

FREE CLINICAL RESOURCE

Longevity Supplements: What the Evidence Actually Shows

Patients arrive with curated supplement stacks. This is where the data currently sit for UK primary care prescribers. A quick reference for the consultation, not a prescribing recommendation.

SUPPLEMENT	EVIDENCE VERDICT	WHAT THE EVIDENCE SHOWS
Omega-3 EPA + DHA	REASONABLE EVIDENCE	Consistent, modest reductions in myocardial infarction and cardiovascular mortality at higher doses, broadly above 1.8 g EPA plus DHA daily. ^{1,2} The DO-HEALTH trial found 1 g daily gave no benefit on blood pressure, cognition, physical performance or fracture risk. ³ Most over-the-counter products under-dose. High-dose preparations raise atrial fibrillation and bleeding risk, relevant on anticoagulants. ⁴
Folic acid	SPECIFIC INDICATION	Modest evidence for stroke prevention where dietary intake is inadequate or homocysteine is elevated. The finding does not extend to healthy adults pursuing longevity. ^{1,2}
Coenzyme Q10	SPECIFIC INDICATION	Benefit shown in heart failure specifically. No evidence of benefit in healthy adults. ^{1,2}
Vitamin D	NO BENEFIT IF REplete	One of the most prescribed supplements in primary care, yet large trials and systematic reviews show no benefit on cardiovascular outcomes, cancer incidence or all-cause mortality in adults without documented deficiency. ^{3,5}
NAD+ precursors	UNPROVEN	Reliably raise NAD+ levels in blood and tissue, but a 2026 systematic review concluded clinical effectiveness for anti-ageing outcomes remains unproven. ⁶ No significant effect on glucose, insulin or lipids. ⁷
Polyphenols resveratrol, curcumin	UNPROVEN	Compelling activity in experimental models, but no human trial has demonstrated clinical benefit for cardiovascular ageing or longevity to date. ⁸
Beta-carotene	AVOID	Not merely unhelpful. The evidence shows it increases mortality and stroke risk. Should be avoided. ^{1,2}

WHAT ACTUALLY WORKS

Healthy weight, not smoking, staying active and eating well are associated with **more than a decade of additional life expectancy** and roughly nine more disease-free years. No supplement approaches that effect size. Mediterranean and plant-forward dietary patterns outperform isolated supplementation by a substantial margin.

IN THE CONSULTATION

Discuss supplement use proactively at every consultation, particularly in older patients on multiple medications, where interactions are common and often undisclosed. Guide supplementation by documented deficiency or specific clinical indication, not by longevity aspiration.¹²

REFERENCES 1. An P, et al. J Am Coll Cardiol. 2022;80(24):2269-85. 2. Khan SU, et al. Ann Intern Med. 2019;171(3):190-8. 3. Bischoff-Ferrari HA, et al. JAMA. 2020;324(18):1855-68. 4. Chang JP, et al. Adv Nutr. 2023;14(6):1326-36. 5. O'Connor EA, et al. JAMA. 2022;327(23):2334-47. 6. Gallagher C, Emmanuel OO. Ageing Res Rev. 2026;116:103057. 7. Chen F, et al. Curr Diab Rep. 2024;25(1):4. 8. Zanders L, et al. Immunol Rev. 2026;337(1):e70084. 9. Li Y, et al. Circulation. 2018;138(4):345-55. 10. Nyberg ST, et al. JAMA Intern Med. 2020;180(5):760-8. 11. Ekmekcioglu C. Crit Rev Food Sci Nutr. 2020;60(18):3063-82. 12. Ronis MJJ, et al. Annu Rev Pharmacol Toxicol. 2018;58:583-601.