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FREE EDUCATIONAL GUIDE

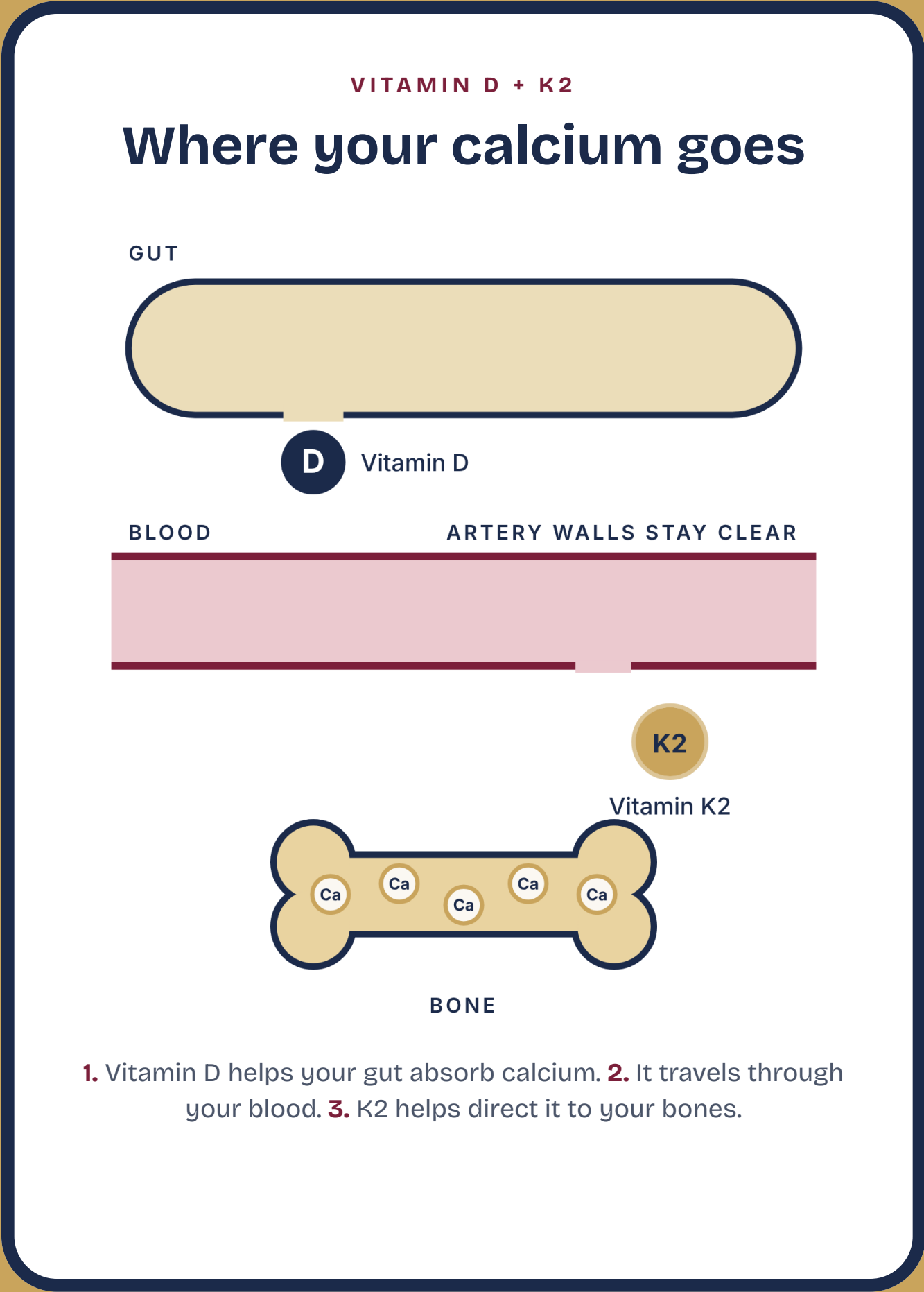
Vitamin D + K2, Made Simple

What vitamin D really does, how much you need, how to check your level, and why it works best with K2.

Nearly half the world has low vitamin D, and most people don't know it.¹

Free Guide

By **Shade Alabi, Pharmacist** · Educational only. Not medical advice.





Why Vitamin D Matters

Vitamin D isn't just for the bones. It acts more like a **hormone**. The liver and kidneys turn it into its active form, cells all over the body have receptors for it, and it helps to regulate the expression of **roughly 900 genes**.² Vitamin D is necessary for calcium absorption, it supports the muscles and immune system, which matters even more in cold and flu season.⁶

How common is low vitamin D?

About **1 in 6 people** worldwide have very low levels (below 12 ng/mL), and **nearly half** are below 20 ng/mL.¹

What low levels can feel like

Often nothing at first. When signs show up, they can look like tiredness for no clear reason, low mood, achy bones or muscles, or catching every bug going around.

What the research suggests

CHRONIC DISEASE

Leading causes of death

Keeping levels above 30 ng/mL is linked with lower rates of several leading causes of death, including heart disease, cancer and stroke.³

SKIN

Eczema

In 11 trials, vitamin D supplements reduced eczema severity in children and adults.⁴

IMMUNITY

Infections and autoimmunity

Healthy levels are linked to a lower risk of viral and bacterial infections and autoimmune disease.⁵



Where You Get It and How Much You Need

Sunlight

When UVB rays from the sun hit the skin, the body makes its own vitamin D. But it's not equal for everyone. Melanin in darker skin acts as a natural barrier, so darker skin makes less from the same sun. Winter months and spending most of the time indoors lower it too, and sun through a window doesn't count, because glass blocks UVB.⁶

Food

Salmon (3 oz) about 570 IU · fortified milk (1 cup) 120 IU · 2 canned sardines 46 IU · 1 egg yolk 44 IU · beef liver (3 oz) 42 IU.⁶ Food helps, but for most people food alone isn't enough.

Age	Daily need	Daily upper limit
Birth to 12 months	400 IU	1,000–1,500 IU
1–3 years	600 IU	2,500 IU
4–8 years	600 IU	3,000 IU
9–70 years	600 IU	4,000 IU
71 years and older	800 IU	4,000 IU
Pregnant or breastfeeding	600 IU	4,000 IU

Source: NIH Office of Dietary Supplements.⁶ 1 mcg = 40 IU.

PHARMACIST NOTE

The standard dose may not be enough if you're low. Your doctor may prescribe a higher dose for a short time to bring your level up, sometimes up to 10,000 IU a day. Only go above the upper limit with your doctor's guidance.



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Check Your Level and Pair It With K2

Know your number

Ask for a **25-hydroxy vitamin D** blood test. Below 20 ng/mL is deficient and 21–29 is insufficient.⁷ Many clinicians aim for 30 or higher.³ Ask what target fits you. Can't get tested? Ask your provider about a daily dose within the limits.

K2 FOOD SOURCES

Natto (fermented soybeans), some cheeses, egg yolks, chicken and liver.^{8,10}

Why K2?

Vitamin D helps with calcium absorption. K2 activates proteins that send that calcium into the bones and teeth and away from the arteries.⁸ In one study, every 10 mcg of K2 a day was linked to a 9% lower risk of heart disease.⁹

ON A BLOOD THINNER?

If you take warfarin, talk to your doctor before taking K2. Vitamin K changes how warfarin works.¹⁰

Kids need it too

From age 1, kids need 600 IU a day, the same as adults.⁶ A simple blood test is worth asking about, especially for picky eaters or kids who are mostly indoors.

WHAT I DO

I take 5,000 IU of vitamin D a day and check my level twice a year with my doctor. That's my routine, not a dose for you.

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