

Balanced Nutrition: Nutritional Antagonism

The nutritional web of life consists of numerous synergisms and antagonisms. Synergisms build upon one another. One nutrient is necessary for the operation of another or reinforces the operation of another. Nutritional deficiencies create problems where synergistic activities are involved.

Nutritional antagonisms revolve around the antagonistic activity of one nutrient against another. Where antagonisms are involved an excess of one nutrient may depress the utilization of another nutrient. Antagonisms are common between vitamins and minerals. High intake of vitamin C can increase iron absorption, but depress copper levels. Excess vitamin D can deplete potassium.

One vitamin can antagonize another vitamin through a mechanism of competitive absorption. For example, high intake of alpha-tocopherol can deplete gamma-tocopherol. This will tend to rob the body of the benefits of the gamma-tocopherol. A similar mechanism may operate with other fat soluble nutrients.

One mineral can also antagonize another mineral. This type of action is quite common and can be dangerous. High intake of calcium can antagonize magnesium. High intake of copper (from copper tubing in homes) can antagonize and deplete zinc. High intake of fluoride from toothpaste and fluoridated water can antagonize and deplete iodine which has the potential to interfere with thyroid function.

Common foods can also antagonize specific nutrients. For example, flax seed, alfalfa sprouts or button mushrooms can antagonize vitamin B6.