

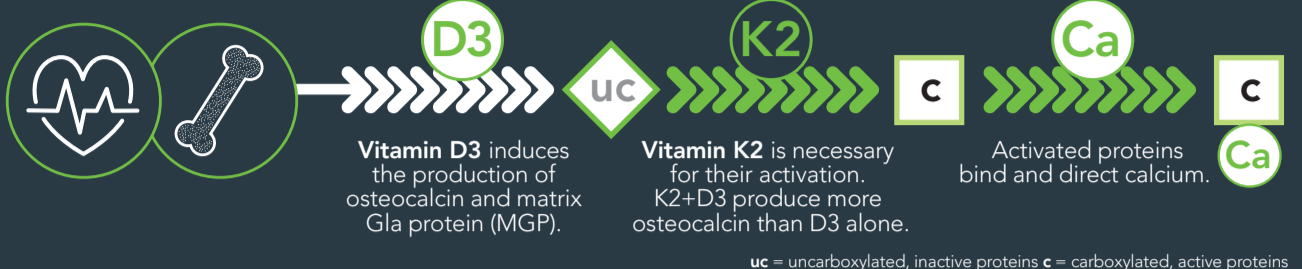
D3 & K2

THE PERFECT PAIR

CALCIUM IS THE MOST ABUNDANT MINERAL IN THE BODY

VITAMIN D3 INCREASES CALCIUM ABSORPTION INTO THE BLOODSTREAM

VITAMIN K2 ACTIVATES OSTEOCALCIN AND MGP TO PUT CALCIUM IN BALANCE



K2VITAL® + D3

COMBINATION IS THE PERFECT PAIR FOR BONE AND HEART HEALTH



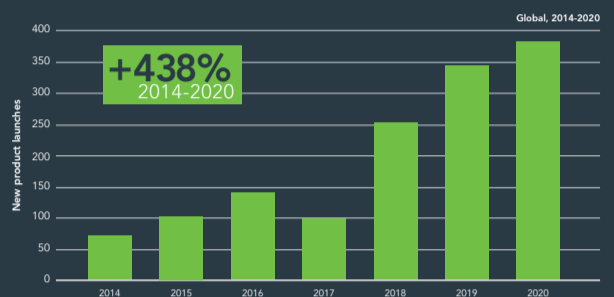
CONSUMERS UNDERSTAND THE BENEFITS OF D3 + K2 SYNERGY

CONSUMER RESEARCH DATA

	Market forecast	Intent to purchase
Vitamin K2 + D3	82	10%
Calcium (with and without D3)	78	12%
Vitamin D (concept average)	75	9%
Vitamin K1 (concept average)	70	8%

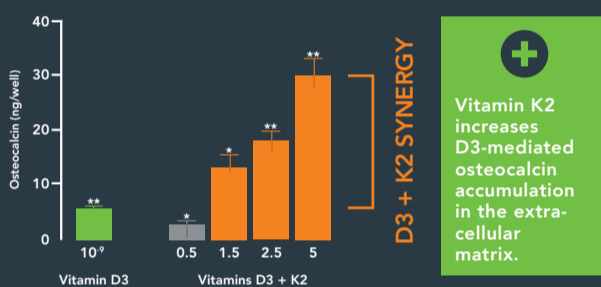
High probability of success: In benchmark testing, "The Perfect Pair" outperformed the category and concept averages for well-established supplements such as calcium and D3.

THE PERFECT PAIR IS IN DEMAND

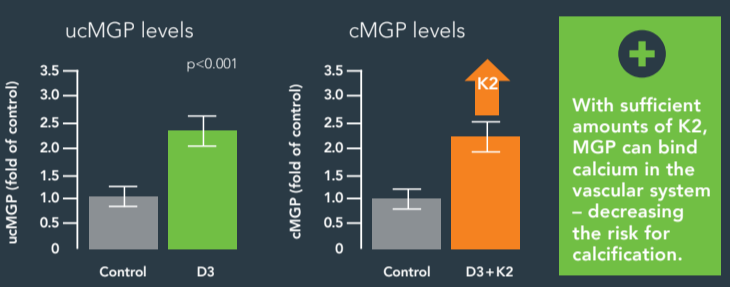


D3 + K2 SYNERGY IS SCIENTIFICALLY PROVEN

OSTEOCALCIN (OC) (1)

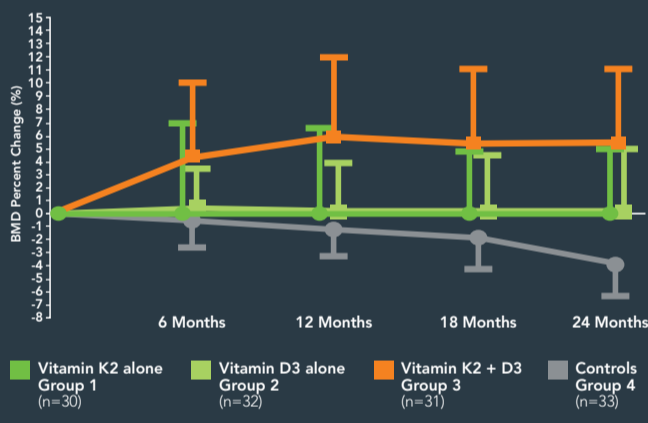


MATRIX GLA PROTEIN (MGP) (2)



D3 + K2 FOR BONE HEALTH

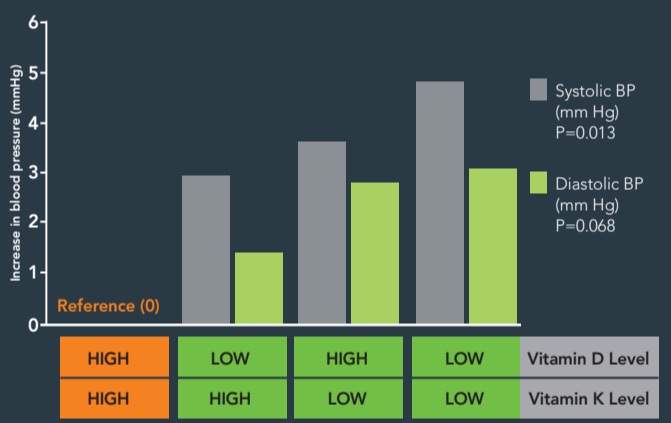
BMD OVER TIME (3)



D3 + K2 combination significantly improves Bone Mineral Density (BMD) in postmenopausal women, whereas D3 or K2 alone typically only limit bone loss.

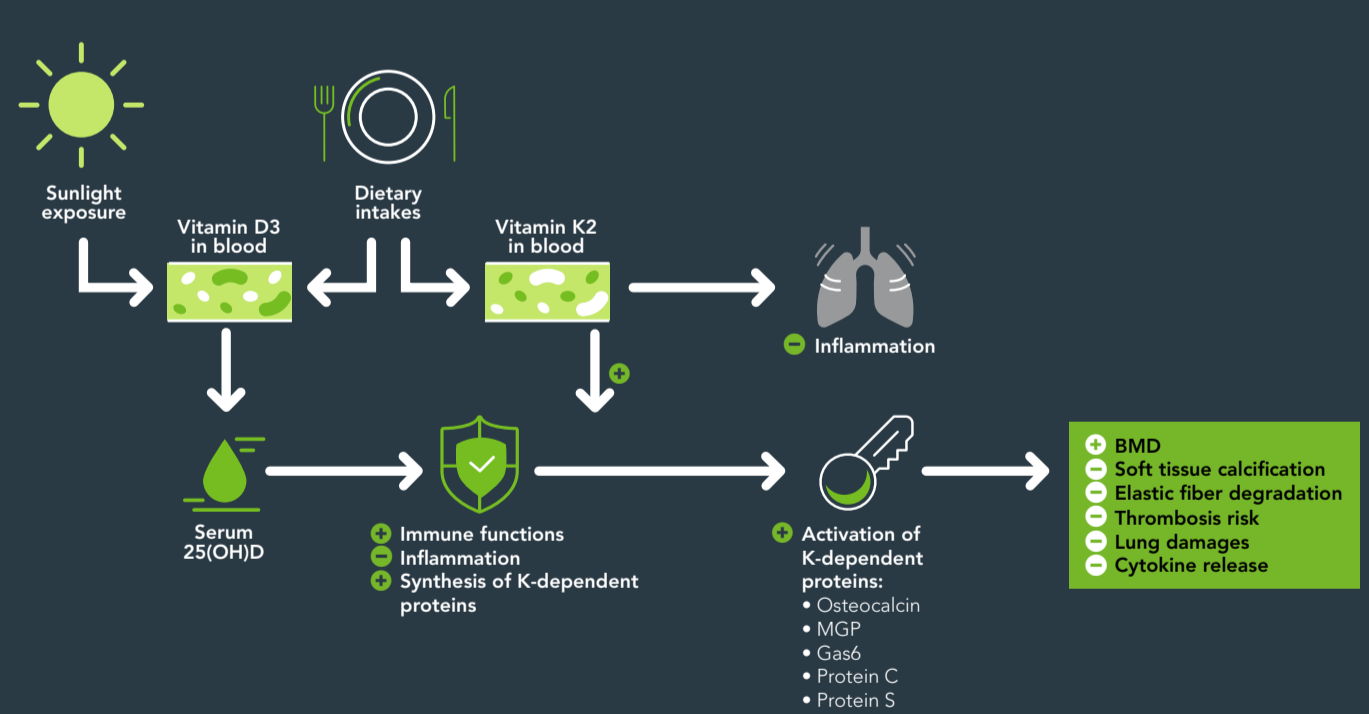
D3 + K2 FOR CARDIOVASCULAR HEALTH

EFFECT ON BLOOD PRESSURE (4)



The combination of low vitamin D and K status was associated with increased blood pressure and greater hypertension risk.

D3+K2 FOR IMMUNITY SUMMARY OF THEIR MECHANISMS OF ACTION (5)



(1) Koshihara, Y., & Hoshi, K. (1997). Vitamin K2 enhances osteocalcin accumulation in the extracellular matrix of human osteoblasts in vitro. Journal of Bone and Mineral Research, 12(3), 431-438.
 (2) Fu, X., Wang, X. D., Memitz, H., Wallin, R., Shea, M. K., & Booth, S. L. (2008). 9-Cis Retinoic Acid Reduces 1 α, 25-Dihydroxycholecalciferol-Induced Renal Calcification by Altering Vitamin K-Dependent γ-Carboxylation of Matrix γ-Carboxyglutamic Acid Protein in A/J Male Mice. The Journal of nutrition, 138(12), 2337-2341. https://academic.oup.com/jn/article/138/12/2337/4670156
 (3) Ushiroyama, T., Ikeda, A., & Ueki, M. (2002). Effect of continuous combined therapy with vitamin K2 and vitamin D3 on bone mineral density and coagulofibrinolysis function in postmenopausal women. Maturitas, 41(3), 211-221.
 (4) Van Ballegooijen, A. J., et al., (2017). Joint association of low vitamin D and vitamin K status with blood pressure and hypertension. Hypertension, 69(6), 1165-1172.
 (5) Goddek, S. (2020). Vitamin D3 and K2 and their potential contribution to reducing the COVID-19 mortality rate. International Journal of Infectious Diseases, 99, 286-290.

KEY TAKEAWAYS FOR YOUR BUSINESS

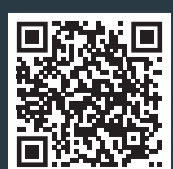
VITAMIN D3
Vitamin D3 supports calcium absorption and initiates the expression of calcium-binding proteins.

VITAMIN K2
These calcium-binding proteins are inactive unless sufficient vitamin K2 is present to carboxylate them.

GLOBAL DEFICIENCY
For the global majority, D3 and K2 dietary intakes are insufficient to meet daily requirements.

K2VITAL® Puts Calcium in Balance

VITAMINS D3 AND K2 WORK IN SYNERGY FOR IMPROVED BONE, CARDIOVASCULAR AND IMMUNE HEALTH



Disclaimer: This document exclusively addresses experts in research or industry professionals. Our products are not intended to prevent, cure, treat, or diagnose any disease. The information is believed to be reliable, however, manufacturers should seek their own independent advice on regulatory, scientific and related matters to ensure all requirements are followed in the respective market.

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