

The Scoop on Supplements

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A State of Confusion

Are you feeling confused about what to eat? What not to eat? Are supplements necessary? Which ones, and in what amounts? Are the RDA's (Recommended Dietary Allowance) right? Is "eating well" sufficient? Does "eating organic" solve our sins?

Americans spend billions on supplements and diet products. We obsess about our weight and our looks. And yet, we are a progressively unhealthy nation. This is the first generation where our children are less healthy than we are. I see this state of confusion and desperation when my patients bring in lots of bottles of *stuff*, for which they spend hundreds of dollars a month, and yet they are not taking the basic supplements in the right doses, or are not taking care of themselves in other ways: eliminating toxins, taking a regular yoga class, prioritizing good sleep, and pursuing joy and love in their lives.

As Colin Campbell discusses in his book, The China Study, (a must read for most of us, especially if we have children), the industries that control our food, drugs (and in my opinion, insurance), have created this confusion to keep us feeling powerless to make a change. They don't have to produce any facts to do so. All they have to do is spread some doubt, or misinformation (a lot cheaper than true data), and they can create enough confusion to negate the honest data that would damage their profits.

Just The Facts, Ma'am

Fortunately, there is enough quality information out there to work through the maze. While the details are subject to change, the principles of health and wellness, from which my diet and supplement recommendations come, are pretty straight-forward when we look at the facts:

1. Most improvements in health and life expectancy have come from public health measures. These include education, awareness of infectious disease (with the developments of sanitary practices and immunization) and nutrition (minimum requirements for health). Drugs and surgery mostly serve to slow down the progression of disease once prevention has failed, but do little for the health of our populations.
2. Diseases cluster into those of poverty and those of affluence. Diseases of poverty are caused by conditions such as poor sanitation and malnutrition. Diseases of affluence are caused by unhealthy lifestyles--such as excessive consumption of animal products, toxins, excess alcohol and poor sleep.
3. In the late 1800's and early 1900's, science discovered diseases of vitamin deficiency--such as rickets (vitamin D), scurvy (vitamin C) and beri-beri (thiamin or B1). From this information, and further research came the RDA's which are the minimum amounts of each vitamin or mineral needed to prevent such diseases.
4. Recent research has shown that for most vitamins and minerals, the RDA's are not optimal. If one were to provide a child or plant with minimal amounts of

nutrients, education and love they would survive but not thrive. In order to reach our full potential, for many nutrients, we need 5-10 times the RDA.

5. Nutrient requirements are increased by certain genetic errors (we all have a few), stressors (such as smoking) or with poor absorption (see below).

6. The recent concept of insufficiency disease--reflects the results of #4 and #5 above. There is not frank illness, but a gradual decline in health. For example, many people have vitamin D insufficiency; not enough to cause rickets, but enough to cause (or exacerbate) osteoporosis, depression, and autoimmune diseases such as multiple sclerosis, rheumatoid arthritis, thyroiditis and bowel diseases.

7. Each vitamin and mineral has a different mechanism of absorption. In addition, most vitamins and minerals come in multiple forms, some absorbed better than others. Gastrointestinal dysfunction, drugs and other factors can cause problems with absorption. Absorption of one nutrient doesn't guarantee absorption of another. For example, one may have sufficient B1, but insufficient B12 due to lack of stomach acid (see my article on this topic).

8. Measuring vitamin and mineral levels is difficult, imprecise and expensive. For example, with magnesium ("Mg"), the typical "serum" test, which measures the Mg circulating in the blood, is not a good measure. This is because Mg, like most of our vitamins and minerals, resides in different "compartments". Sufficiency in one compartment doesn't imply sufficiency in all compartments. This is like having a positive balance in your checking account (which looks good) but having thousands in credit card debt. In order to get the true picture, one must know where to look. Going back to Mg, the best place to look in the red blood cells (RBC's). Serum levels (used by most doctors and hospitals) often don't correlate with RBC levels.

In addition, tests for every supplement would be very expensive, and are not always "covered" by insurance. And if you do the test and find a low value, logic requires that it be tested again after treatment to insure that the level has been corrected. Lots of blood and money. See below on how I handle this issue.

Finally, "normal range" is a misnomer, since each of us is different. From a normal range, it is not possible to predict an individual's need.

9. As Colin Campbell discusses in his book, nutritional research that focuses on one supplement at a time is just plain wrong. Similarly, research that studies one toxin at a time is also wrong. This is because we don't eat one supplement at a time, and we are not exposed to one toxin at a time. The combination of these chemicals is called "the cocktail effect". How we are functioning at any one time is due to the combined effects of all the things we've done over the past few days, weeks and months. Wellness and illness, which often appear random, actually have patterns when one looks holistically at one's food, environment, sleep, stress, and other

factors. For this reason, the scientific method, which can only study one or two factors at a time, has inherent limitations in determining what is good and bad.

10. Since we can't rely too heavily on the scientific method to tell us what to eat, we can rely on other forms of data. One of these is what we ate 20,000 years ago. *Homo sapiens* has been around for approximately 50-100,000 years. Though society and our environment has changed dramatically, our genes and internal mechanisms haven't. How we lived earlier in our evolution should guide how we function today.

Another important source of information is from comparing populations, and their dietary and disease profiles. For example Eskimo women, have a much lower rate of cardiovascular disease, but a higher rate of osteoporosis. This is probably due to their huge fish consumption, with its benefits (fish oils) and detriments (excessive animal protein produces acids and phosphates which deplete the body of calcium). Colin Campbell gives lots of examples of such cross-cultural trends in his book.

11. "Eating well" is virtually impossible, unless you are growing your own food, know the contents of the soil (and whether there was a toxic waste dump there a few decades ago), and purify the water to feed your plants and animals. We know scientifically that the American diet has deficiencies in certain critical vitamins and minerals. Even the American Medical Association recommends a multi-vitamin a day (though using the RDA as a basis).

Guess Who's Coming To Supplements?

The pharmaceutical industry is trying to buy up all the supplement and homeopathic companies. They are also trying to promulgate laws that would limit the production and access to supplements here in America and in Europe, with varying amounts of success.

This is because they see the future, when most of us will be turning to nutrition rather than drugs, as health insurance costs force more of us to pursue less expensive ways of preventing and treating dis-ease. While it may seem that taking the purple pill is less expensive than buying organic foods or supplements, we forget that we're also paying a very high percentage of our Gross National Product (GNP), and our incomes on "health insurance" which is really just "hospital and drug insurance".

Conclusions

1. Our diet is deficient in several critical nutrients and contains a growing amount of toxins, including Genetically Modified Organisms (GMO's). Supplements can help correct these deficiencies and protect us from some of these toxins.
2. For vitamins and minerals, we should think in terms of "Optimal Daily Intake" (not RDA's) which are consistent among many authors.
3. For some supplements, brand is very important. This will affect the quality and absorbability of the supplement. For others, a less expensive form is acceptable.
4. Testing may be helpful in looking for certain

important supplements, such as B12, Vitamin D and Magnesium. However, due the cost and inconvenience, testing should be reserved for persistent dis-ease that is not improving.

5. Supplements should be taken in the context of a holistic health plan, including good nutrition, good sleep, good exercise (yoga and walking are my favorites), and good psycho-spiritual practice. Supplements (sometimes called "green pills") cannot compensate for a self-destructive lifestyle.

6. A supplement program (and an overall holistic health program) should be developed with the consultation of a knowledgeable health practitioner, and should be reviewed and revised every 3-6 months, based upon response.

7. There is no one supplement, holistic health plan or diet that meets everyone's needs equally. Our needs also vary with age, environment, season, and other factors. While a program may start using general guidelines, it should be fine-tuned for the individual to achieve optimal health.

IMPORTANT NOTE: This general information should not be used to make decisions about medical care without the involvement of an experienced practitioner.

For More Information

- See Dr. Cheikin's related articles on: Inflammation, Detoxification and others. Dr. Cheikin's website, www.cheikin.com, has helpful articles on related topics
- Dr. Cheikin offers workshops on topics such as Chronic Pain, Journaling, Nutrition, Weight Management, and classes in yoga, meditation and other wellness methods. Please call to be placed on his contact list or if you wish to host a Workshop.
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