

47th ESPEN Congress
on Clinical Nutrition & Metabolism
Prague, Czech Republic
13-16 September 2025
Prague Congress Center

SIG-MN meeting 14th SEP 2025

- Web-site evolution
- MN guideline – APP – Anna Schweinlin
- Feedback on LLL 44 (new test questions yes/no will be used on 15th)
- Stady update of our big studies (+future studies ?)
 - Angélique de Man & Kristine Koekkoek -VITaCCA and BIO-MICRO
 - Karin Amrein – Vitamin D
 - Info. about publication project with industry – MN promoting healthy aging (MB)
- Micronutrient abuse & misinformation –podcast by our group?
- Varia

MICRONUTRIENT Special Interest Group

ESPEN MN-SIG

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Activities timeline

- Meeting Prague upcoming meeting 14 September 2025
- 5 May 2025 Web-Meeting 24 March 2025 [Read minutes here](#)
- 31 October 2024 Current Members [View actual member list here](#)
current member list will remain through 2025
- 8 September 2024 Meeting Milano [Read Minutes here](#)
[View Slides here](#)
- 11 September 2023 Meeting Lyon [Read Minutes here](#)
[View Slides here](#)

Outline

- ④ Aims of the SIG-MN
 - To coordinate/perform scientific and epidemiological studies in the field of MNs
 - To become a reference group for international questions transmitted over the ESPEN central website
 - To create a network in the field of MN
 - To promote education in the domain of MNs
 - To promote collaborative research in the field
 - To help adapt national policies regarding MNs
 - To stimulate the industry to produce adapted MN products
- ④ Education
- ④ Focus
- ④ Composition of the group
- ④ Officers
- ④ Members must fulfil the following criteria
- ④ Meetings of the group
- ④ Endorsed research projects

SIG-MN web-site
www.espen.org/micronutrient

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Clinical case:

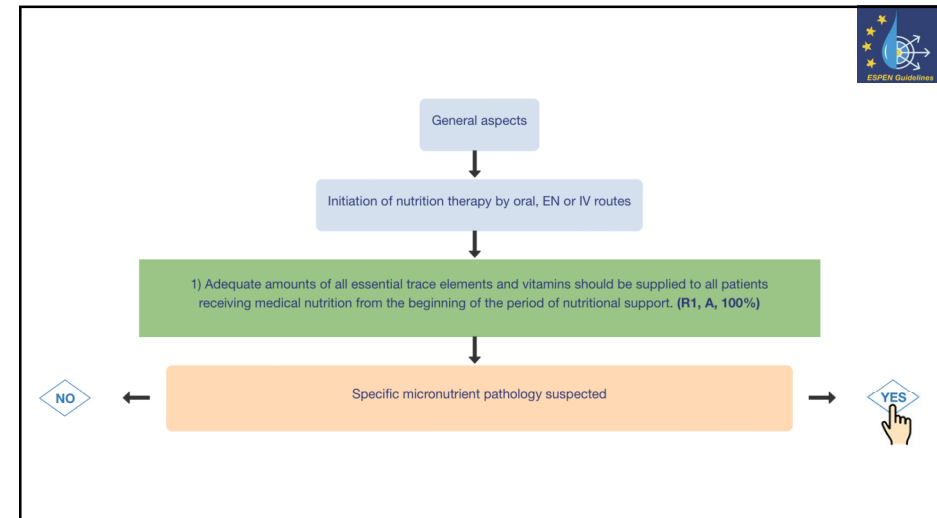
- Patient, male, 56 years
- Liver cirrhosis
- Child-Pugh class C
- Suspected Vitamin A and Zinc deficiencies

Vitamin A **Zn²⁺**

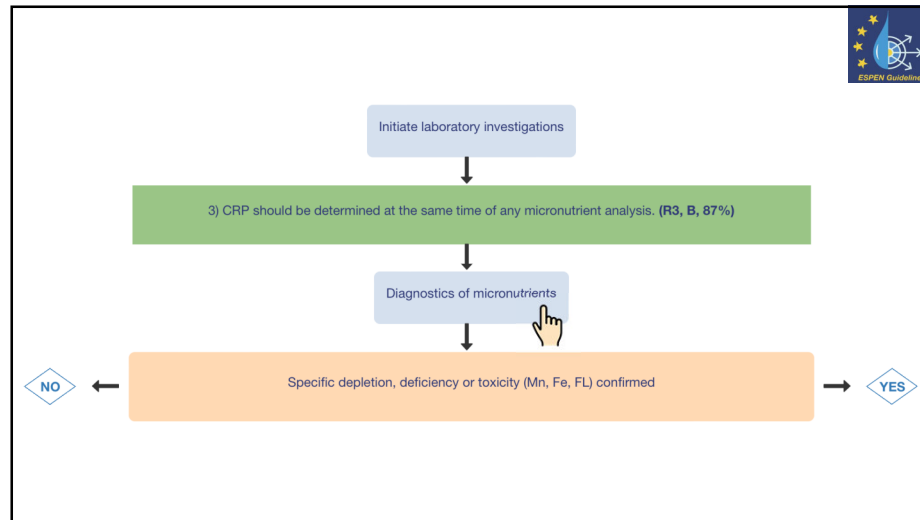


ESPEN Guidelines

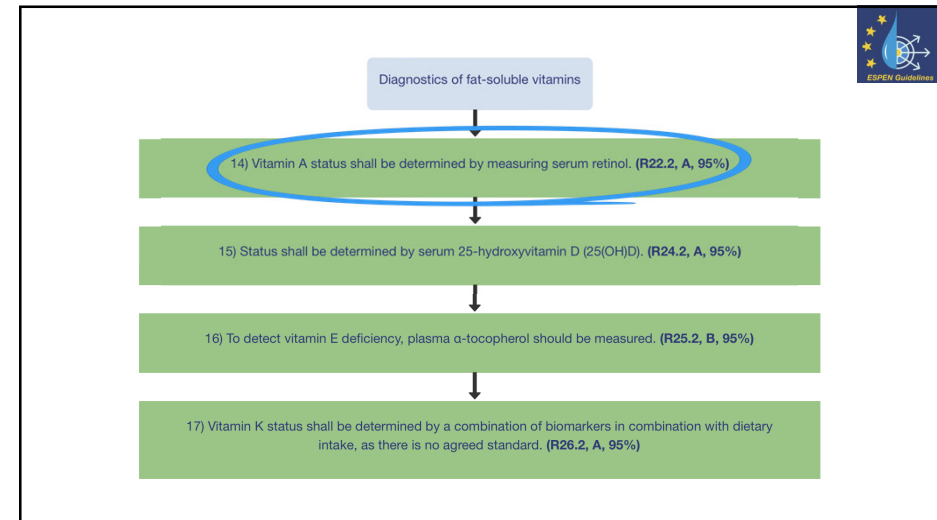
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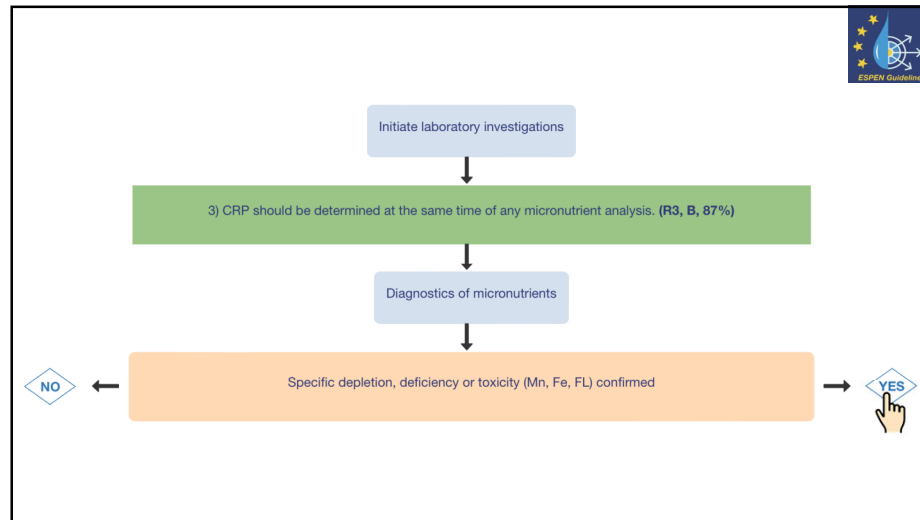
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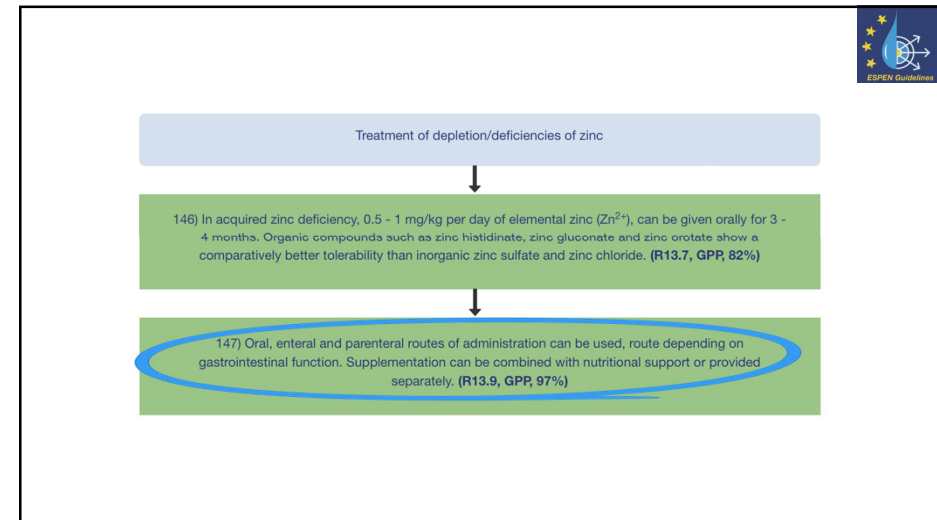
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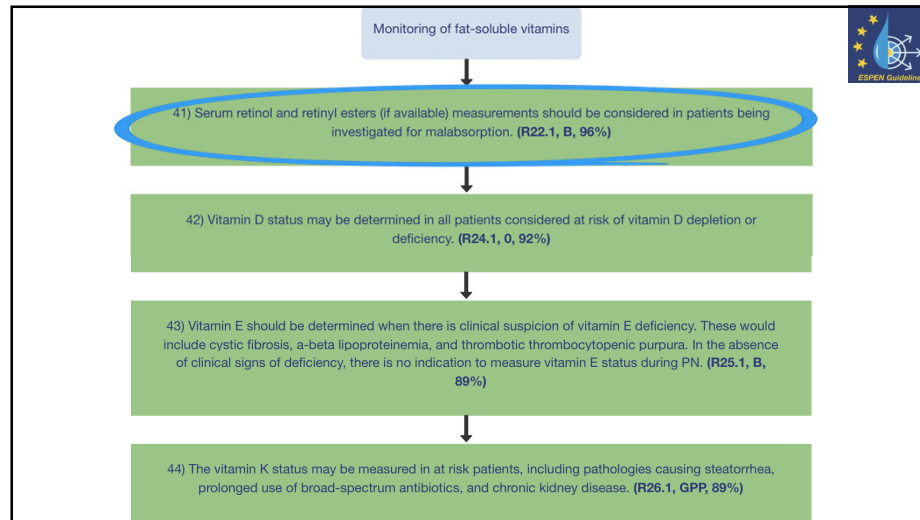
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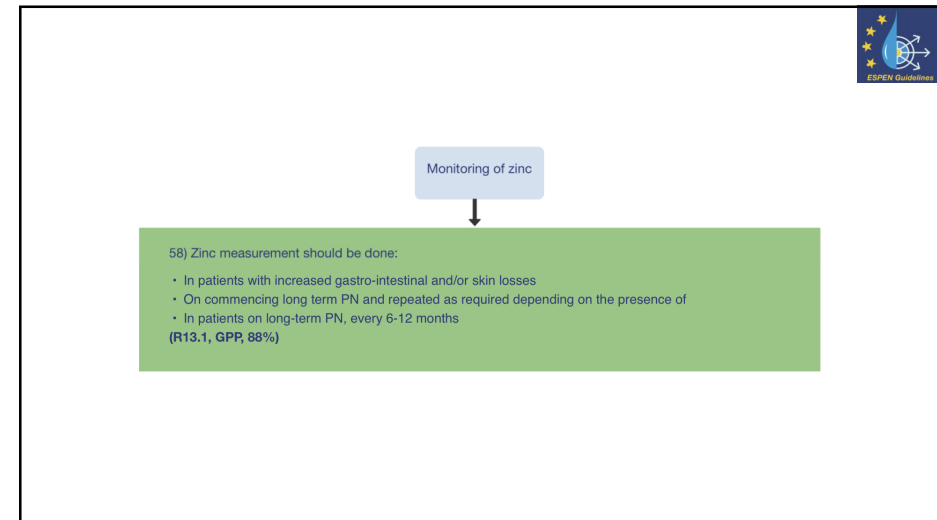
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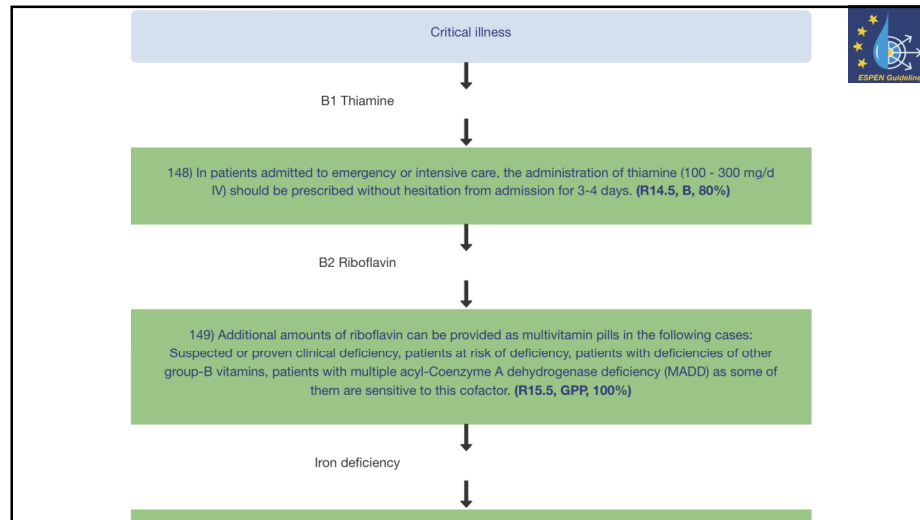
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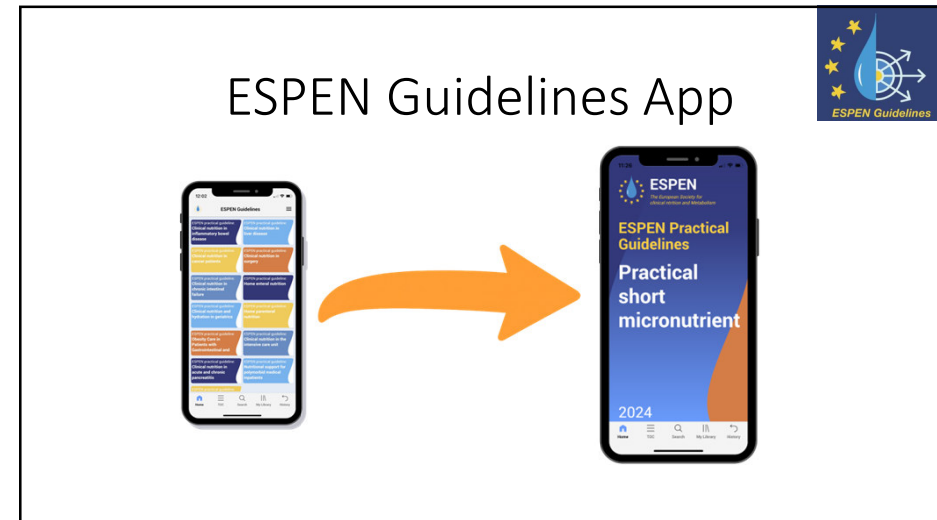
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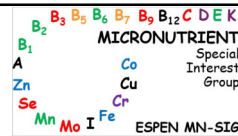
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SIG-MN meeting 14th SEP 2025

Stady update of our studies (+future studies ?)

- Angélique d.Man & Kristine Koekkoek
- Karin Amrein
- Info. about publication project with industry – MN promoting healthy aging (MB)

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ESPEN Micronutrient SIG meeting

14 September Prague

Angelique de Man, state of research trials and projects



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Early high-dose vitamin C in post-cardiac arrest syndrome

Sander Rozemeijer, Eric A. Dubois, Corstiaan A. den Uil, Thijs C.D. Rettig, Bas van den Bogaard, Arthur R.H. van Zanten, Rob J. Bosman, Harm-Jan de Grooth, Paul W.G. Elbers, Armand Girbes, Alexander P.J. Vlaar, Jos W.R. Twisk, Kenneth Christopher, Patrick Schober, Heleen M. Oudemans - van Straaten and Angélique M.E. de Man

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Study design

273 comatose post-cardiac arrest patients included <5 hours after ROSC

Three study groups:

- Placebo
 - 2 x 1.5 g vitamin C per day
 - 2 x 5 g vitamin C per day
- for 4 days

Currently: inclusion and analysis completed, manuscript almost finished

Plan: presentation with co-publication at CCR 2025 down-under in Melbourne

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Main aim

- To train the next generation of innovative, interdisciplinary and intersectoral research fellows (RFs) who will develop the urgently needed strategies for micronutrient (MN) personalized medicine in critically ill patients.
- They will develop new analytics to enable reliably determination of functional MN body status, investigate potential subphenotypes of patients most likely to benefit from MN supplementation, enable guidance with appropriate timing of MN therapy, investigate the interplay between MNs and explore the role of MNs in rehabilitation in the post ICU-phase.

Involved MN-SIG members

WP4 **Personalized MN therapy**
 WP4a: Use precision medicine and guide therapy of MS by critically II
 WP4b: Evaluate efficacy of high-dose or 2 m intrathecally Glatiramer acetate in patients with relapsing-remitting MS, with consideration of inflammation and cognitive status
 WP4c: Subpopulation analysis of patients with Glatiramer acetate and cognitive status

WP1 **MN measurements in erythrocytes and leukocytes**
 WP1a: Develop new analysis
 WP1b: Use measurement of various markers in erythrocytes and leukocytes
 WP1c: Comparison

WP2 **Functional markers of MN status**
 WP2a: Develop new analysis
 WP2b: Use measurement of various markers in erythrocytes and leukocytes
 WP2c: Comparison

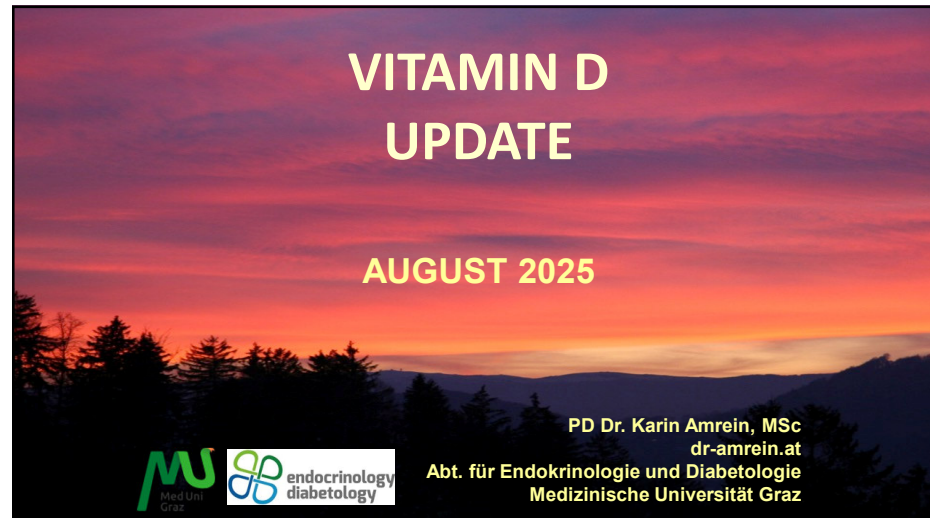
WP3 **Identifying inflammatory subpopulations**
 WP3a: Develop new analysis
 WP3b: Use measurement of various markers in erythrocytes and leukocytes
 WP3c: Comparison

WP5 **MN status & PCS**
 WP5a: Develop new analysis
 WP5b: Use measurement of various markers in erythrocytes and leukocytes
 WP5c: Comparison

WP6 **Project management**
 WP7 **Education and training**
 WP8 **Dissemination, exploitation and communication**

13 PhD's
 Netherlands
 Germany
 Italy
 Ireland
 Grant: €4 million

Online education



VITAMIN D UPDATE

AUGUST 2025

PD Dr. Karin Amrein, MSc
dr-amrein.at
Abt. für Endokrinologie und Diabetologie
Medizinische Universität Graz

 Med Uni
Graz

 endocrinology
diabetology

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HOPE!

NEW 2025 RCT Data – consistent small benefits (10-20% RR)

- less MS activity (D-lay, Thouvenot, France, JAMA 2025)
- less Frailty / slower ageing (Do HEALTH, Bischoff-Ferrari, CH, Nature 2025 & Zhu VITAL Am J Clin Nutr 2025)
- less advanced / fatal cancer (VITAL und DO HEALTH)
- less autoimmune disease (VITAL, Hahn, US, BMJ 2022, Costenbader)
- less diabetes (Tobias / VITAL, Nature 2025, Pittas IPDMA 3 RCTs, Annals IM 2023)

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EMPIRIC HIGH DOSE VITAMIN D: ENDO SOCIETY 2024

Ages 1-18	Ages 19-49	Ages 50-74	Ages ≥75	Pregnancy	Prediabetes
Empiric vitamin D supplementation* To prevent nutritional rickets and because of the potential to lower the risk of respiratory tract infections.	No empiric vitamin D supplementation* Follow the Institute of Medicine Recommended Daily Allowance.		Empiric vitamin D supplementation* Because of the potential to lower the risk of mortality.	Empiric vitamin D supplementation* Because of the potential to lower the risk of preeclampsia, intrauterine mortality, preterm birth, small for gestational age birth, and neonatal mortality.	Empiric vitamin D supplementation* Because of the potential to lower the risk of progression to diabetes.
The panel assumed that all should follow the Recommended Dietary Reference Intakes (DRIs) established by the US Institute of Medicine (currently the National Academy of Medicine). The Recommended Daily Allowance (RDA) in the DRI is 600 IU (15 µg) for persons aged 1-70 years and 800 IU (20 µg) for persons older than 70 years. The RDA established by the Institute of Medicine and the American College of Obstetricians and Gynecologists (ACOG) is 600 IU (15 µg) during pregnancy. * Empiric vitamin D supplementation refers to vitamin D (cholecalciferol [D₃] or ergocalciferol [D₂]) intake (usually in pill or drop form) that (a) exceeds the DRIs and (b) is implemented without testing for 25-hydroxyvitamin D. Vitamin D doses in the included clinical trials varied considerably (see technical remarks under recommendations); hence, optimal doses remain unclear. For people older than 50 years for whom vitamin D treatment is indicated, the panel suggests supplementation via daily administration of vitamin D, rather than intermittent high doses. The panel suggests against routine 25-hydroxyvitamin D testing for generally healthy individuals who do not otherwise have established indications for 25-hydroxyvitamin D testing (e.g., hypocalcemia). The panel did not specifically address whether and how those who present with low levels of 25-hydroxyvitamin D should be evaluated and/or treated. * Importantly, this guideline does not address individuals with underlying conditions that substantially alter vitamin D physiology, including various conditions associated with decreased absorption (e.g., short gut, gastric bypass, inflammatory bowel disease), increased catabolism/decreased activation (e.g., some medications), and increased renal losses (e.g., nephrotic syndrome). In addition, this guideline does not address persons known to be at high risk for fractures.					

Demay JCEM 2024; <https://doi.org/10.1210/clinem/dgae290>

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VITDALIZE – Start 2017, A, D, B, UK

EFFECT OF HIGH-DOSE VITAMIN D3 ON 28-DAY MORTALITY IN ADULT CRITICALLY ILL PATIENTS WITH SEVERE VITAMIN D DEFICIENCY; NCT03188796

Setting

- randomized, double blind, placebo controlled
- mixed ICUs (medical, surgical, neurologic)
- **2400** ICU patients; **25(OH)D ≤ 12 ng/ml**

Intervention

- 540,000 IU Vitamin D3 vs. Placebo 1x po/tube
- 4,000 IU daily for 90 days

Primary Endpoint

28-DAY MORTALITY

Secondary Endpoints

morbidity, LOS, lab, duration of mech.vent./circulatory support, readmissions etc.

VITDALIZE UPDATE

TOTAL

> 2050 recruited, > 50 centers

In 2025

> 350 recruited

Anticipated end of recruitment

Q1 / 2026? (after 9 years)

Austria, Germany, UK are recruiting
Belgium has finished in 2024

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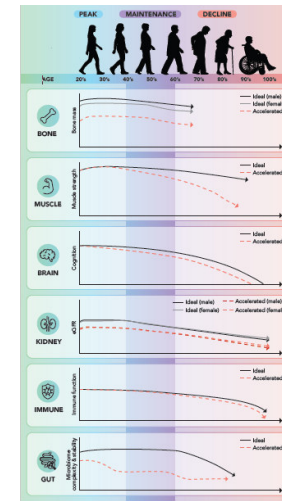
Micronutrients and n-3 PUFA complements to promote healthy aging beyond 50 years? Distinct micronutrient requirements as we age?

Target : high quality journal

Berger-Blaauw-Calder-D'Amelio-Erhart-Gombart-Gramlich-Kressig

Supported by Nestlé Health Int

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MN to support Healthy aging – manuscript in preparation
Berger-Blaauw-Calder-D'Amelio-Erhart-Gombart-Gramlich-Kressig

Around 50 years, all organs seem to start declining, with progressive loss of function.

In some subjects the decline is faster

Can this functional decline be prevented by nutritional interventions
... by specific micronutrients?

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SIG-MN meeting 14th SEP 2025



What about generating a SIG-MN podcast

- To provide reliable information about needs
- To counteract web misinformation

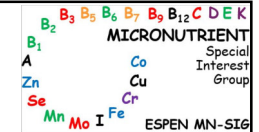


VOF 6 TAGEN / 10 MIN
Top Doctor: The hidden dangers in your daily multivitamin | Dr David Seres
ZOE Science & Nutrition

➤ Wiedergeben

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SIG-MN OPEN meeting 14th SEP 2025

- News and activities since the Milano meeting
- Creation of a Micronutrient GL-APP. Anna Schweinlin
- LLL-44 course status
- Ongoing research projects:
 - o Analytical developments for MN: Prof. ass. A. de Man,
 - o Vitamin D - Dr. K. Amrein
- MN individual Additives to cover specific needs – progression of
- RE-Appeal to industry for the development of analytics
- Q&A

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