# Medical Coverage Policy | Nutrient/Nutritional Panel Testing



**EFFECTIVE DATE:** 10|01|2021 **POLICY LAST UPDATED:** 06|02|2021

## **OVERVIEW**

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, chronic fatigue) to specify supplements that will ameliorate symptoms. 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, there is no evidence of associations between fibromyalgia or unexplained fatigue and nutrient deficiencies. Also, 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 outcomes.

## MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

## POLICY STATEMENT

#### Medicare Advantage Plans and Commercial Products

Nutrient/nutritional panel testing is considered not covered for Medicare Advantage Plans and not medically necessary for Commercial Products for all indications including but not limited to testing for nutritional deficiencies in patients with mood disorders, fibromyalgia, unexplained fatigue, and healthy individuals.

## COVERAGE

# Medicare Advantage Plans and Commercial Products

Benefits may vary between groups/contracts. Please refer to the Evidence of Coverage or Subscriber Agreement for applicable not medically necessary/not covered benefits/coverage.

## BACKGROUND

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, chronic fatigue) to specify supplements that will ameliorate symptoms.

Genova Diagnostics offers nutritional/nutrient panel testing. Among the tests this company offers is NutrEval 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.

Genova Diagnostics produces a report that includes test results categorized as normal, borderline, and high need, along with recommendations for supplements and dosages for items categorized as high need.

NutrEval FMV patient reports can recommend supplementation or any of the nutrients if they are found to be areas of high need.

SpectraCell Laboratories offers a micronutrient test that measures functional deficiencies at the cellular level. The test assesses how well the body uses 33 vitamins, minerals, amino and fatty acids, antioxidants, and metabolites. SpectraCell categorizes test results into adequate, borderline, and deficient, and offers supplementation suggestions based on each patient's deficiencies.

Direct evidence of clinical utility is provided by studies that have compared health outcomes for patients managed with and without the test. Because these are intervention studies, the preferred evidence would be from randomized controlled trials (RCTs).

No RCTs were identified that assessed the clinical utility of nutrient/nutritional panel testing for mood disorders, fibromyalgia, chronic fatigue, or optimization of health and fitness.

Several systematic reviews and meta-analyses evaluating associations between the indications of interest and specific nutrient deficiencies were identified. No systematic reviews or meta-analyses were identified in the association between nutritional deficiencies and unexplained fatigue. A limitation of all reviews is that, although they compared low and high levels of nutrient levels, none addressed whether these low levels constituted actual deficiencies in a particular nutrient.

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 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. There was no evidence of associations between fibromyalgia or unexplained fatigue and nutrient deficiencies. Systematic reviews have found statistically significant associations between depression and levels of several nutrients; however, there is no evidence that nutrient supplementation for patients with depression improves health outcomes. Also, 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 outcomes.

# COVERAGE

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# CODING

There is no single code specific to nutrient/nutritional panel testing. The following codes are not covered for Medicare Advantage Plans and not medically necessary for Commercial Products for the ICD-10 indications listed below:

- 82746 Folic acid; serum
- 83735 Magnesium
- 83785 Manganese
- 84590 Vitamin A
- 84630 Zinc
- 82128 Amino acids; multiple, qualitative, each specimen
- 82136 Amino acids, 2 to 5 amino acids, quantitative, each specimen

ICD-10 indications:

F30.10-F39 Mood [affective] disorders code range

M79.7 Fibromyalgia

# RELATED POLICIES

Not applicable

# **PUBLI SHED**

Provider Update, August 2021

## REFERENCES

- 1. Genova Diagnostics. NutrEval FMV; https://www.gdx.net/product/nutreval-fmv-nutritional-test-blood-urine. Accessed October 20, 2020.
- 2. SpectraCell Laboratories Micronutrient Test Panel. https://www.spectracell.com/micronutrient-test-panel. Accessed October 20, 2020.
- 3. Petridou ET, Kousoulis AA, Michelakos T, et al. Folate and B12 serum levels in association with depression in the aged: a systematic review and meta-analysis. Aging Ment Health. Sep 2016; 20(9): 965-73. PMID 26055921
- 4. Cheungpasitporn W, Thongprayoon C, Mao MA, et al. Hypomagnesaemia linked to depression: a systematic review and meta-analysis. Intern Med J. Apr 2015; 45(4): 436-40. PMID 25827510
- 5. Swardfager W, Herrmann N, Mazereeuw G, et al. Zinc in depression: a meta-analysis. Biol Psychiatry. Dec 15 2013; 74(12): 872-8. PMID 23806573
- 6. Anglin RE, Samaan Z, Walter SD, et al. Vitamin D deficiency and depression in adults: systematic review and meta-analysis. Br J Psychiatry. Feb 2013; 202: 100-7. PMID 23377209
- Hsiao MY, Hung CY, Chang KV, et al. Is Serum Hypovitaminosis D Associated with Chronic Widespread Pain Including Fibromyalgia? A Meta-analysis of Observational Studies. Pain Physician. Sep-Oct 2015; 18(5): E877-87. PMID 26431141
- 8. 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
- 9. Gowda U, Mutowo MP, Smith BJ, et al. Vitamin D supplementation to reduce depression in adults: meta-analysis of randomized controlled trials. Nutrition. Mar 2015; 31(3): 421-9. PMID 25701329
- 10. Taylor MJ, Carney S, Geddes J, et al. Folate for depressive disorders. Cochrane Database Syst Rev. 2003; (2): CD003390. PMID 12804463
- Nowak A, Boesch L, Andres E, et al. Effect of vitamin D3 on self-perceived fatigue: A double-blind randomized placebo-controlled trial. Medicine (Baltimore). Dec 2016; 95(52): e5353. PMID 28033244
- 12. U.S. Preventive Services Task Force (USPSTF). Iron Deficiency Anemia: Screening. 2015; https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/iron-deficiency-anemia-inyoung-children-screening#fullrecommendationstart. Accessed October 20, 2020.
- U.S. Preventive Services Task Force (USPSTF). Iron Deficiency Anemia in Pregnant Women: Screening and Supplementation, 2015. https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/iron-deficiency-anemia-inpregnant-women-screening-and-supplementation. Accessed October 20, 2020.
- 14. U.S. Preventive Services Task Force (USPSTF). Vitamin D Deficiency: Screening. 2014; https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/vitamin-d-deficiencyscreening. Accessed October 20, 2020.

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