

NUTRITION & LIFESTYLE- MODULE FIVE

- Selenium
- Magnesium
- Foods for the Endocrine System

Magnesium

Magnesium works with calcium to keep our hearts beating strongly. Magnesium dilates the blood vessels in the heart, calcium closes them. When the body's stores of magnesium are low, the heart may become constricted, go into a spasm, contract suddenly, and induce heart failure. Stress depletes magnesium in the body, especially the stress of prolonged noise! In fact, the louder the noise, the more magnesium is depleted, putting the heart at risk. Yet scientists have also found that even small increases in dietary magnesium intake protect against noise-related stresses. Adequate magnesium levels also help ensure healthy blood pressure levels and protect against the formation of calcium-based kidney stones. Magnesium plays an important role in protecting us against a buildup of lead in the body, and research indicates that low levels of magnesium may be a risk factor in the development of diabetic retinopathy. An abundance of magnesium imparts magnetism and radiance to the energetic body and discourages bad breath and body odor. It's also important for deep sleep, strong nerves, flexible bones, and fewer headaches. The RDA for magnesium is 350 to 450 milligrams a day, but most of us don't get the recommended amount. Overly processed foods, soft water, chemical fertilizers, and harsh cooking processes result in inadequate amounts of magnesium in our diets.

You'll get plenty of magnesium in your diet by eating whole grains, soybeans, buckwheat, black-eyed peas, almonds, tofu, cashews, kidney beans, lima beans, Brazil nuts, pecans, peanuts, walnuts, bananas, beet greens, avocado, blackstrap molasses, potatoes, and oatmeal.

Herbs containing magnesium include milky oats/oatstraw, licorice, kelp, nettles, dulse, burdock, chickweed, marshmallow root, and horsetail. Magnesium is also offered by sage, raspberry leaves, red clover, valerian, yellow dock, dandelion, and parsley.

Selenium

Selenium appears to play a very important role in protecting our cells from the chromosome damage caused by PCBs, mercury, lead and other toxic pollutants in our air, food, and water. Selenium slows cell division and inhibits tumor growth, protecting us against cancer of the intestines, rectum, ovary, prostate, lung, pancreas, bladder, skin, kidney, and some forms of leukemia. Selenium stimulates the production of interferon, the body's natural antiviral and anti- cancer agent. Selenium is especially protective against breast cancer, and research indicates that selenium and vitamins A and E work

together synergistically, enhancing the effect of each other, especially when it comes to protecting us from this particular cancer threat. Selenium helps stall aging, enhances immunity, boosts energy levels, clears vision, and strengthens the heart.

You'll find selenium in seafood, whole grains, and organ meats, like kidney and liver.

Herbal sources of selenium include catnip, milk thistle, valerian, dulse, black cohosh, and ginseng. Also uva ursi, hops, echinacea, kelp, raspberry leaves, rose flowers and hips, hawthorn berries, fenugreek, and yellow dock.

Foods for Thyroid Health

The thyroid is the largest endocrine gland, and thyroid disease and inflammation can have a significant effect on the overall functioning of the endocrine system. Vitamin D helps control overall thyroid hormone production. While synthesizing vitamin D from sun exposure is ideal, foods such as cod liver oil, organic eggs, fortified dairy products, fortified cereals, mushrooms and oily fish will also boost vitamin D levels.

Selenium is a mineral that helps activate the enzymes needed to maintain normal thyroid function and to stimulate thyroid hormone production. Foods containing the highest amount of selenium are organ meats, clams, grass-fed beef, pasture-raised pork, raw Brazil nuts, tuna, shrimp, sardines and wild-caught salmon.

Iodine, an essential mineral, helps make thyroid hormone, which is important for metabolic processes. In addition to iodized table salt, foods rich in iodine include cod, wild-caught salmon, sardines, sea vegetables, scallops, shrimp, whole grains and plain yogurt.

Foods for Adrenal Health

The adrenal glands are especially important during times of stress because they secrete epinephrine and norepinephrine in order to trigger the "fight or flight" response. Stress stimulates the adrenals to release cortisol, the "stress hormone," to regulate blood sugar, blood pressure, metabolism, immune response and anti-inflammatory actions. If cortisol levels remain high, adrenal fatigue can occur.

In the November 2009 issue of "Today's Dietitian," registered dietitian Dina Aronson suggested certain anti-inflammatory foods to support adrenal health. These include fruits, vegetables, whole grains, nuts, seeds, beans and fatty fish.

Foods for Hypothalamus Health

The hypothalamus plays a key role in metabolism and weight management. A study published in a 2013 issue of the "British Journal of Nutrition" found diets high in certain polyunsaturated fatty acids, including a 1:1 ratio of omega-3s to omega-6s, improved hypothalamus health and function. According to this study, a diet low in saturated fat and rich in polyunsaturated fatty acids will improve hypothalamus function. Foods rich in omega-3 and omega-6 fatty acids include flaxseed oil, hemp seeds, pumpkin seeds, wild-caught salmon, grass-fed beef, eggs, sardines and tuna.

Foods for Pineal Gland Health

A disruption in the sleep cycle has cascading, negative effects on the entire endocrine system and overall health. Vitamins B-5 (pantothenic acid) and B-6 (pyridoxine) help the pineal gland to produce and release melatonin, a hormone that regulates circadian rhythms -- your body's inner clock mechanism. Foods containing vitamins B-5 and B-6 include avocado, beans, lentils, mushrooms, sweet potatoes, tuna and turkey.