



References

Nutritional Deficiencies References

The first two references have abstracts for background purposes.

1. Peter S, Eggersdorfer M, et al.

Selected nutrients and their implications for health and disease across the lifespan: a roadmap. *Nutrients*. 2014 Dec 22;6(12):6076-94. doi: 10.3390/nu6126076.

Abstract

Worldwide approximately two billion people have a diet insufficient in micronutrients. Even in the developed world, an increasing number of people consume nutrient-poor food on a regular basis. Recent surveys in Western countries consistently indicate inadequate intake of nutrients such as vitamins and minerals, compared to recommendations. The International Osteoporosis Foundation's (IOF) latest figures show that globally about 88% of the population does not have an optimal vitamin D status. The Lancet's "Global Burden of Disease Study 2010" demonstrates a continued growth in life expectancy for populations around the world; however, the last decade of life is often disabled by the burden of partly preventable health issues. Compelling evidence suggests that improving nutrition protects health, prevents disability, boosts economic productivity and saves lives. Investments to improve nutrition make a positive contribution to long-term national and global health, economic productivity and stability, and societal resilience.

2. McCabe D, Lisy K, Lockwood C, Colbeck M

The impact of essential fatty acid, B vitamins, vitamin C, magnesium and zinc supplementation on stress levels in women: a systematic review. *JBISIRIR*. 2017 Feb;15(2):402-453. doi: 10.11124/JBISIRIR-2016-002965.

Abstract

BACKGROUND:

Women juggling multiple roles in our complex society are increasingly experiencing psychological stress. Dietary supplementation to manage stress is widespread despite limited supporting evidence. A systematic review of the available literature was undertaken to investigate the efficacy of specific **dietary supplements in managing**



CONCLUSION:

The current review suggests that EFAs may be effective in reducing prenatal stress and salivary cortisol and may reduce anxiety during premenstrual syndrome and during menopause in the absence of depression. Magnesium and vitamin B6 may be effective in combination in reducing premenstrual stress, and vitamin B6 alone may reduce anxiety effectively in older women. High-dose sustained-release vitamin C may reduce anxiety and mitigate increased blood pressure in response to stress.

1. Peter S, Eggersdorfer M, van Asselt D, Buskens E, Detzel P, Freijer K, et al. Selected nutrients and their implications for health and disease across the lifespan: a roadmap. *Nutrients* (2014) 6:6076–94. doi: 10.3390/nu6126076
2. Hoefft B, Weber P, Eggersdorfer M. Micronutrients - a global perspective on intake, health benefits and economics. *Int J Vitam Nutr Res.* (2012) 82:316–20. doi: 10.1024/0300-9831/a000125
3. Chedraui P, Pérez-López FR. Nutrition and health during mid-life: searching for solutions and meeting challenges for the aging population. *Climacteric* (2013) 16:85–95. doi: 10.3109/13697137.2013.802884
4. Bates Bea. *National Diet and Nutrition Survey Results From Years 5 and 6 (Combined) of the Rolling Programme (2012/2013 –2013/2014)*. London: TSO (2016).
5. King DE, Xiang J, Brown A. Intake of key chronic disease-related nutrients among baby boomers. *South Med J.* (2014) 107:342–7. doi: 10.14423/01.SMJ.0000450706.44388.45
6. Derbyshire EJ. *Nutrition in the Childbearing Years*. Chichester: Wiley-Blackwell (2011).
7. Bates B, Cox L, Nicholson S. *National Diet and Nutrition Survey Results from Years 5 and 6 (combined) of the Rolling Programme (2012/2013 – 2013/2014)*. Section 7: Methodological issues and response rates. London: FSA/PHE (2016).



8. Derbyshire EJ. Nutrition in the Childbearing Years. Chichester: Wiley-Blackwell (2011).
9. Bates B, Cox L, Nicholson S. National Diet and Nutrition Survey Results from Years 5 and 6 (combined) of the Rolling Programme (2012/2013 - 2013/2014). Section 7: Methodological issues and response rates. London: FSA/PHE (2016).
10. NDNS. Appendix A: Dietary Data Collection and Editing. London: PHE (2016).
11. COMA. Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. London: HMSO (1991).
12. Chedraui P, Perez-Lopez FR
Nutrition and health during mid-life: searching for solutions and meeting challenges for the aging population. *Climacteric*. 2013 Aug;16 Suppl 1:85-95. doi: 10.3109/13697137.2013.802884.
13. PHE. Government Dietary Recommendations: Government Recommendations for Energy and Nutrients for Males and Females Aged 1-18 Years and 19+ Years. London: PHE (2016).
14. Miller R, Spiro A, Stanner S. Micronutrient status and intake in the UK - where might we be in 10 years' time? *Nutrition Bulletin*. (2016) 41:14-41. doi: 10.1111/nbu.12187
15. Saeedian Kia A, Amani R, Cheraqian B.
The Association between the Risk of Premenstrual Syndrome and Vitamin D, Calcium, and Magnesium Status among University Students: A Case Control Study. *Health Promot Perspect*. 2015 Oct 25;5(3):225-30. doi: 10.15171/hpp.2015.027. eCollection 2015.
16. Lopez-Gonzalez B, Molina-Lopez J, Florea DI et al. Association between magnesium-deficient status and anthropometric and clinical-nutritional parameters in postmenopausal women. *Nutr Hosp*. 2014 Mar 1;29(3):658-64. doi: 10.3305/nh.2014.29.3.7198.



17. Parazzini F, Di Martino M, Pellegrino P. Magnesium in the gynecological practice: a literature review. *Magnes Res.* 2017 Feb 1;30(1):1-7. doi: 10.1684/mrh.2017.0419.
18. Nielsen FH. Magnesium deficiency and increased inflammation: current perspectives. *J Inflamm Res.* (2018) 11:25-34. doi: 10.2147/JIR.S136742
Sherwood RA, Rocks BF, Stewart A, Saxton RS. Magnesium and the premenstrual syndrome. *Ann Clin Biochem.* 1986 Nov;23 (Pt 6):667-70.
19. Chasapis CT, Loutsidou AC, Spiliopoulou CA, Stefanidou ME. Zinc and human health: an update. *Arch Toxicol.* (2012) 86:521-34. doi: 10.1007/s00204-011-0775-
20. Shamberger RJ. Calcium, magnesium, and other elements in the red blood cells and hair of normals and patients with premenstrual syndrome. *Biol Trace Elem Res.* 2003 Aug;94(2):123-9.
21. Schierbeck LL, Rejnmark L et al. Vitamin D deficiency in postmenopausal, healthy women predicts increased cardiovascular events: a 16-year follow-up study. *Eur J Endocrinol.* 2012 Oct;167(4):553-60. doi: 10.1530/EJE-12-0283. Epub 2012 Aug 8.
22. Lerchbaum E. Vitamin D and menopause--a narrative review. *Maturitas.* 2014 Sep;79(1):3-7. doi: 10.1016/j.maturitas.2014.06.003. Epub 2014 Jun 13.
23. Ferreira Tda S, Rocha TM, Klein MR, Sanjuliani AF.
Vitamin D deficiency is associated with insulin resistance independent of intracellular calcium, dietary calcium and serum levels of parathormone, calcitriol and calcium in premenopausal women. *Nutr Hosp.* 2015 Apr 1;31(4):1491-8. doi: 10.3305/nh.2015.31.4.8490.



24. Soni M, Kos K, Lang IA, Melzer D, Llewellyn DJ
Vitamin D and cognitive function. *Scand J Clin Lab Invest Suppl.* 2012;243:79-82. doi: 10.3109/00365513.2012.681969.
25. Olza J, Aranceta-Bartrina J, Gonzalez-Gross M, Ortega RM, Serra-Majem L, Varela-Moreiras G, et al. Reported dietary intake and food sources of zinc, selenium, and vitamins a, e and c in the spanish population: findings from the ANIBES Study. *Nutrients* (2017) 9:E697. doi: 10.3390/nu9070697
26. Derbyshire E. Associations between red meat intakes and the micronutrient intake and status of UK females: a secondary analysis of the UK National diet and nutrition survey. *Nutrients* (2017) 9:E768. doi: 10.3390/nu9070768
27. White DJ, Cox KH, Peters R, Pipingas A, Scholey AB. Effects of four-week supplementation with a multi-vitamin/mineral preparation on mood and blood biomarkers in young adults: a randomised, double-blind, placebo-controlled trial. *Nutrients* (2015) 7:9005-17. doi: 10.3390/nu7115451
28. Wallace TC, McBurney M, Fulgoni VL, 3rd. Multivitamin/mineral supplement contribution to micronutrient intakes in the United States, 2007-2010. *J Am Coll Nutr.* (2014) 33:94-102. doi: 10.1080/07315724.2013.846806
29. Ji X, Grandner MA, Liu J. The relationship between micronutrient status and sleep patterns: a systematic review. *Public Health Nutr.* (2017) 20:687-701. doi: 10.1017/S1368980016002603