Medical Policy
Nutrient/Nutritional Panel Testing

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Policy Number: 745
BCBSA Reference Number: 2.04.136 (For Plan internal use only)

Related Policies
• Homocysteine Testing in the Screening, Diagnosis, and Management of Cardiovascular Disease, #016
• Intracellular Micronutrient Analysis, #073
• Cardiovascular Risk Panels, #664

Policy
Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Nutrient/nutritional panel testing is considered INVESTIGATIONAL for all indications including but not limited to testing for nutritional deficiencies in individuals with mood disorders, fibromyalgia, unexplained fatigue and healthy individuals.

Prior Authorization Information
Inpatient
• For services described in this policy, precertification/preauthorization IS REQUIRED for all products if the procedure is performed inpatient.

Outpatient
• For services described in this policy, see below for products where prior authorization might be required if the procedure is performed outpatient.

<table>
<thead>
<tr>
<th></th>
<th>Outpatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Managed Care (HMO and POS)</td>
<td>This is not a covered service.</td>
</tr>
<tr>
<td>Commercial PPO and Indemnity</td>
<td>This is not a covered service.</td>
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<tr>
<td>Medicare HMO BlueSM</td>
<td>This is not a covered service.</td>
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<tr>
<td>Medicare PPO BlueSM</td>
<td>This is not a covered service.</td>
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</tbody>
</table>

CPT Codes / HCPCS Codes / ICD Codes
Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

**CPT Codes**
There are no specific CPT codes.

**Description**
Nutritional panel testing aims to identify nutritional deficiencies that will lead to personalized nutritional supplement recommendations. Testing is proposed both for healthy individuals to optimize health and for patients with chronic conditions (eg, mood disorders, fibromyalgia, unexplained fatigue) to specify supplements that will ameliorate symptoms.

Genova Diagnostics offers nutritional/nutrient panel testing. Among the tests this company offers is NutrEval<sup>®</sup> FMV, which involves analysis of urine and blood samples and provides information on more than 100 markers including organic acids, amino acids, fatty acids, markers of oxidative stress (direct measurement of glutathione and CoQ10, and markers of oxidative injury and DNA damage) and nutrient elements (Table 1)<sup>1</sup>. Genova Diagnostics produces a report that includes test results categorized as minimal, moderate, or high need for support, along with recommendations for supplements and dosages for items categorized as high need. NutrEval FMV patient reports can recommend supplementation for any of the nutrients listed in Table 1 if they are found to be areas of high need.

NutrEval Plasma, also by Genova Diagnostics, is a similar test<sup>2</sup>. The only difference between NutrEval FMV and NutrEval Plasma is that the former uses urine (first morning void) whereas the latter uses plasma (fasting sample) to measure amino acids.

SpectraCell Laboratories offers a micronutrient test that measures functional deficiencies at the cellular level<sup>3</sup>. The test assesses how well the body uses 31 vitamins, minerals, amino and fatty acids, antioxidants, and metabolites (see Table 1). SpectraCell categorizes test results into adequate, borderline, and deficient, and offers supplementation suggestions based on each patient’s deficiencies.

**Table 1. Components of the NutrEval FMV and Spectra Cell Tests**

<table>
<thead>
<tr>
<th>Category</th>
<th>NutrEval FMV</th>
<th>Spectra Cell Nutrient Testing</th>
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<tbody>
<tr>
<td>B vitamins</td>
<td>Thiamin B1, riboflavin B2, niacin B3, pyridoxine B6, biotin B7, folic acid B9, cobalamin B12</td>
<td>Vitamin A, vitamin B1, vitamin B2, vitamin B3, vitamin B6, vitamin B12, biotin, folate, pantothenate, vitamin C, vitamin D, vitamin K</td>
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<tr>
<td>Minerals</td>
<td>Magnesium, manganese, molybdenum, zinc</td>
<td>Calcium, magnesium, manganese, zinc, copper</td>
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<tr>
<td>Fatty acids</td>
<td>Omega-3-oils</td>
<td>Oleic acid</td>
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<tr>
<td>Digestive support</td>
<td>Probiotics, pancreatic enzymes</td>
<td></td>
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<tr>
<td>Other vitamins</td>
<td>Vitamin D</td>
<td></td>
</tr>
<tr>
<td>Amino acids</td>
<td>Arginine, asparagine, cysteine, glutamine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, serine, taurine, threonine, tryptophan, tyrosine, valine</td>
<td>Asparagine, glutamine, serine</td>
</tr>
</tbody>
</table>

**Summary**

**Description**
Multimarker nutritional panel testing is proposed for patients with certain chronic conditions (eg, mood disorders, fibromyalgia, unexplained fatigue) as well as for healthy individuals seeking to optimize health and/or fitness.
Summary of Evidence
For individuals who have mood disorders, fibromyalgia, or unexplained fatigue, or healthy individuals who seek to optimize health and fitness who receive nutritional panel testing, the evidence includes several systematic reviews and randomized controlled trials (RCTs) on the association between a single condition and a single nutrient and on the treatment of specific conditions with nutritional supplements. Relevant outcomes are symptoms, change in disease status, and functional outcomes. Systematic reviews have found statistically significant associations between depression or fibromyalgia and levels of several nutrients; however, there is little evidence that nutrient supplementation for patients with depression improves health outcomes. An RCT has also found statistically significant associations between fatigue and levels of vitamin D. However, there is no direct evidence on the health benefits of nutritional panel testing for any condition, including testing healthy individuals, and no evidence that nutritional panel testing is superior to testing for individual nutrients for any condition. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Policy History

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>2/2023</td>
<td>Annual policy review. Minor editorial refinements to policy statements; intent unchanged.</td>
</tr>
<tr>
<td>2/2022</td>
<td>Annual policy review. Description, summary, and references updated. Policy statements unchanged.</td>
</tr>
<tr>
<td>2/2021</td>
<td>Annual policy review. Description, summary, and references updated. Policy statements unchanged.</td>
</tr>
<tr>
<td>1/2020</td>
<td>Annual policy review. Description, summary, and references updated. Policy statements unchanged.</td>
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Information Pertaining to All Blue Cross Blue Shield Medical Policies
Click on any of the following terms to access the relevant information:
Medical Policy Terms of Use
Managed Care Guidelines
Indemnity/PPO Guidelines
Clinical Exception Process
Medical Technology Assessment Guidelines

References
9. Daniel D, Pirotta MV. Fibromyalgia--should we be testing and treating for vitamin D deficiency?. Aust Fam Physician. Sep 2011; 40(9): 712-6. PMID 21894281