

## The Role and Use of Vitamins in Optimizing Health

The following article was written by Dr. Melissa Junsako Carr DTCM (Doctor of Traditional Chinese Medicine) and Nutritional Health Consultant who has previously written articles on Alternative Medicine and Stress in the Bulletin for the Nikkei Seniors Health Care and Housing Society.

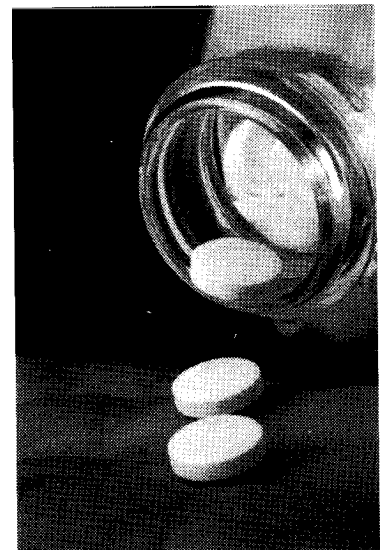
### OPTIMIZING YOUR HEALTH

More and more people are interested in taking care of their own health. However, it used to be a much simpler task than it is now. The basics are, of course, to eat well and get regular exercise. But now you watch TV, and one moment they tell you that alcohol is bad; then they report that it is healthy for you. They say fats cause disease; then studies show the importance of dietary fats. Eat more carbohydrates; eat fewer carbohydrates. Cut red meat out of your diet; eat red meat for the iron and vitamin B12. Confused yet? Understandable! We are complex beings and no single diet is going to work for everyone. Seniors have special dietary needs and it is not just about living a long life, but living a healthy long life.

As the average life expectancy continues to increase, the fastest growing population is of individuals over 85. According to the National Institute of Nutrition, the most common finding about seniors is a significant reduction in energy intake. Seniors tend to eat less, and thus have problems getting the recommended amounts of vitamins and minerals. Not only that, but as we age, our bodies produce less stomach acid and fewer digestive enzymes, making it harder to digest and absorb any nutrients that we do eat. This increases the risk for infections and illness, and worsens chronic disease.

#### A perfect world?

In an ideal world, we would all eat regular meals of a variety of fresh, organically grown, whole foods. We would not have to worry about genetically modified organisms (GMOs), steroids, antibiotics, hormones, or pollutants in our food. We would be assured that the fruit and vegetables that we eat are full of the nutrients that they should contain, not depleted and weak due to the nutrient-depleted soil from which they are grown. We would wake and sleep with the rise and fall of the sun. We would take time to stop and watch a sunset or smell the flowers, and avoid the chronic stress that depletes our bodies of nutrients. We would not be exposed to the toxic effects of car exhaust fumes, factory smog, tobacco smoke, cellular phones, microwaves, computer and tv screens, chemicals in our household cleaning products and personal care products, and food additives and preservatives. We would not be taking pharmaceutical medications such as antacids, hormone replacement pills, antidepressants, antibiotics, pain relievers, and those for lowering blood pressure or cholesterol that change the body's ability to absorb certain nutrients. Finally, we would all be able to properly digest and assimilate the foods that we eat. Unfortunately, we do not live in that ideal world. How do we adapt? First of all, health begins with a proper diet, regular exercise, and spiritual and emotional balance. Do not neglect this basis, but do understand that in this day and age, your body is likely to need more than just the basics.



### **What can you do?**

No two people are identical. In the same way, no two people's supplemental needs are identical. To simplify things, you may want to consider a multivitamin/mineral to start. Not only is this convenient, but each nutrient requires other nutrients for optimal absorption. For example, vitamin C helps with the absorption of iron. However, all "multis" are not equal. A once-a-day tablet is convenient and great for someone with sufficiently strong digestion. Otherwise, I would suggest capsules, powder, or liquid. Also important are the sources of the vitamins. One example is vitamin E, which should be in its natural form of "d-alpha tocopherol", not "dl-alpha tocopherol". Other things to consider are the forms of the minerals. For instance, calcium carbonate is poorly absorbed, while calcium citrate or chelate is well absorbed. The binders and fillers are also important as cheaper versions may contain artificial preservatives or colour, and many people need to avoid substances such as dairy, starch, wheat, and yeast.

If a one-a-day multivitamin has all of the vitamins and minerals, why is it that nutrition stores are lined with so many other bottles? Some of the nutrients are not in sufficient doses because a pill containing everything in ample amounts would be impossible to swallow. So how much of each of these nutrients is needed? The RDA (Recommended Daily Allowance) is commonly quoted for its nutrient intake standards. However, these amounts are the basic requirement to avoid disease only, not to maintain optimal health, and not taking into consideration increased needs due to age, size and weight, gender, activity level, poor digestion, medication, disease, smoking, alcohol consumption, restrictive diets, and stress. Chronic illness and surgery also drain the body and can leave a person with vitamin deficiencies. Furthermore, dieters and vegetarians have to consider what nutrients they may be lacking from their food.

### **What to look for on the labels...**

Calcium/Magnesium: essential for strong bones and teeth, important for a regular heartbeat and the transmission of nerve impulses, and required for a healthy cardiovascular system. Tablets are usually very large and can be difficult to swallow, but are relatively inexpensive; capsules are a better option, but contain lower dosages; powder or liquid are generally well-absorbed and have significant dosages, but can be more costly. Choose what suits you best. Look for ones that say citrate, chelate, gluconate, or hydroxyapatite; carbonates are poorly absorbed (the antacid Tums is calcium carbonate). Ask about the "elemental calcium", as some labels are tricky.

- Vitamin D improves the absorption of calcium.
- The B vitamins help to maintain healthy nerves and may be useful in relieving depression and anxiety. They are also important for healthy circulation, lowering blood cholesterol, the formation of red blood cells, proper brain function, and healthy muscle tone in the gastrointestinal tract. B vitamins are water-soluble; meaning that your body will eliminate excess amounts through the urine, and you will likely notice your urine will be coloured bright yellow.
- Vitamin B12 is commonly deficient in elderly people, vegetarians, and those taking anti-gout medications, anticoagulant drugs, and potassium supplements. Deficiency can cause fatigue, anemia, constipation, depression, digestive problems, headaches, ringing in the ears, and more. If taken orally, B12 is best taken as a "sublingual", i.e. a tablet that dissolves rapidly under the tongue.

- Vitamin C boosts the immune system, helps promote tissue repair, protects against bruising and blood clots, is a powerful antioxidant, and helps prevent muscle breakdown. It is best absorbed as a "buffered" form and with bioflavonoids, e.g. "Ester-C". You can take large doses of vitamin C, particularly when you feel the beginning of a cold or flu, and you will know when you have taken too much if your stool becomes too soft.
- Vitamin E is an antioxidant that improves blood circulation, promotes normal blood clotting and healing, aids in preventing cataracts, reduces blood pressure, and relaxes leg cramps. Don't forget, the natural form is best.
- Natural anti-inflammatories include enzymes such as bromelain, papain, and betaine, MSM, and herbs such as tumeric, boswellia, and yucca.
- Natural antibiotics, anti-virals, and immune system boosters to prevent or treat colds, flues, and infections include Echinacea, oregano oil, astragalus, goldenseal, olive leaf extract, essential fatty acids, garlic, zinc, vitamins C, A, and E. If you take antibiotic medication, then replenish the "good" bacteria in your intestines with probiotics like acidophilus.
- For prostate health, saw palmetto is the most commonly used herb. Other ingredients include pygeum, pumpkin seeds, stinging nettle, zinc, and lycopene.
- Spirulina (a blue-green algae commonly from the Pacific waters off Hawaii) contains more iron than spinach, as much calcium as milk, more beta-carotene than carrots, and three times more protein than beef (although animal sources of protein are better assimilated).

### **Hate taking pills?**

If you are tired of taking pills, you can reduce the number with a yummy power shake. The key ingredient for this quick, convenient, and tasty drink is a good protein powder. Whey protein, which is derived from milk and then lactose-reduced, is the most biologically available source of protein. Soy protein is another option and it is recognized as having anti-cancerous benefits. Rice protein is the easiest protein for people to take if they are sensitive to both whey and soy. Variety, as they say, is the spice of life; so don't be shy to try different protein powders. The protein will supply your body with the building blocks (amino acids) for muscles and other tissues, hormones, antibodies, and enzymes. It will also help to stabilize your blood sugar levels, reduce sugar cravings, and keep you full longer. Greens drinks will increase your energy and stamina, cleanse your body of toxins, provide much-needed phytonutrients, and balance your blood sugar levels. Essential fats are "essential" because you need to get them through your diet; your body cannot make them. They lower cholesterol and triglyceride levels, reduce elevated blood pressure, help prevent arthritis, are anti-inflammatory, improve the health of skin and hair, enhance the release of sex hormones, and are necessary for normal brain function. Then, you can toss in the appropriate amount of a multi-vitamin/mineral liquid or powder. Ditto for the calcium/magnesium and vitamin C liquids or powders. Choose your preferred liquid to mix in - water, milk, soy- milk, rice-milk, or juice. And, if you like, blend it with your choice of fruit and/or yoghurt.

Finally, do not be shy to ask questions of your doctors, pharmacists, health store retailers, and alternative medicine providers.

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