



The Role of **MICRONUTRIENTS** In **WOMEN'S HEALTH**

Are you ready to achieve optimal health and reduce your risk of chronic diseases?

There is overwhelming evidence that vitamin deficiencies are associated with chronic disease processes and the overall condition of one's health.

OSTEOPOROSIS

Good bone health is not as simple as getting enough calcium. In order to absorb calcium and reduce bone loss, proper vitamin D, K and C levels are crucial. Additionally, several vitamins and minerals are necessary for the prevention of osteoporosis as well as the painful bone disease, osteomalacia. Vitamin K is a major factor in building bone proteins while the amino acid carnitine can improve bone mineral density and zinc deficiency can negatively affect bone integrity.

PMS

Several symptoms of PMS are alleviated by specific nutrients and worsened by deficiencies. Since ovarian hormones influence calcium, magnesium and vitamin D metabolism, the evaluation of how each nutrient is functioning in a woman's body reveals crucial information. In clinical trials, zinc has reduced and sometimes eliminated menstrual cramping; calcium and vitamin D can mitigate premenstrual headaches; and magnesium plus vitamin B6 supplementation can reduce the anxiety often felt in women suffering from PMS.

HORMONES & HRT

The delicate balance of hormones is profoundly affected by nutritional deficiencies. Micronutrients can actually function as a hormone (vitamin D for example) or, in most cases, hormones are regulated by nutrients. Research shows that synthetic Hormone Replacement Therapy (HRT) can negatively affect mineral levels of calcium, copper, chromium, magnesium, selenium and zinc and certain vitamins, while reducing important antioxidants.

MENOPAUSE

Menopausal women are at a higher risk for micronutrient deficiencies. This is due largely to the fact that as we age, our bodies are less efficient at absorption, but also due to the oxidative stress that accompanies normal aging. As a woman enters menopause, her risk for cardiovascular disease also increases, partly because certain vitamins that protect against heart disease become deficient. For example, folic acid and B vitamin supplementation in women can help blood vessels remain pliable and clear while improving a woman's lipid profile. In some women, high estrogen levels are associated with low magnesium levels, which consequently affect blood pressure and several negative menopausal symptoms.

BREAST CANCER

Several key nutrients are critical for maintaining healthy breast tissue. Low antioxidant status is linked to higher rates of breast and other cancers. In fact, antioxidants such as coenzyme Q10, cysteine and vitamin A have been shown to mitigate DNA damage in cancerous tissue and inhibit hormonal toxicities that can initiate cancerous cells. Other studies have shown that adequate vitamin D and calcium levels can lower risk by more than 70%.

