



# Reimbursement Policy

**Policy Number:** RPLAB029

**Policy Title:** Micronutrient Testing

**Approval Date:** May 15, 2026

**Effective Date:** Sept. 4, 2026

## Policy Disclaimer

If a conflict arises between a Reimbursement 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 reimbursement policy 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's 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 Oklahoma may use reasonable discretion interpreting and applying this policy to services being delivered in a particular case. BCBSOK has full and final discretionary authority for their interpretation and application to the extent provided under any applicable Plan documents.

Providers are responsible for submitting 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 ICD-10-PCS, National Drug Codes, Diagnosis Related Group guidelines, Centers for Medicare & 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 and procedures billed. Claim submissions are subject to claim review, including but not limited to, any terms of benefit coverage, provider contract language, medical policies, and reimbursement policies, as well as coding software logic. Upon request, the provider is urged to submit any additional documentation.

## Description

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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

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1. Serum micronutrient testing as a general screen for nutritional disorders **is not reimbursable.**
2. Intracellular micronutrient panel testing (e.g., SpectraCell, Cell Science Systems cell micronutrient assay and ExaTest) **is not reimbursable.**

For information on testing for micronutrients vitamin D, vitamin B, and folic acid, see CPCPLAB003 Vitamin D Testing; CPCPLAB010 Vitamin B12 and Methylmalonic Acid Testing; and RPLAB048 Folate Testing respectively.

## Procedure Codes

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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.

Code	Description
82128	AMINO ACIDS MULT QUAL
82136	AMINO ACIDS QUANT 2-5
82180	ASSAY OF ASCORBIC ACID
82310	ASSAY OF CALCIUM
82379	ASSAY OF CARNITINE
82495	ASSAY OF CHROMIUM
82525	ASSAY OF COPPER
82978	ASSAY OF GLUTATHIONE
83735	ASSAY OF MAGNESIUM
83785	ASSAY OF MANGANESE
84207	ASSAY OF VITAMIN B-6
84252	ASSAY OF VITAMIN B-2
84255	ASSAY OF SELENIUM
84425	ASSAY OF VITAMIN B-1
84446	ASSAY OF VITAMIN E
84590	ASSAY OF VITAMIN A
84591	ASSAY OF NOS VITAMIN

84597	ASSAY OF VITAMIN K
84630	ASSAY OF ZINC

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## 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 September 11, 2025. <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
13. SpectraCell. Sample Laboratory Report. [https://assets.speakcdn.com/assets/2606/300\\_micronutrient\\_sample\\_report\\_8\\_19.pdf](https://assets.speakcdn.com/assets/2606/300_micronutrient_sample_report_8_19.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. Ye AL, Sudek EW, Magdaleno D, Roldan CJ. Diagnostic and Therapeutic Value of Intracellular Biomarker Testing in Chronic Pain. *Pain Management*. 2024/01/01 2024;14(1):21-27. doi:10.2217/pmt-2023-0080
24. 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
25. 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 History

Approval Date	Description
05/15/2026	09/04/2026; Document updated with literature review. The following changes were made: Added new #1: "Serum micronutrient testing as a general screen for nutritional disorders is not reimbursable." Removed codes 82607, 82652, 82725, 82746, 84999, 86353, 88348. Added reference to testing for micronutrients vitamin D, vitamin B, and folic acid, see CPCPLAB003 Vitamin D Testing; CPCPLAB010 Vitamin B12

	and Methylmalonic Acid Testing; and RPLAB048 Folate Testing respectively. Title changed from Intracellular Micronutrient Testing. References revised.
04/28/2025	08/08/2025; Document updated with literature review. Reimbursement information unchanged. References revised.
04/29/2024	01/15/2025: Document updated with literature review. Reimbursement information unchanged. References revised.
06/15/2023	06/15/2023: Document updated with literature review. Reimbursement information unchanged. References revised; some updated, others removed.
11/1/2022	11/01/2022: New policy