

**K IS CONTRA-INDICATED
REGARDING ONLY WARFARIN
AKA
COUMADIN**

K will not over clot your blood

It will stabilize your Prothrombin Time

K does not build up in your system

Your body “loves” K

Remember: K is part of a system and not a stand-alone

OTHER SIGNIFICANT
TRIVIA CONCERNING
THE K'S

Alzheimer's Implications K-1:

K-1 is transported through the blood brain barrier and remade into MK-4 which is used to make sheathing material for the neurons resulting in fewer neuronal-neurofibrillary tangles.

References

Presse N., Belleville S., Gaudreau P., Greenwood C.E., Kergoat M.J., Morais J.A., Payette H., Shatenstein B., Ferland G. Vitamin K status and cognitive function in healthy older adults. *Neurobiol. Aging*. 2013;34:2777–2783.

doi: 10.1016/j.neurobiolaging.2013.05.031.

Kiely A., Ferland G., Ouliass B., O'Toole P.W., Purtill H., O'Connor E.M. Vitamin K status and inflammation are associated with cognition in older Irish adults. *Nutr. Neurosci*. 2020;23:591–599. doi: 10.1080/1028415X.2018.1536411.

Chouet J., Ferland G., Féart C., Rolland Y., Presse N., Boucher K., Barberger-Gateau P., Beauchet O., Annweiler C. Dietary Vitamin K Intake Is Associated with Cognition and Behaviour among Geriatric Patients: The CLIP Study. *Nutrients*. 2015;7:6739–6750. doi: 10.3390/nu7085306.

Booth S.L., Shea M.K., Barger K., Leurgans S.E., James B.D., Holland T.M., Agarwal P., Fu X., Wang J., Matuszek G. Association of vitamin K with cognitive decline and neuropathology in community-dwelling older persons. *Alzheimer's Dement. Transl. Res. Clin. Interv*. 2022;8:e12255. doi: 10.1002/trc2.12255.

Nancy Presse, Bryna Shatenstein, Marie-Jeanne Kergoat, Guylaine Ferland,
Low Vitamin K Intakes in Community-Dwelling Elders at an Early Stage of Alzheimer's Disease,
Journal of the American Dietetic Association, Volume 108, Issue 12, 2008, Pages 2095-2099,, ISSN 0002-8223,
<https://doi.org/10.1016/j.jada.2008.09.013>. (<https://www.sciencedirect.com/science/article/pii/S0002822308017331>)

Alzheimer's and MK-4

MK-4 transported to the brain via the lymph system

Most likely this is the backup system to the K-1 route which is carried on the LDL and HDL and VLDL

References:

Shearer M. J. (2022). The Biosynthesis of Menaquinone-4: How a Historic Biochemical Pathway Is Changing Our Understanding of Vitamin K Nutrition. *The Journal of nutrition*, 152(4), 917–919. <https://doi.org/10.1093/jn/nxab405>

Don't forget your Selenium (about 100mcg/day)

Bone Health/Osteoporosis:

How much:

45mg MK-4 (two Koncentrrated K a day)

Vitamin D in the range of 60 to 120 ng/ml

Red Blood Cell Magnesium: 6.0+ mg/dl. (about 3 grams of Magnesium Malate per day)

No calcium

Boron might help also

MK-4 reference:

Koitaya, N., Sekiguchi, M., Tousen, Y., Nishide, Y., Morita, A., Yamauchi, J., Gando, Y., Miyachi, M., Aoki, M., Komatsu, M., Watanabe, F., Morishita, K., & Ishimi, Y. (2014). Low-dose vitamin K2 (MK-4) supplementation for 12 months improves bone metabolism and prevents forearm bone loss in postmenopausal Japanese women. *Journal of bone and mineral metabolism*, 32(2), 142–150. <https://doi.org/10.1007/s00774-013-0472-7>

Kidney Stones

it appears that one important factor in the development of kidney stones is a vitamin K deficiency, where matrix Gla protein is not activated and cannot help inhibit the calcification that takes place. And research has demonstrated that treatment with vitamin K1 can inhibit the formation of renal crystals in vivo. VK1 increases MGP expression and functions through MGP to reduce crystal deposition in cells and provide cell protection, indicating that VK1 treatment could be a potential strategy for the treatment and prevention of nephrolithiasis.

Reference:

Li Y, Lu X, Yang B, Mao J, Jiang S, Yu D, et al. Vitamin K1 inhibition of renal crystal formation through matrix Gla protein in the kidney. *Kidney and Blood Pressure Res.* 2019;44(6)

Oral Health

The following system reverses the impact of Bisphosphonates (BRONJ) on the jaw and reduces cavities per day:

2 Koncentrated K

3 to 6 grams of vitamin C

5,000 to 20,000 iu vitamin D

3 to 5 grams of Magnesium Malate

Reference:

Neustadt, J., & Pieczenik, S. (2011). Bridging the gap between osteoporosis and osteonecrosis of the jaw: preventing and treating BRONJ with MK4. *Compendium of continuing education in dentistry (Jamesburg, N.J. : 1995)*, 32(8), e125–e131.

Karl FB Payne, Alexander MC Goodson, Arpan S Tahim, Imran Rafi and Peter A Brennan
British Journal of General Practice 2017; 67 (660): 330-331. DOI: <https://doi.org/10.3399/bjgp17X691565>

The Jaw heals in under three months when the Bisphosphonates are eliminated, thus allowing for dental work to be completed such as implants

MK-7 - - - - Kovid - - - - MyoKarditus

MK-7
Prevents MyoKarditus
via
the carboxylation
of the
S-Protein

(when happy the S protein does not capriciously throw
micro clots when agitated by spike proteins)

Also

Vitamin C plus MK-7 make elastin, which keeps you