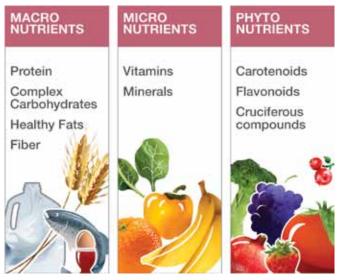
# **NEWS** YOU CAN USE

# FROM THE WORLD OF SCIENCE

### A LIFETIME OF GOOD HEALTH BEGINS WITH WHOLE FOOD NUTRITION

In 2010, a study which looked at the dietary habits of over 16,000 individuals found that more than 80% of those 70 and older, and more than 90% of all other groups, consumed too many calories from fats, added sugars and alcohol.¹ Nearly everyone failed to meet recommendations for dark green and orange vegetables, and whole grains! While these findings are not totally unexpected, the extent of this dietary pattern is fairly stunning.

A separate analysis revealed that between 35-70% of these individuals weren't getting enough of nutrients such as magnesium, potassium, and vitamins A, C, D, E and others from natural foods alone.<sup>2</sup> The use of dietary supplements, on the other hand, dramatically improved intakes of many key nutrients—a good example of why a healthy, balanced diet along with dietary supplements is a good strategy for the wellbeing. This issue takes a closer look at a few of these "missing" nutrients and how they contribute to health, and the latest research findings about them.



CRITICAL NUTRIENTS FOR ENHANCING HEALTH



## The Nutrients You Need For the Vitality You Want

PROTEIN is an essential nutrient that helps build and maintain muscle and bone mass. The Institute of Medicine recommends that adults consume 0.8g of protein per Kg of body weight per day.<sup>3</sup> For example, a 150 lb person should consume 55g of protein per day. Many Americans fall short of this requirement. About 38% of men and 41% of women have intakes below this recommendation. Their protein intake distribution through the day is also not optimal. Americans typically backload their daily protein intake with higher intake of protein during late-day meals and take less in the early (breakfast) and mid-day meals.<sup>4</sup> Studies have shown that starting the day with a protein and nutrient rich breakfast allows us to enjoy both physical and mental energy.

GNLD's GR<sup>2</sup> Control Meal Replacement Protein Shake provides you the optimal balance of key macronutrients and micronutrients—for a healthy start to an energy filled day.

Protective nutrients from whole grains—rich in lipids and sterols, fruits and vegetables—rich in protective carotenoids,

flavonoids and cruciferous phytonutrients, and healthy fats such as those found in fish (omega-3 fatty acids) are the perfect accompaniment to a macronutrient and micronutrient rich breakfast. This sustains both day-to-day energy and vitality and long term health.

### GOOD REASONS TO TAKE A "MULTI" REGULARLY

A good diet is the foundation for better health, but even the most knowledgeable consumers don't always eat the way they should. A number of studies published over the last few years suggest that the use of multiple vitamin and mineral supplements can help support our health in various ways.

# MULTI-NUTRIENT SUPPLEMENTS HELP ACTIVE, MIDDLE AGE MEN AND WOMEN<sup>5</sup>

A well conducted intervention trial evaluated the effect of the multi-nutrient supplement on measures of inflammation and artery health, physical function, and mood in active middle-aged men and women. Joint pain was reported to decrease in men taking the multi-nutrient supplement, while anxiety and balance improved in women. Both men and women



## Vitamin D Research Update

experienced improvement in perceived energy, and a marker of inflammation. The authors concluded that multi-nutrient supplementation may help middle-aged individuals maintain a healthy, active lifestyle.

# MULTIVITAMIN USE SUPPORTS HEART HEATH IN WOMEN<sup>6</sup>

In a 10 year study that included over 31,000 women with no history of cardiovascular disease, those who reported taking multivitamins had a 27% lower risk of experiencing a heart attack.

## "MULTI" USE MAY SUPPORT EYE HEALTH IN MEN AND WOMEN<sup>7</sup>

In addition to getting a placebo or high-dose antioxidants, two-thirds of the people who took part in the well-known Age-Related Eye Disease Study also took a multivitamin and mineral supplement. After accounting for factors that might bias the results, researchers found that "multi" users had a 16% lower risk of developing any type of cataract, or of cataract progressing. For the most common type of age-related cataract, nuclear cataract, a 25% risk reduction was seen.

### TIP: Pair Your "Multi" with Fish Oil

Taking a vitamin D-containing multinutrient such as Formula IV/IV Plus along with Salmon Oil Plus at breakfast or meal time may help your body absorb fat soluble nutrients as well as super-healthy omega-3 fats!

# MULTIVITAMINS MAY UPLIFT SPIRITS IN OLDER INDIVIDUALS<sup>8</sup>

A daily multivitamin could improve the mental health of elderly patients according to a study from the University of Sheffield. Researchers recruited 225 hospitalized patients and randomly assigned them to receive a normal hospital diet plus a multivitamin or placebo for 6 weeks. Researcher found that those receiving the multivitamin had significantly better spirits compared to those assigned a placebo, and the benefit was seen regardless of the initial level of depression.

Not only is solid nutrition an investment in long term health, it also pays daily dividends by fueling physical activity and supporting vitality. Keep in mind, too, that interactions among nutrients are many and varied, emphasizing the need to consume a diverse array of foods and comprehensive supplements.

**GNLD "MULTI" PRODUCTS:** Formula IV®, Formula IV Plus, Pro Vitality with Formula IV Plus, Vegetarian Multi

If you asked a health professional about the role of vitamin D a decade ago, they would have answered that it helps the body absorb calcium to keep bones strong. But in the intervening years, a wealth of research has revealed that vitamin D has other important duties, and even more potential health benefits. For example, we now know that vitamin D is involved in immune system function, and that it may help dampen inflammation. Low blood levels of this hormone-like vitamin have been linked to certain cancers, heart disease, autoimmune diseases and even eye conditions such as age-related macular degeneration.

A number of intervention studies are being conducted to test whether the findings of observational studies hold true. For instance, a research team from Harvard and Tufts University is currently exploring whether vitamin D plays a role in lowering type 2 diabetes risks.<sup>9</sup>

Recognizing that we become less able to absorb or make vitamin D as we grow older, and that many people avoid vitamin D-producing sunlight or use sunscreens for skin protection, the Institute of Medicine raised the recommended allowance of vitamin D in November 2010 to 600 IU daily for children and adults, and 800 IU per day for those 70 and older. Taking higher levels—1000 IU—have also been shown to have additional benefits beyond just bone health.<sup>10</sup>

To meet the new recommendations, supplements of vitamin D may well be needed by most individuals. The first study to examine food-based intakes of the sunshine vitamin in adults, recently reports that vitamin D intake from foods has dropped 15% from the early 1980's.<sup>11</sup> Looking at data collected regularly from the Minnesota Heart Survey, the researchers also noted that milk intake, which is fortified with vitamin D and a key source of this nutrient, also declined over the nearly 20 year period. The researchers called the lower vitamin D dietary intake a "concerning trend", given that close to one-third of the U.S. population has blood values that put them at risk for inadequacy or deficiency. In fact, as many as a billion people worldwide have low levels of vitamin D.<sup>12</sup>

**GNLD PRODUCTS CONTAINING VITAMIN D:** Cal-Mag capsules, Cal-Mag tablets with 1000 IU Vitamin D, Formula IV, Formula IV Plus, Vegetarian Multi, and Vita-Squares.

#### **FACTOID:** Take Vitamin D With Food

It's not uncommon for someone being treated for vitamin D deficiency to fall short of reaching blood level goals. A small but striking study suggests that one reason might be that people are taking vitamin D supplements on an empty stomach, or with meals that are too small to contain enough fat to enhance this vitamin's absorption. Within two to three months after being asked to take the supplement with dinner or the largest meal of the day, vitamin D blood levels rose by an average 57% in participants. The researchers concluded that it may be wise to take vitamin D with larger meals which are likely to provide adequate fat levels.<sup>13</sup>



## Vitamin B12, Your Body And Your Brain

Vitamin B12 helps keep your nerve and blood cells healthy and is needed to make DNA, the genetic material in all cells. Weakness, nerve and balance problems, and in some cases, a form of anemia (megaloblastic), can occur with deficiency. Running low on B12 can also result in confusion and poor memory.

According to vitamin B12 expert Dr. Irwin Rosenberg of Tufts University, "...the symptoms of B12 deficiency overlap with those of Alzheimer's disease...That raises the question of whether similar nutrition factors contribute to Alzheimer's or its symptoms." A direct link between vitamin B12 levels and dementia still remains elusive, because not all studies have confirmed this relationship.

New research, however, suggests that the B12 brain connection may have merit. University of Oxford researchers recently reported that supplementing B12 in concert with folic acid and B6 over a 2-year period "...appear to slow cognitive and clinical decline in people with mild cognitive impairment, in particular those with elevated homocysteine." Too little B12 can cause homocysteine to accumulate, and high levels of this amino acid have been associated with some dementias.

Older people with low levels of vitamin B12 may be more prone to brain shrinkage, according to investigators at Chicago's Rush University Medical Center. Most of us are aware that people can shrink in height as they age. Well the brain, too, shrinks naturally with age, and it seems that those with the greatest reductions in brain volume are most at risk for Alzheimer's and other age-related dementias. In this study, people with markers of vitamin B12 deficiency had smaller brain volume and lower scores on tests measuring thinking, reasoning, and memory.<sup>15</sup>

#### **BE B12 SMART**

Some studies have shown that 15-30% of older people are low in B12, mostly because they produce less stomach acid (required to separate B12 from the protein to which it's attached in food). The Institute of Medicine advises that people over 50 get most of their vitamin B12 from dietary supplements and fortified foods because in these sources, B12 is not bound to protein and is more easily absorbed.

**GNLD PRODUCTS CONTAINING B12:** Formula IV®, Formula IV Plus, Pro Vitality with Formula IV Plus, Lipotropic Adjunct, Super B, Vegetarian Multi

Vitamin B12—Who Needs It & Why			
Who Should Be Aware Of B12 Shortfalls?	Why Are Supplements Important?		
Everyone over 50	Many older adults don't produce enough stomach acid to absorb the B12 naturally present in food.		
People who have had gastrointestinal surgery such as weight loss surgery, or digestive disorders, like Celiac or Crohn's diseases.  Heavy alcohol users.	These conditions (or behavior) can decrease the amount of vitamin B12 that the body can absorb.		
Vegans and vegetarians or others who eat little or no animal foods.	Only animal foods contain vitamin B12 naturally. (When pregnant women and women who breastfeed their babies are strict vegetarians or vegans, their babies might also not get enough vitamin B12).		
Users of certain medications:  The antibiotic Chloramphenicol (Chloromycetin®), Proton pump inhibitors (e.g Pevacid®) used to treat acid reflux and peptic ulcers  Histamine H2 receptor antagonists (e.g. Tagamet®) for peptic ulcers.  Metformin, a common diabetes drug.	These medications can interfere with the body's absorption or use of vitamin B12		
People with pernicious anemia.	Inability to make intrinsic factor which is needed to absorb vitamin B12. Doctors usually treat this anemia with B12 shots. Affects 1-2% of older adults		



## Achieving Better Potassium Intake

Along with dietary fiber, vitamin D and calcium, potassium deficiency was identified by the 2010 Dietary Guidelines to be of public health concern—intakes are simply too low for adults and children. Adults should aim for at least 4,700 mg daily. Getting more potassium—while keeping salt intake down—can help maintain normal blood pressure.

According to the Dietary Guidelines, other possible benefits of an eating pattern rich in potassium include a reduced risk of developing kidney stones and decreased bone loss. One well-researched diet that offers ample amounts of potassium is the DASH (Dietary Approaches to Stop Hypertension) diet. It's rich in fruits, vegetables, whole grains, low- and nonfat dairy, lean meats, fish, beans, and nuts.







	FOOD SOURCE	SERVING	POTASSIUM (MG)
	Acorn squash, cooked	1/2 cup (cubes)	448
	Almonds	1 ounce	200
	Artichoke, cooked	1 medium	343
	Banana	1 medium	422
	Lima beans, cooked	1/2 cup	485
	Molasses	1 tablespoon	293
	Orange	1 medium	237
	Plums, dried (prunes)	1/2 cup	637
	Potato, baked with skin	1 medium	926
	Raisins	1/2 cup	598
	Spinach, cooked	1/2 cup	420
	Sunflower seeds	1 ounce	241
	Tomato	1 medium	292

**GNLD PRODUCTS CONTAINING POTASSIUM:** Active 40+, All Natural Fiber, Formula IV®, Formula IV Plus, GR<sup>2</sup> Control® Meal Replacement Protein Shake, Multi-Min, Nourishake®, Pro Vitality with Formula IV Plus, Sports 30, Stress 30, Super Ease®, Vegetarian Multi

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