-to-swallow capsules and in an ultra-fine powder to ensure rapid assimilation and free of GI irritation. The capsules may be taken throughout the day, preferably with meals, for individuals to customize optimal delivery and absorption times.

In conclusion, foods are generally the best sources of vitamins and minerals, but it is not always possible to eat a perfect diet in addition to getting the specific nutrient requirements and demands as seen with elite athletes, pregnant women, individuals taking medications, etc. As a solution, supplementation with a high quality vitamin and mineral supplement is an important adjunct to all individuals. Look to MMSN or Max Nutraceutical brands to provide you with a comprehensive line of innovative and science-based supplements to meet your specific demands and requirements.

It is important to mention that Vit-Acell does not contain folate (folic acid) and iron. Both of these nutrients are too fragile to go into solution and had to be omitted in the formula. Max Complete, however, contains 100 percent DV of both folate and iron and Pro-Vite contains 100 percent DV of folate and 20 percent DV for iron.

Vit-Acell is great if you're at home or at work because it has to be refrigerated after opening. Max Complete and Pro-Vite are great if you travel or just like the convenience of a capsule. **MS&F**



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