

A → ZINC

From A to Zinc

What Your Body Is Really Missing

Dr. Kristina Carman ND | IMA Weekly Webinar | June 2025



The Deficiency Epidemic



75%

of people are
magnesium deficient

1B

people globally are
vitamin D deficient

2B

people worldwide are
iron deficient

20%

of over-60s have
B12 deficiency

2B

people globally
are zinc deficient

RDA = preventing disease
Optimal = thriving

These are not the same.

These are global figures — including Western, well-nourished populations.

The Form Problem — Not All Supplements Are Equal



✗ What Most People Buy

Magnesium oxide (4% absorbed)

Folic acid

Cyanocobalamin (B12)

Vitamin D alone

Standard curcumin

Calcium carbonate

✓ What Actually Works

Magnesium glycinate (80% absorbed)

Methylfolate — essential for MTHFR variants (40% of population)

Methylcobalamin — the active form

Vitamin D3 + K2 + Magnesium — the triad

Liposomal or phytosome curcumin (29x more bioavailable)

Calcium citrate — better absorbed, especially with low stomach acid



Form determines whether a supplement works at all.

What Your Medications Are Depleting



Statins	→ CoQ10, Carnitine, Magnesium, Dolichol, Fat soluble vitamins: D, K2, E, A	<i>The very enzyme the drug blocks also makes CoQ10</i>
Metformin	→ Vitamin B12 + CoQ10 + magnesium	<i>Long-term depletion often missed in standard care</i>
PPIs (omeprazole etc)	→ B12, Magnesium, Zinc, Iron	<i>Common long-term prescription with major nutrient impact</i>
Oral Contraceptive Pill	→ B6, B12, Folate, Mg, Zn, Se	<i>Especially important pre-conception and in young women</i>
Antidepressants (SSRIs)	→ B12, Folate, CoQ10 + gut microbiome changes	<i>Nutrient repletion can improve treatment outcomes</i>
Antibiotics	→ Gut microbiome + B vitamins	<i>Probiotic restoration is essential post-course</i>

This is not anti-medication — this is informed, integrative medicine.



If You Do Nothing Else – Start Here

01

Vitamin D3 + K2

Test first. Dose to optimal 60–80 ng/mL. Always pair D3 with K2 (MK-7) and magnesium for activation.

02

Magnesium Glycinate

300–400mg before bed.
The most bioavailable form.
Supports sleep, mood, stress, muscles, and cardiovascular health.

03

Omega-3 EPA/DHA

2,000mg daily, triglyceride form. Check EPA + DHA content not total fish oil weight. Refrigerate to prevent oxidation.

The Mood–Gut–Nutrient Connection



90%

*of serotonin is produced
in the GUT — not the brain.*

The gut-brain axis
is bidirectional.

IMAhealth.org

The Serotonin Pathway

Tryptophan → 5-HTP → Serotonin → Melatonin
Each conversion requires B6, magnesium, and zinc.
Deficiency at any step impairs the whole chain.

The Natural Calm Toolkit

GABA · Magnesium · L-Theanine · B6
These work synergistically to reduce anxiety
and promote calm without sedation.

The Depression Nutrient Quartet

Omega-3 · Zinc · Folate · B12
Nutritional psychiatry trials now show dietary
intervention rivals antidepressants in mild–moderate depression.

The Longevity Nutrients



1

Spermidine

Triggers autophagy — the body's cellular self-cleaning and renewal process. Declines with age.

2

NMN / NR

NAD+ precursors for mitochondrial energy production and DNA repair. Research exploding.

3

CoQ10 (Ubiquinol)

Declines with age and statin use. Essential for cellular energy and heart muscle function.

4

Taurine

Landmark 2023 Science study: taurine decline drives aging. Exceptional safety profile.

5

Resveratrol

Activates sirtuins — longevity proteins. Choose trans-resveratrol in liposomal form.

6

Phosphatidylserine

Brain membrane integrity, memory, and cortisol regulation.

Aging is not simply the passage of time — it is addressable at the cellular level.

The Smart Supplement Approach



TARGETED & PERSONALISED

Based on testing, symptoms & individual health goals

FOUNDATIONAL SUPPLEMENTS

Vitamin D3/K2 · Magnesium · Omega-3 · Quality B Complex

NON-NEGOTIABLE FOUNDATION

Nutrient-dense diet · Quality sleep · Stress management · Movement

Key Principles

- Test before you supplement — ferritin, vitamin D, B12, magnesium, zinc, thyroid panel, CRP
- Introduce one supplement at a time — allow 4–8 weeks before assessing
- No supplement protocol outperforms a poor lifestyle — build from the bottom up
- Reassess every 3–6 months as needs change with seasons and life stages

Your Questions

Dr. Kristina Carman ND
Naturopathic Doctor & Functional Medicine Practitioner

 **From A to Zinc**

Your comprehensive A–Z nutrient reference guide

Available at [IMAhealth.org](https://www.imahealth.org)

