

If a conflict arises between a Clinical Payment and Coding Policy and any plan document under which a member is entitled to Covered Services, the plan document will govern. If a conflict arises between a CPCP and any provider contract pursuant to which a provider participates in and/or provides Covered Services to eligible member(s) and/or plans, the provider contract will govern. "Plan documents" include, but are not limited to, Certificates of Health Care Benefits, benefit booklets, Summary Plan Descriptions, and other coverage documents. Blue Cross and Blue Shield of Texas may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSTX has full and final discretionary authority for their interpretation and application to the extent provided under any applicable plan documents.

Providers are responsible for submission of accurate documentation of services performed. Providers are expected to submit claims for services rendered using valid code combinations from Health Insurance Portability and Accountability Act approved code sets. Claims should be coded appropriately according to industry standard coding guidelines including, but not limited to: Uniform Billing Editor, American Medical Association, Current Procedural Terminology, CPT® Assistant, Healthcare Common Procedure Coding System, ICD-10 CM and PCS, National Drug Codes, Diagnosis Related Group guidelines, Centers for Medicare and Medicaid Services National Correct Coding Initiative Policy Manual, CCI table edits and other CMS guidelines.

Claims are subject to the code edit protocols for services/procedures billed. Claim submissions are subject to claim review including but not limited to, any terms of benefit coverage, provider contract language, medical policies, clinical payment and coding policies as well as coding software logic. Upon request, the provider is urged to submit any additional documentation.

Intracellular Micronutrient Analysis

Policy Number: CPCPLAB029

Version 1.0

Approval Date: April 28, 2025

Plan Effective Date: August 8, 2025

Description

The Plan has implemented certain lab management reimbursement criteria. Not all requirements apply to each product. Providers are urged to review Plan documents for eligible coverage for services rendered.

Reimbursement Information:

1. Intracellular micronutrient panel testing (e.g., SpectraCell, Cell Science Systems cell micronutrient assay and ExaTest) is not reimbursable.

Procedure Codes

The following is not an all-encompassing code list. The inclusion of a code does not guarantee it is a covered service or eligible for reimbursement.

Codes

82128, 82136, 82180, 82310, 82379, 82495, 82525, 82607, 82652, 82725, 82746, 82978, 83735, 83785, 84207, 84252, 84255, 84425, 84446, 84590, 84591, 84597, 84630, 84999, 86353, 88348

References:

- 1. CDC. About Micronutrients. Updated December 22, 2023. https://www.cdc.gov/nutrition/php/micronutrients/index.html
- 2. Life Sa. *Micronutrients, Macro Impact*. Sight and Life; 2012. https://sightandlife.org/resource-hub/other-publication/micronutrients-macro-impact-the-story-of-vitamins-and-a-hungry-world
- 3. Frieden E. New perspectives on the essential trace elements. *Journal of Chemical Education*. 1985/11/01 1985;62(11):917. doi:10.1021/ed062p917
- 4. WHO. Trace elements in human nutrition. Report of a WHO expert committee. *World Health Organ Tech Rep Ser.* 1973;532:1-65.
- 5. Gidden F, Shenkin A. Laboratory support of the clinical nutrition service. *Clinical chemistry and laboratory medicine*. Aug 2000;38(8):693-714. doi:10.1515/cclm.2000.100
- 6. Preiser JC, van Zanten AR, Berger MM, et al. Metabolic and nutritional support of critically ill patients: consensus and controversies. *Critical care (London, England)*. Jan 29 2015;19:35. doi:10.1186/s13054-015-0737-8
- 7. Pazirandeh S, Burns, David, Griffin, Ian. Overview of dietary trace elements. Updated February 6, 2025. https://www.uptodate.com/contents/overview-of-dietary-trace-elements
- 8. Pearce EN, Lazarus JH, Moreno-Reyes R, Zimmermann MB. Consequences of iodine deficiency and excess in pregnant women: an overview of current knowns and unknowns. *The American Journal of Clinical Nutrition*. 2016;104(suppl_3):918S-923S. doi:10.3945/ajcn.115.110429

- 9. 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. *JBI Database System Rev Implement Rep*. Feb 2017;15(2):402-453. doi:10.11124/jbisrir-2016-002965
- 10. Elmadfa I, Meyer AL. Developing Suitable Methods of Nutritional Status Assessment: A Continuous Challenge123. *Adv Nutr*. 2014;5(5):590S-8S. doi:10.3945/an.113.005330
- 11. Fairfield K. Vitamin intake and disease prevention. Updated October 3, 2024. https://www.uptodate.com/contents/vitamin-intake-and-disease-prevention
- 12. Shive W, Pinkerton F, Humphreys J, Johnson MM, Hamilton WG, Matthews KS. Development of a chemically defined serum- and protein-free medium for growth of human peripheral lymphocytes. *Proceedings of the National Academy of Sciences of the United States of America*. Jan 1986;83(1):9-13. doi:10.1073/pnas.83.1.9
- SpectraCell. Sample Laboratory Report.
 https://assets.speakcdn.com/assets/2606/300_micronutrient_sample_report_8_1
 9.pdf
- 14. Exatest. EXA Test Managing Heart Disease and Quality of Life full spectrum mineral analysis: Technical Process http://www.exatest.com/Technical%20Process.htm
- 15. Vibrant. Micronutrient: Your guide to customized optimal nutrition. https://labtestshop.com/wp-content/uploads/2020/07/Vibrant-Micronutrient-Sample-Report.pdf
- 16. Cell Science Systems. Understanding Your Cellular Nutrition Assays. https://cellsciencesystems.com/pdfs/Understanding-Your-Alcat-Functional-Cellular-Assays.pdf
- 17. Genova Diagnostics. NutrEval® FMV. https://www.gdx.net/products/nutreval
- 18. Steele I, Allright D, Deutsch R. A randomized observational analysis examining the correlation between patients' food sensitivities, micronutrient deficiencies, oxidative stress response and immune redox status. *Functional Foods in Health and Disease*. 03/30 2020;10:143-154. doi:10.31989/ffhd.v10i3.695
- 19. Yamada H, Yamada K, Waki M, Umegaki K. Lymphocyte and plasma vitamin C levels in type 2 diabetic patients with and without diabetes complications. *Diabetes Care*. Oct 2004;27(10):2491-2. doi:10.2337/diacare.27.10.2491
- 20. Houston MC. The role of cellular micronutrient analysis, nutraceuticals, vitamins, antioxidants and minerals in the prevention and treatment of hypertension and cardiovascular disease. *Therapeutic advances in cardiovascular disease*. Jun 2010;4(3):165-83. doi:10.1177/1753944710368205
- 21. Frye DL. Micronutrient Optimization Storage Trial Using Customized Vitamin & Mineral Replacement Therapy Most 2010. *Translational Biomedicine*. 2010;1(3)
- 22. SpectraCell. Clinical Research Library. https://spectracell.sitewrench.com/research-library
- 23. Coelho JM, Cansanção K, Perez RM, et al. Association between serum and dietary antioxidant micronutrients and advanced liver fibrosis in non-alcoholic fatty liver disease: an observational study. *PeerJ.* 2020;8:e9838. doi:10.7717/peerj.9838
- 24. Raghavan R, Ashour FS, Bailey R. A Review of Cutoffs for Nutritional Biomarkers12. *Adv Nutr.* 2016;7(1):112-20. doi:10.3945/an.115.009951

Policy Update History:

Approval Date	Effective Date; Summary of Changes
04/28/2025	08/08/2025; Document updated with literature review.
	Reimbursement information unchanged. References revised.
09/13/2024	01/01/2025: New policy.