

Sources of Vitamins

Vitamins have long been recognized as being essential to one's health and vitality.

The world-renowned Linus Pauling Institute at Oregon State University has done exhaustive research on the vital necessity of [vitamins](#) and [minerals](#). They have made available scientifically prepared data on what each is and why the body needs it.

Human bodies do not create all of the needed vitamins and minerals so they must be introduced into the body from an external source.

One external source is wholesome food, some of which has been fortified with nutrients. While it is certainly true that a nutrient-rich diet is indispensable to good health, diet alone may not be enough. Some aspects of many people's lives such as high stress levels, exposure to pollution and other toxins, a less than optimum quality or duration of hours of sleep each night, strenuous workouts, stressful environments all put additional demands on the body. You may need to supplement your nutrient intake to meet those demands.

HOW MUCH IS ENOUGH?

Health Canada publishes tables of recommended daily intake for [vitamins](#), [minerals](#), and [macronutrients](#) referred to as RDA, or Recommended Dietary Allowance. The RDA is presented as "the goal for usual intake by an individual".

The RDA is calculated on the basis of the EAR, Estimated Average Requirement, defined as

"the median daily intake value that is estimated to meet the requirement of half the healthy individuals in a life-stage and gender group. At this level of intake, the other half of the individuals in the

specified group would not have their needs met."

The Health Canada tables are useful as guides, but vitamin requirements are not necessarily universal. Vitamin intake requirements can vary widely from person to person. In fact, the same person's minimum requirement can change, depending upon their circumstances and the demands placed upon them. Vitamin requirements are influenced by many factors that may demand vitamin intake in excess of the RDA guidelines:

- Ingestion of toxins from pollution and other sources
- Certain drugs
- Illness and infection
- Smoking
- Drinking
- High stress levels
- Sleep
- Quality of diet
- Weight

These circumstances can all put a strain on the body's resources.

Even for people who do not have extraordinary demands being imposed on them from stress, long work hours, pollution, illness, and other factors that affect vitamin and mineral requirements, something to consider is that the Health Canada RDA guidelines are "the average daily dietary intake level that is sufficient to meet the nutrient requirement of nearly all (97 to 98 percent) healthy individuals in a particular life-stage and gender group". Is "sufficient" enough to provide the means of enjoying vibrant health and energy? Perhaps not.

Whether or not you should take supplements could

depend on whether you're content to live with less-than-optimum health and vitality.

VITAMIN AND MINERAL SUPPLEMENTS

Off-the-shelf oral supplements are available in pill, capsule, powder and liquid form. While there is some benefit to be derived from oral supplementation, that benefit can be limited by factors that impede digestion and absorption. Some studies suggest that only a very small percentage of the dose finds its way to the cells, even with a perfectly functioning digestive system (which very few people have).

You might think you're taking 50 mg of a supplement (that's what it says on the bottle), but your cells might be getting much, much less than that.

It is also the case that oral supplements can vary in quality from brand to brand. Some brands contain binders, fillers, preservatives, waxy coatings, and (believe it or not) sugar and corn syrup, all of which make the actual nutrients even less bioavailable.

IV NUTRIENTS

Vitamins and minerals administered intravenously present two immediately obvious advantages: better absorption into the cells and higher doses.

Absorption

Digestive issues that impede the absorption of nutrients into the cells can include an overabundance of yeast in the bowel, an insufficiency of digestive enzymes, and an insufficiency of stomach acids. People suffering from Chron's disease, colitis, inflammatory bowel diseases and other bowel-compromised conditions such as irritable bowel syndrome, candida or parasites may also be unable to digest and absorb nutrient supplements through the digestive tract.

An insufficiency of dietary fiber and the consumption of excess sugars will also impede the absorption of vitamins and minerals, from both dietary sources and oral supplements.

Refined sugar in the digestive tract is particularly nasty. Not only will sugar inhibit the absorption of nutrients but the resulting deficiencies can cause sugar cravings.

IV vitamins and minerals bypass the digestive system. The nutrients are injected directly into the bloodstream for distribution to the parts of the body and absorption into the cells, which is where they are needed.

The Vital Importance of Getting Nutrients into the Cells

Your cells depend on nutrients to function. Vitamin B1 (thiamin), for instance, enables the body to use carbohydrates as energy, and plays a role in nerve, muscle, and heart function. Vitamin B12 preserves the myelin sheathing around neurons and is essential for the synthesis of neurotransmitters. (Neurotransmitters are chemicals that are released from nerve cells to enable the transmission of an impulse to another nerve cell or organ. Examples of neurotransmitters are dopamine, norepinephrine, and serotonin). Vitamin C is indispensable to the activity of enzymes (enzymes are needed for the regulation of the chemistry of cells and organisms). It is also needed for wound healing, the immune system, and in the treatment of some diseases, to name but a few of its functions. Magnesium helps to regulate muscle and nerve function, blood sugar levels, and blood pressure.

Almost all of the needed nutrients perform multiple indispensable roles. There is not one single vitamin or essential mineral that your cells can do without.

Dosages

Many people have a relatively low tolerance for oral

supplements travelling through the digestive tract so the doses must be limited. High doses of Vitamin C taken orally, for instance, can have an osmotic effect which means to say that the high oral dose pulls water into the intestines and over-softens the stool. This can result in diarrhea, nausea, and stomach cramps. High oral doses of other vitamins and minerals can likewise have a negative effect.

IV administration of vitamins bypasses the digestive system and its limitations so that higher doses are easily tolerated with minimal to no side effects. Nutrients administered directly into the bloodstream are able to enter and supersaturate the cells of the body, where they are needed.

High dose vitamins and minerals provide your body with the nutrients it needs to meet the demands that various aspects of life impose upon it.

This results in a greatly enhanced health effect, achieved in a much shorter period of time than with limited doses of oral supplementation.

OBSERVATIONS CONCERNING IV ADMINISTRATION OF NUTRIENTS

We have treated many people with high dose vitamin injections and we continue to be amazed at the therapeutic effects of this treatment. The results are often quite spectacular.

We think, though, that the most compelling demonstration of the efficacy of IV nutrient therapy comes from the patients themselves. The outcomes the patients report include:

- more energy
- infrequent to no colds and flus
- improved adrenal gland functioning
- improved gastrointestinal functioning
- significant reduction of the side effects of conventional medical cancer treatment

- improved thyroid gland functioning
- improved mood, happier
- improved immune system functioning
- reduction of joint and muscular stiffness and pain
- overall better health
- improved respiratory functioning
- improved sleep
- fewer migraine headaches

If some of the above sounds a bit dry, what the patients actually said was "I feel good!", "I'm alive!", "There should be a lineup out to the street!" Each and every one of the patients surveyed, when asked if they would recommend IV nutrient therapy to others, responded with a resounding "YES". We think that's very telling.

IS IV VITAMIN THERAPY RIGHT FOR YOU?

Should you be getting IV vitamins and minerals? Which vitamin and mineral supplements should you have? What dosages should you be taking? How often should you receive IV vitamin therapy? Like so many other things, it depends. There really is no such thing as a "one size fits all" vitamin regimen.

Different conditions require different combinations and concentrations of some vitamins and minerals over others. We compound many different vitamins and minerals according to the patient's needs and the desired therapeutic effect.

The doctors at Green Apple Health Care will do a full assessment of your current health and your health goals and will tailor a program to suit you.

Call us at (780) 485-9468. We can help make sure you get the nutrients you need to restore and maintain your health!