Health Science News Page



Exclusive Information from the Dr. Rath Research Institute

VITAMIN K: MORE THAN BLOOD CLOTTING

Vitamin K is a fat-soluble vitamin now known for a variety of functions, however it is still referred to as the "blood clotting vitamin." Currently, researchers are learning about its role in a wide array of physiological processes including during the COVID-19 pandemic. Vitamin K is essential for healthy bones, the cardiovascular system, the liver, kidneys, pancreas, brain and nervous system, and it has anti-inflammatory and anti-carcinogenic properties.

While the body makes some vitamin K in the digestive system, most of the required amount of it is obtained either from diet or supplements. The dietary sources of vitamin K are green leafy vegetables, turnips, broccoli, Brussels sprouts, fruits like blueberries, kiwis, and grapes, egg yolks, dairy and other animal products, and fermented foods such as hard cheeses, sauerkraut, and Japanese foods miso and natto. There are two different types of vitamin K present in these foods. The leafy greens and vegetables contain the subtype vitamin K1 also known as phylloquinones; whereas vitamin K2 (known as menaguinones) is mostly found in fermented foods where bacteria are part of its production process. Dairy and other animal products are also a good source of K2. It has been found that Vitamin K1 mostly accumulates in the liver, heart, and pancreas, while K2 mostly accumulates in the brain, pancreas, and kidneys. Although both K1 and K2 are needed in blood clotting through their essential role in the formation of prothrombin, it appears that K2 has a wider functionality than K1. Yet, there is no specific recommended daily allowance of K2. Vitamin K deficiency is more pronounced especially in newborn infants and older adults. In addition, people who follow a low fat diet, those who have digestive disorders (i.e., Crohn's disease, ulcerative colitis, and inflammatory bowel disease), or those who have had gastric bypass or colon removal are at an increased risk of developing vitamin K2 deficiency.



Vitamin K2 is important for calcium metabolism in the body. Its chronic deficiency has been associated with bone thinning and an increased risk of fractures in the elderly. It is important for cardiovascular health as it activates a protein that prevents calcification of the blood vessels, reduces arterial stiffening, and improves elasticity of the blood vessels. Its deficiency might lead to high blood pressure and atherosclerosis. Moreover, vitamin K is also shown to improve fat metabolism, glucose tolerance, and insulin sensitivity in clinical trials in patients with diabetes, and it reduces chances of eye, kidney, and cardiovascular complications arising from consistent high blood sugar levels.

Owing to its antioxidant and anticancer properties, vitamin K2 may inhibit cancer cell growth and its spread (metastasis), and induce cancer cell death (apoptosis). This action has been reported in multiple cancers including liver, prostate, lung, and colon cancers. In addition to its anticancer effects, vitamin K2 also supports liver regeneration, induces coagulation processes, and assists in recovery of alcoholic and non-alcoholic liver cirrhosis. Furthermore, vitamin K2 has a significant role in function of the immune system, brain and the central nervous system. The brain has higher expression of specific receptors for vitamin K2 enzymes and deficiency of K2 is linked to various neurological diseases.

Most importantly, vitamin K has gained special attention in the current coronavirus pandemic. Low vitamin K levels may increase chances of death due to respiratory failure, and thromboembolism in COVID-19 patients. When available in abundance, vitamin K keeps the clotting process in check by activating coagulation factors in the liver and at the same time by inducing anticoagulation protein outside the liver. Unfortunately, vitamin K2 is significantly lacking in the modern Western diet and there is not enough awareness about its importance in health and disease.

This information is provided to you by the Dr. Rath Research Institute a leader in the breakthrough of natural health research in the field of cancer, cardiovascular disease and other common diseases. The Institute is a 100% subsidiary of the non-profit Dr. Rath Foundation.

The ground-breaking nature of this research poses a threat to the multi-billion dollar pharmaceutical "business with disease". It is no surprise that over the years the drug lobby has attacked Dr. Rath and his research team in an attempt to silence this message. To no avail. During this battle, Dr. Rath has become an internationally renowned advocate for natural health. Says he: "Never in the history of medicine have researchers been so ferociously attacked for their discoveries. It reminds us that health is not given to us voluntarily, but we need to fight for it."

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