# **Educational Update ESP**:

# Vitamin K2 and vitamin D3 are teammates in heart disease prevention and more

One of the most important things for you to understand is that all nutrients work in partnerships in your body—no one is an "independent contributor."

**Calcium and magnesium** work together to regulate your heartbeat. Calcium causes your heart to contract, and magnesium tells it to relax between beats.

**Sodium and potassium** regulate the fluid levels in your body. Sodium causes your body to retain water when you need it, and potassium makes your body excrete water when there is excess.

Well, **vitamins D3 and K2** carry out a very important, life-saving role in your body.

In addition to fighting heart disease-causing inflammation, **<u>vitamin D3** also helps your body absorb calcium—that's why it's so important for your bones.</u>

At the same time, **Vitamin K2** tells the calcium where it needs to go. This is VITAL because if all that calcium that vitamin D just helped you absorb doesn't get to your bones and teeth, it can hang out in your arteries, causing calcification and encouraging plaque buildup!

Which INCREASES your heart disease risk!

In addition, excess calcium that doesn't get told where to go by vitamin K2 can also accumulate in your organs, and when this happens in your *gallbladder*—you guessed it—gallstones may be in your future!

This is why it boggles my mind that SO many doctors push calcium, calcium, calcium for osteoporosis prevention, with no acknowledgment whatsoever of the carefully orchestrated partnership between calcium, vitamin D3 and vitamin K2.

Let me clarify this a bit more—menopausal women who are blindly gulping calcium to prevent osteoporosis are in effect INCREASING their heart disease risk if they ignore vitamins D3 and K2

#### You may be low in K2—especially if you're taking medication!

It's a pretty well-known fact that vitamin D3 is a common deficiency due to our shunning the sun and slathering ourselves in toxic sunscreen.

But many of us are running low in K2 as well. Current estimates state that up to 85 percent of us don't have the K2 levels we should.

One of the main reasons for this is our heavy reliance on meat and dairy from grain-fed animals. In addition to being low in omega-3 essential fatty acids, products derived from grain-fed animals are low in vitamin K2. *Grass-fed* beef and the dairy products from grass-fed animals, on the other hand, are higher in vitamin K2.

Another reason for low levels of nutrients, in general is our guts are completely out of whack. When your gut flora balance is topsy-turvy and harmful microbes call the shots, trust me, your nutrient absorption is in the tanker.

And things like stress, eating lots of sugar and carbs and lacking sleep can destroy your friendly flora population and leave them waving the white flag of defeca.

**Many medications**—including the blood thinner warfarin, statins and antituberculosis medications—can impair your body's ability to absorb K2. In addition, broad-spectrum antibiotics can alter your gut microbiome and reduce the ability of your gut to synthesize vitamin K2.

## Even more heart disease prevention!

If you're interested in minimizing heart disease risk, probiotics and omega-3 essential fatty acids are also vital.

Probiotics help enhance absorption of the nutrients (like vitamins D and K) that are essential to fight heart disease (and all diseases in general).Plus probiotics also "eat" excess cholesterol, which is another heart disease risk!And the omega-3 essential fatty acids have been PROVEN to lower blood pressure, lower cholesterol and help reduce arterial inflammation!

## Now you know the truth!!!!

The truth is, your body needs a variety of nutrients to fight disease. You can't concentrate on one to the exclusion of all others.

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