

Calcium and Vitamin D Supplementation: A Health Disaster for Many People?

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Calcium and vitamin D have a unique role among the many different nutrients. Different foods and beverages list the addition of calcium and vitamin D to their ingredients. Even some orange juice containers list calcium and vitamin D on their labels. For many years, medical doctors have “prescribed” calcium supplements to their patients, especially women in order to “prevent” osteoporosis. More recently, based on low serum vitamin D tests, more and more doctors are recommending large doses of vitamin D supplementation. There seems to be a certain logic to this nutrition approach that many medical doctors advocate. However, some areas of nutrition science give us reason to question the wisdom of the simplistic calcium and vitamin D supplement approach. More specifically, nutrition research based on hair tissue mineral analysis (HTMA) provides a deeper and broader understanding of how vitamins and minerals fit into the complex dynamic systems involving nutrients and the neuro-endocrine system.

Research shows that the nutrient minerals measured in a HTMA are part of a complex dynamic system. This complex system involves the neuro-endocrine system, stress reactions, energy production, and the regulation of vital life processes. HTMA data reflect the interrelationships between the nutrient minerals and their functions in regulating these life processes. The early HTMA research done by Drs. Paul Eck and David Watts from 1975 to 1984 established the basic concepts and principles for better understanding the vital role that nutrient minerals play in health and disease. Eck and Watts accomplished this by relating HTMA nutrient minerals to the autonomic nervous system (sympathetic and parasympathetic) and the stages of the stress response (Dr. Hans Selye). Eck and Watts also related the HTMA nutrient minerals to the energy producing endocrine glands (thyroid and adrenals). HTMA nutrient minerals were also shown to be related to glucose regulation and the energy production pathways of the Krebs and glycolysis cycles. Eck and Watts also showed that HTMA mineral patterns reflected the two basic oxidation types (metabolic types) that had different mineral imbalances and required different nutrients to restore healthier mineral balances.

In their HTMA research, Eck and Watts determined the reciprocal relationships between pairs of nutrient minerals. The calcium/potassium ratio was a highly significant relationship. They related this ratio to thyroid activity. A high calcium/potassium ratio was related to slower thyroid activity. A low ratio of calcium/potassium was related to faster thyroid activity. HTMA research shows that calcium and vitamin D supplements both tend to lower the potassium level, raise the tissue calcium level and raise the calcium/potassium ratio. Calcium and /or vitamin D supplementation can start a **cascade of changes and shifts** in vital mineral levels and balances starting with the drop in the potassium level. With the drop in the potassium level, the sodium/potassium ratio is likely to increase and bring on intense stress (fight or flight response). As stress intensifies, magnesium is lost from inside of cells, resulting in a magnesium deficiency.

Magnesium deficiency symptoms are likely to manifest affecting muscle tension, heart functions, blood pressure, glucose dys-regulation to name a few. As the calcium level increases and the magnesium deficiency worsens, the calcium/magnesium ratio increases, making the magnesium deficiency even more severe.

A few years ago, I experienced this cascade of mineral changes just by taking 5000 IU of vitamin D3 for a few months. When I saw what changes had occurred in my HTMA as a result of taking vitamin D3 for three months, I immediately stopped taking the D3 and took supplements to reverse the adverse mineral changes that had occurred.

The HTMA, with the unique concepts and principles related to it, provides a scientific perspective for gaining a greater understanding of what are the health risks and implications of more calcium and vitamin D supplementation. Taking extra calcium and/or vitamin D without an understanding of how they are interrelated with other vital nutrient minerals can start a cascade of adverse changes in the nutrient mineral system. Unfortunately, for countless numbers of people, their medical doctors lack this essential information and understanding of dynamic scientific nutrition. Doctors continue to misinterpret serum vitamin D tests that show low vitamin D levels and inappropriately recommend high doses of vitamin D without knowing their patients' underlying nutrient mineral patterns. Approximately 80 % of the population has high tissue calcium levels as shown in HTMA data. This high HTMA calcium is soft tissue calcium which is very unhealthy. It is quite likely that the body has feedback loops and regulatory mechanisms that drop the serum calcium level. This would be a protective mechanism so that there is less chance of a continuing buildup of soft tissue and organ calcification.

From the perspective of HTMA and its related concepts and principles, the simplistic recommendations for calcium and/or vitamin D supplementation need to be carefully re-evaluated. Otherwise, the health of countless numbers of people will continue to be put at grave risk. The HTMA offers a sound scientific nutritional approach to understanding and dealing with these complex health issues.

Health risks of inappropriate supplementation with heavy doses of vitamin D and calcium:

- Potassium deficiency
- Increased soft tissue and organ calcification
- Greatly diminished thyroid activity
- Chronic fatigue and exhaustion
- Adrenal fatigue and exhaustion
- Increased stress reactions
- More inflammation
- Magnesium deficiency
- Glucose regulation problems
- Stress induced psychological problems
- Cardio-vascular problems
- Heart attacks