



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 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 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 29, 2024

Plan Effective Date: January 15, 2025

Description

BCBSOK 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:

- Baze. (2020). How Does the Baze Approach Differ from DNA and Dry Blood Spot Analyses? <https://magazine.baze.com/how-does-the-baze-approach-differ-from-dna-and-dry-blood-spot-analyses/>
- CDC. (2022). *Micronutrient Facts | IMMPaCt | CDC.* @CDCgov. <https://www.cdc.gov/immpact/micronutrients/>
- Coelho, J. M., Cansanção, K., Perez, R. M., Leite, N. C., Padilha, P., Ramalho, A., & Peres, W. (2020). Association between serum and dietary antioxidant micronutrients and advanced liver fibrosis in non-alcoholic fatty liver disease: an observational study. *PeerJ*, 8, e9838. <https://doi.org/10.7717/peerj.9838>
- Elmadfa, I., & Meyer, A. L. (2014). Developing Suitable Methods of Nutritional Status Assessment: A Continuous Challenge. *Adv Nutr*, 5(5), 590S-598S. <https://doi.org/10.3945/an.113.005330>
- Exatest. (2014). *EXA Test Managing Heart Disease and Quality of Life full spectrum mineral analysis: Technical Process* Retrieved 1/5/21 from <http://www.exatest.com/Technical%20Process.htm>
- Fairfield, K. (2024, 11/08/2023). *Vitamin supplementation in disease prevention.* <https://www.uptodate.com/contents/vitamin-supplementation-in-disease-prevention>
- Frieden, E. (1985). New perspectives on the essential trace elements. *Journal of Chemical Education*, 62(11), 917. <https://doi.org/10.1021/ed062p917>
- Frye, D. L. (2010). Micronutrient Optimization Storage Trial Using Customized Vitamin & Mineral Replacement Therapy Most 2010. *Translational Biomedicine*, 1(3). https://www.researchgate.net/publication/290009633_Micronutrient_optimization_storage_trial_using_customized_vitamin_mineral_replacement_therapy_most_2010
- Genova Diagnostics. (2021). NutrEval® FMV. <https://www.gdx.net/product/nutreval-fmv-nutritional-test-blood-urine>
- Gidden, F., & Shenkin, A. (2000). Laboratory support of the clinical nutrition service. *Clin Chem Lab Med*, 38(8), 693-714. <https://doi.org/10.1515/cclm.2000.100>
- Houston, M. C. (2010). The role of cellular micronutrient analysis, nutraceuticals, vitamins, antioxidants and minerals in the prevention and treatment of hypertension and cardiovascular disease. *Ther Adv Cardiovasc Dis*, 4(3), 165-183. <https://doi.org/10.1177/1753944710368205>
- Life, S. a. (2012). *Micronutrients, Macro Impact.* Sight and Life. <https://sightandlife.org/resource-hub/other-publication/micronutrients-macro-impact-the-story-of-vitamins-and-a-hungry-world>

- McCabe, D., Lisy, K., Lockwood, C., & Colbeck, M. (2017). 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*, 15(2), 402-453. <https://doi.org/10.11124/jbisrir-2016-002965>
- Pazirandeh, S., Burns, David, Griffin, Ian. (2024, Jan. 2024). *Overview of dietary trace minerals*. <https://www.uptodate.com/contents/overview-of-dietary-trace-minerals>
- Pearce, E. N., Lazarus, J. H., Moreno-Reyes, R., & Zimmermann, M. B. (2016). Consequences of iodine deficiency and excess in pregnant women: an overview of current knowns and unknowns. *The American Journal of Clinical Nutrition*, 104(suppl_3), 918S-923S. <https://doi.org/10.3945/ajcn.115.110429>
- Preiser, J. C., van Zanten, A. R., Berger, M. M., Biolo, G., Casaer, M. P., Doig, G. S., Griffiths, R. D., Heyland, D. K., Hiesmayr, M., Iapichino, G., Laviano, A., Pichard, C., Singer, P., Van den Berghe, G., Wernerman, J., Wischmeyer, P., & Vincent, J. L. (2015). Metabolic and nutritional support of critically ill patients: consensus and controversies. *Crit Care*, 19, 35. <https://doi.org/10.1186/s13054-015-0737-8>
- Raghavan, R., Ashour, F. S., & Bailey, R. (2016). A Review of Cutoffs for Nutritional Biomarkers. *Adv Nutr*, 7(1), 112-120. <https://doi.org/10.3945/an.115.009951>
- Shive, W., Pinkerton, F., Humphreys, J., Johnson, M. M., Hamilton, W. G., & Matthews, K. S. (1986). Development of a chemically defined serum- and protein-free medium for growth of human peripheral lymphocytes. *Proc Natl Acad Sci U S A*, 83(1), 9-13. <https://doi.org/10.1073/pnas.83.1.9>
- SpectraCell. (2021). *LABORATORY REPORT*. https://assets.speakcdn.com/assets/2606/300_micronutrient_sample_report_8_19.pdf
- SpectraCell. (2024). *Clinical Research Library*. Retrieved 1/5/21 from <https://spectracell.sitewrench.com/research-library>
- Steele, I., Allright, D., & Deutsch, R. (2020). 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*, 10, 143-154. <https://doi.org/10.31989/ffhd.v10i3.695>
- Systems, C. S. (2022). *Understanding Your Cellular Nutrition Assays*. <https://cellsciencesystems.com/pdfs/Understanding-Your-Alcat-Functional-Cellular-Assays.pdf>
- Vibrant. (2017). *MICRONUTRIENTS Your guide to customized optimal nutrition*. <https://www.vibrant-america.com/micronutrient/>
- WHO. (1973). Trace elements in human nutrition. Report of a WHO expert committee. *World Health Organ Tech Rep Ser*, 532, 1-65. <https://www.ncbi.nlm.nih.gov/pubmed/4202138>
- Yamada, H., Yamada, K., Waki, M., & Umegaki, K. (2004). Lymphocyte and plasma vitamin C levels in type 2 diabetic patients with and without diabetes complications. *Diabetes Care*, 27(10), 2491-2492. <https://doi.org/10.2337/diacare.27.10.2491>

Policy Update History:

Approval Date	Effective Date: Summary of Revisions
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