Vitamin D3 + K2

Cholecalciferol 5,000 IU with menaquinone-7 50 mcg · 60 vegan capsules

INDICATION

Adults with low or untested vitamin D, women planning or carrying a pregnancy, postmenopausal and older adults, and anyone indoors or covered most of the day.

44%
of healthy Ghanaian adults tested were vitamin D deficient (12)

45%
less pre-eclampsia with vitamin D in pregnancy (4)

39%
fewer hip fractures with calcium plus vitamin D (1)

1 cap
daily for 8 to 12 weeks, then three times a week

01 COMPOSITION AND DOSE

Vitamin D3 (cholecalciferol)	**5,000 IU (125 mcg)**
Vitamin K2 (menaquinone-7, from natto)	**50 mcg**

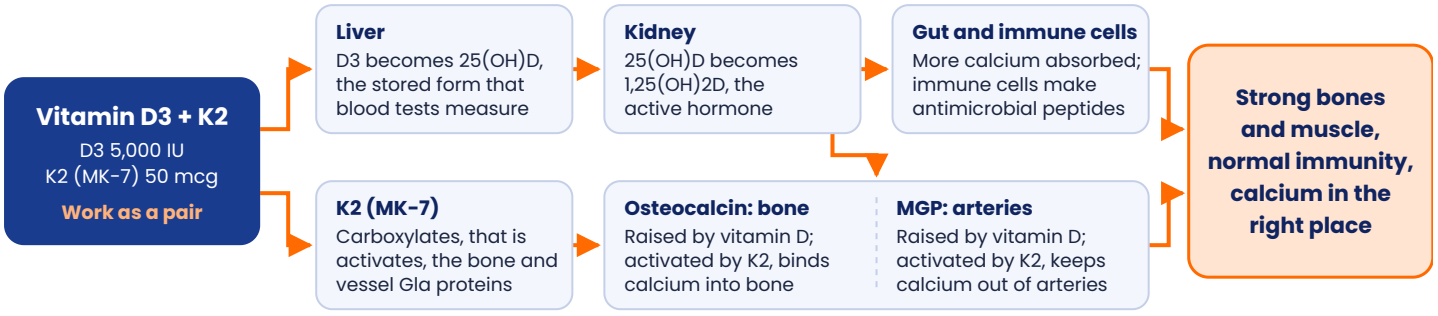
Per capsule. Vegan, gluten free, non-GMO. **Dose:** 1 capsule daily with the main meal for 8 to 12 weeks to correct low levels (the Endocrine Society uses 6,000 IU a day for 8 weeks), then recheck 25(OH)D. For maintenance, 1 capsule three times a week, about 2,000 IU a day, in line with the guideline's 1,500 to 2,000 IU; vitamin D is stored, so it need not be taken daily (14). **Label use:** supports bone, teeth, muscle and immune health (15).

HOW IT WORKS

The liver turns D3 into 25(OH)D, the stored form; the kidney makes 1,25(OH)2D, the active hormone, which raises calcium absorption from the gut and helps immune cells make antimicrobial peptides (14).

Active vitamin D also raises production of osteocalcin and matrix Gla protein (MGP) (16, 17). Once K2 carboxylates them, osteocalcin binds calcium into bone and MGP keeps calcium out of artery walls (6, 18).

MK-7 lasts far longer in the blood than K1 (6) and activates MGP dose by dose (19). D3 raises 25(OH)D more than D2 (20).



02 EVIDENCE, WITH REFERENCES

Study	Design and people	Intervention	Main result
Weaver 2016 (1)	Meta-analysis, 8 RCTs, 30,970 adults	Calcium + vitamin D	Total fractures down 14%; hip fractures down 39%
Bischoff-Ferrari 2009 (2)	Meta-analysis, 8 RCTs, 2,426 older adults	700 to 1,000 IU/day	Falls down 19%; lower doses gave no benefit
Beaudart 2014 (3)	Meta-analysis, 30 RCTs, 5,615 people	Vitamin D	Strength up; larger gain from 65 and in deficiency
Moghib 2024 (4)	Meta-analysis, 33 RCTs, 10,613 pregnant women	Vitamin D in pregnancy	Pre-eclampsia down 45% (RR 0.55)
Hollis 2011 (5)	Double-blind RCT, 494 pregnant women	Up to 4,000 IU/day	4,000 IU best at reaching sufficiency; equally safe
Tripkovic 2012 (20)	Meta-analysis, 7 RCTs	Vitamin D3 vs D2	D3 raised blood 25(OH)D significantly more than D2
Schurgers 2007 (6)	Studies in healthy adults	MK-7 vs vitamin K1	7 to 8 times higher blood levels; fuller osteocalcin activation
Knapen 2013 (7)	Double-blind RCT, 244 postmenopausal women, 3 years	MK-7 180 mcg/day	Less bone loss at spine and femoral neck; less loss of vertebral height; inactive osteocalcin down 51%
Knapen 2015 (8)	Same trial, arterial outcomes	MK-7 180 mcg/day	Arterial stiffness improved; inactive MGP down 50%
Geleijnse 2004 (9)	Cohort, 4,807 adults aged 55+	Highest vs lowest K2	Coronary deaths 57% lower; all deaths 26% lower; severe aortic calcification halved

In Ghana: 44% of 500 healthy blood donors (12) and 82% of 180 pregnant women in the Volta Region (13) were deficient, despite the sun. **Guideline:** the Endocrine Society suggests vitamin D in pregnancy, from age 75 and in prediabetes (10). **Evidence base:** effects are smaller without deficiency; Cochrane rates pregnancy data as uncertain (11); K2 trials used 180 mcg.

For health professionals. This product is a food supplement and is not intended to diagnose, treat, cure or prevent any disease.

WHO BENEFITS MOST

Low vitamin D
Indoor work, covered skin, obesity, or a low 25(OH)D result.

Expect: levels corrected in 8 to 12 weeks

Pregnant or planning
Most pregnant women tested in Ghana were deficient; vitamin D lowered pre-eclampsia.

Start: on the prescriber's advice

After menopause
Postmenopausal or older, with bone loss, a past fracture or falls; K2 slowed bone loss.

Expect: fewer falls and fractures

Little sun on the skin
Indoor workers, covered dress, darker skin, older adults or obesity.

Expect: 25(OH)D up within 8 to 12 weeks

HOW TO USE IT IN PRACTICE

- **Starting:** 1 capsule daily with the main meal for 8 to 12 weeks.
- **Monitoring:** 25(OH)D at the start where available and at 8 to 12 weeks; serum calcium if daily use goes past three months (21).
- **Review:** once 25(OH)D is above 75 nmol/L (30 ng/mL) (14), move to 1 capsule three times a week long term.
- **With prescribed treatment:** suits patients on bisphosphonates, which need adequate vitamin D; direct oral anticoagulants are unaffected.
- **With Draxer products:** GynoEssence in PCOS/PMOS when vitamin D is low; Magnesium Glycinate with Zinc for bone and muscle.
- **Supporting nutrients:** calcium from food (milk, small fish eaten with bones, leafy greens); magnesium contributes to normal bones and muscle function (15).

SIDE EFFECTS AND SPECIAL GROUPS

Common	None expected at the maintenance dose.
Uncommon	Raised blood or urine calcium with prolonged daily use; rarely rash or itching (21).
K2 (MK-7)	Affects clotting only in people on warfarin-type drugs (22).
Overdose	Prolonged excess raises blood calcium: nausea, constipation, thirst, passing more urine; stop and check calcium (21). Daily use exceeds the 4,000 IU upper level (23), hence the 8 to 12 week limit.
Under 18	Not recommended; adult strength.
Kidney	Stones or severe impairment: specialist supervision only (21).

03 INTERACTIONS AND CAUTIONS

- **Warfarin and other vitamin K antagonists:** do not use; MK-7 lowered INR from 10 mcg a day (22); this capsule has 50 mcg.
- **Thiazides, digoxin:** risk of high calcium (21).
- **Orlistat, cholestyramine:** separate doses (21).
- **Phenytoin, barbiturates, steroids:** weaker effect (21).

04 PREGNANCY AND BREASTFEEDING

Suitable where levels are low, and needed: most pregnant women tested in Ghana were deficient (13), supplementing lowers pre-eclampsia (4), and the Endocrine Society advises it (10). 4,000 IU a day from 12 weeks was safe and most effective in 350 women (5). The upper intake in pregnancy is 4,000 IU (23), so give 1 capsule daily for 8 to 12 weeks under the prescriber, then three times a week. No concerns identified for K2.

Breastfeeding: suitable. The label precaution is the standard one.

05 WHEN NOT TO RECOMMEND

- Patients on warfarin or acenocoumarol (22)
- High blood calcium, kidney stones, nephrocalcinosis or hypervitaminosis D (21)
- Sarcoidosis or severe kidney impairment, unless a specialist supervises (21)
- Under 18 years
- Bone pain, repeated fractures or proximal weakness without a diagnosis: refer

PATIENT COUNSELLING CHECKLIST

- ☐ 1 capsule with your main meal
- ☐ Daily for 8 to 12 weeks, then 3 times a week
- ☐ A blood test will show your progress
- ☐ On warfarin? Do not take this product
- ☐ Pregnant? Take it as your prescriber advises
- ☐ Eat calcium foods: milk, small fish, greens
- ☐ Do not add another vitamin D product
- ☐ Thirsty, sick or constipated? Stop; see your pharmacist

Product details. 60 vegan capsules (60 days at 1 daily). Store below 30°C in a dry place, away from direct light. Shelf life 24 months from manufacture; see pack for expiry. Food supplement made for Draxer Therapeutics by a partner manufacturer. Keep out of reach of children.

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