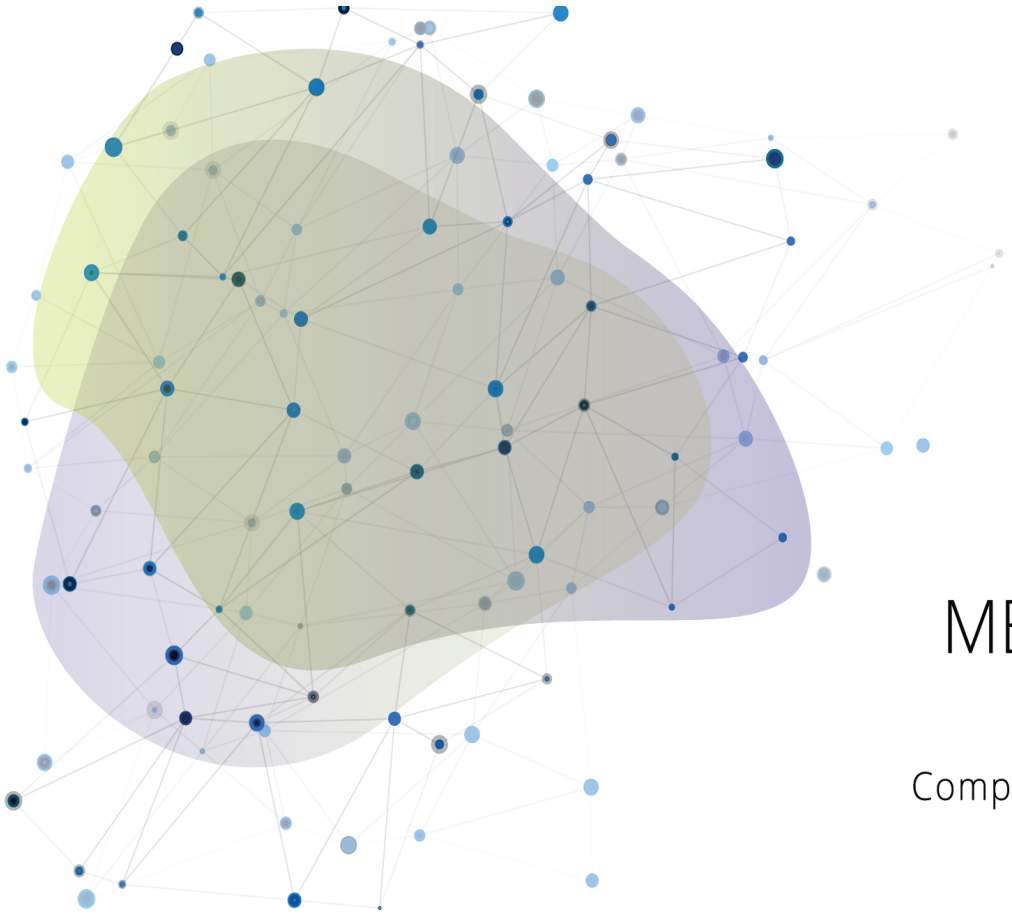


MENTAL HEALTH SUPPORT

Comprehensive Nutrient Panel

Patient: **SPECTRACELL, TEST**

Accession ID: 2108060120

Provider: Sample Provider, M.D.

Order Status: Complete

6030 North Course Drive, Houston, TX 77072
1(800) 227-5227 | support@spectracell.com | www.spectracell.com

SpectraCell Laboratories
Science + Health + Solutions

PATIENT		SPECIMEN		PROVIDER	
NAME	AGE	ACCESSION ID	DATE COLLECTED	ACCOUNT ID	CLIENT NAME
SPECTRACELL, TEST	**52**	**2108060120**	**08/06/2021**	**00000000**	**Sample Provider, M.D.**
DOB	GENDER	ORDER ID	DATE RECEIVED	ADDRESS	
1/1/1970	**Male**	**1119-MD Location-210806**	**08/06/2021**	**123 S. Any Street**	
PATIENT ID			DATE REPORTED	**ANYWHERE, TX 77000**	
19-115-00445			**08/06/2021**		

Your Micronutrient Results Summary

These cellular deficiencies may suggest the underlying cause of a myriad of unwanted symptoms and if corrected, can optimize overall health and performance.

Functional Deficiencies

Abnormal	Suggested Supplementation *
Selenium	200 mcg daliy of selenium glycinate or selenomethionine for 3 months and then reduce to 100 mcg daily
Zinc	25 mg daily

Borderline Deficiencies

Borderline
Calcium
Choline
Chromium
Coenzyme Q10
Glucose-Insulin Interaction
Magnesium
Vitamin E

Micronutrients and Mental Health

Micronutrients play a prominent role in mental health. The brain, neurons and messenger chemicals all require micronutrients in order to function optimally. Further, mental health relies on highly orchestrated feedback systems that need micronutrients to work. If you are deficient in one or more micronutrients, it may compromise your ability to make the necessary biological chemicals (called neurotransmitters) that keep your mood stable and emotional responses appropriate to circumstances that elicit them. Obviously, there are many factors that contribute to depression – hormone levels, neurochemistry, medications, what we ingest and of course, the circumstances of life. How each of these factors affect our mental health and mood is highly dependent on micronutrient status. So, regardless of the reason, a micronutrient deficiency may negatively impact mental health. By repleting deficient micronutrients, you are potentially altering your body chemistry in a way that makes you more resistant to depressive or anxiety symptoms.

PATIENT: **SPECTRACELL, TEST** PROVIDER: **Sample Provider, M.D.** DATE REPORTED: **08/06/2021** ACCESSION ID: **2108060120**

* SpectraCell is a CLIA certified laboratory that reports functional micronutrient deficiencies in an individuals' cells, which is the purpose of this report. It is not intended to diagnose or treat specific medical conditions. The quality and bio-availability of supplements varies considerably and should be taken into account when developing a repletion regimen.

* The RDA (Recommended Daily Allowance) was first published in 1968 primarily for use in nutritional labeling of packaged foods. The DRI (Dietary Reference Intake), published in 1997, serves as replacements for the former RDA, although the actual values are generally within an order of magnitude, and are also primarily for use in nutritional labeling and fortification of packaged foods. In most cases, neither the RDA nor the DRI will be adequate to replete a nutrient in people who demonstrate a functional cellular deficiency of said nutrient. An evidence based approach was used to develop clinically relevant repletion recommendations, consisting of data from published studies and clinician expertise. However, the information presented is not intended nor implied to be a substitute for professional medical advice, diagnosis or treatment.

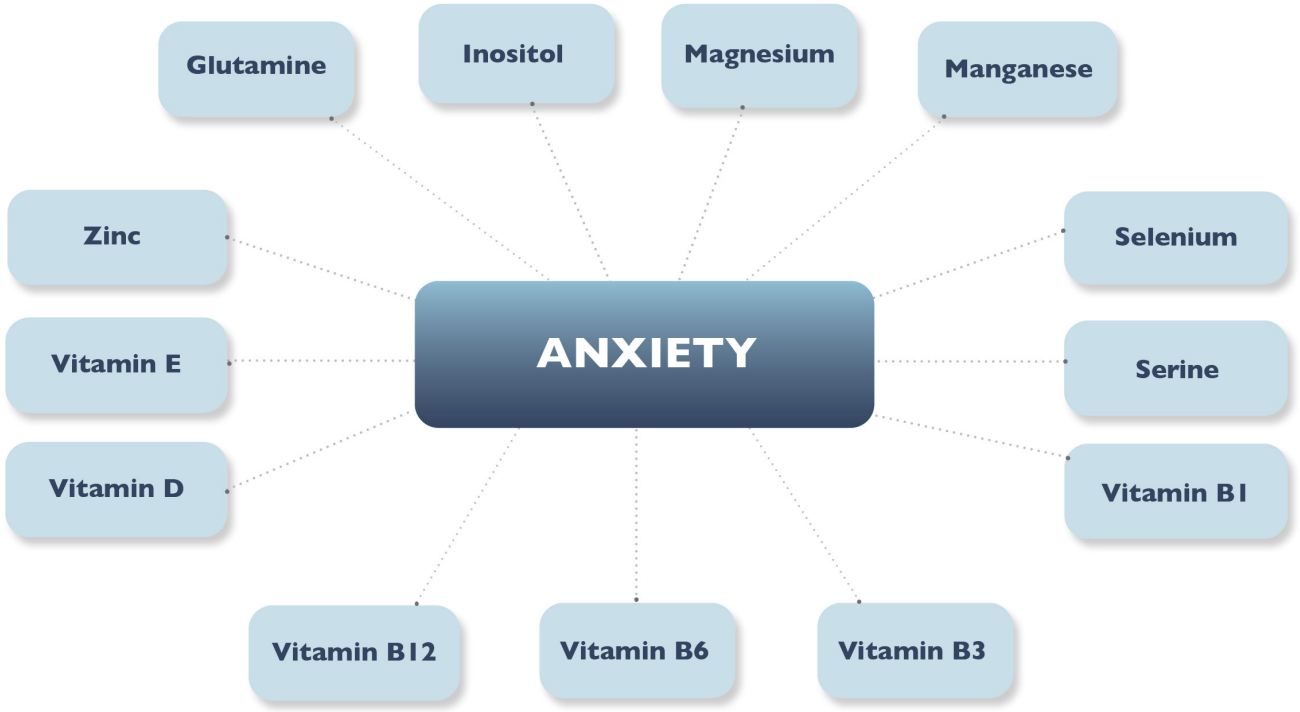
* Listed repletion suggestions are for patients 12 and older.

* For more information on nutrients (food sources, symptoms of deficiency, physiological functions), go to www.spectracell.com.

PATIENT: **SPECTRACELL, TEST** PROVIDER: **Allen Joshua, DO, MD** DATE REPORTED: **08/06/2021** ACCESSION ID: **2108060120**

Micronutrients	Patient Results	Reference Range	Patient Result	Interpretation
VITAMINS				
Vitamin B1 (thiamine)		>78%	99	
Vitamin B3 (niacin)		>80%	103	
Choline		>20%	24	Borderline
Vitamin B6 (pyridoxine)		>54%	63	
Inositol		>58%	74	
Folate		>32%	38	
Vitamin B12 (cobalamin)		>14%	23	
Vitamin D3		>50%	58	
MINERALS				
Calcium		>38%	41	Borderline
Chromium		>40%	41	Borderline
Copper		>42%	55	
Magnesium		>37%	38	Borderline
Manganese		>50%	72	
Selenium		>74%	73	Deficient
Zinc		>37%	37	Deficient
AMINO ACIDS AND METABOLITES				
Asparagine		>39%	46	
Cysteine		>41%	53	
Glutamine		>37%	54	
Serine		>30%	47	
ANTIOXIDANTS				
Coenzyme Q10		>86%	87	Borderline
Vitamin E		>84%	86	Borderline
CARBOHYDRATE METABOLISM				
Glucose-Insulin Interaction		>38%	39	Borderline

PATIENT: **SPECTRACELL, TEST** PROVIDER: **Allen Joshua, DO, MD** DATE REPORTED: **08/06/2021** ACCESSION ID: **2108060120**



Glutamine - One of the few micronutrients that is also a neurotransmitter.

Inositol - Influences signaling pathways in the brain.

Choline - Precursor to a neurotransmitter that affects focus and mood; low levels linked to anxiety.

Magnesium- Deficiency damages special receptors in the brain that regulate mood.

Manganese - Cofactor for one the of the most potent antioxidants in the brain.

Selenium - Integral part of regulatory proteins in the brain called selenoproteins.

Serine - Regulates brain chemistry; low levels correlate with depression .

Vitamin B1 - Cofactor to over 24 enzymes, many of which regulate mood and emotion.

Vitamin B3 - Converts tryptophan (a protein) to serotonin (a feel-good hormone).

Vitamin B6 - Studies indicate that low levels may predispose a person to depression.

Vitamin B12 - Deficiency common in psychiatric disorders and depression.

Vitamin D - Acting like a hormone, this vitamin is necessary to regulate mood via various biochemical pathways.

Vitamin E - Animal studies confirm its role in reducing anxiety-related behavior.

Zinc - Reduces both anxiety and depression in clinical trials.

This list is non-exhaustive. Other nutrients affect anxiety.

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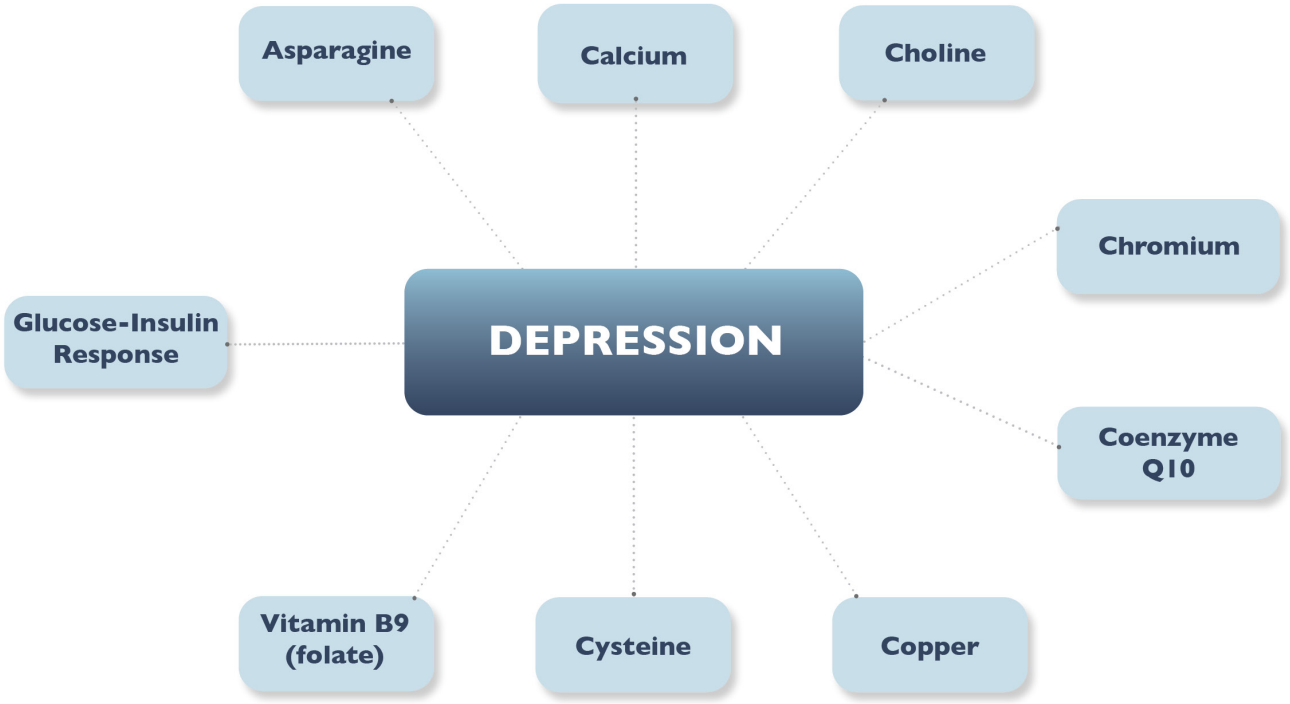

Asparagine - Deficiency linked with immune dysregulation which can affect mood.

Calcium - Key role in cellular communications in the brain.

Choline - Precursor to a neurotransmitter that affects focus and mood; low levels linked to anxiety.

Chromium - Study suggest an anxiety-relieving effect due to its role in serotonin transmission.

Coenzyme Q10 - Protects cells against physiological stressors.

Copper - Integral part of endorphins (feel-good chemicals in brain).

Cysteine - Precursor to powerful antioxidants that protect our brain, which is very sensitive to oxidation.

Folate - Building block for many feel-good neurotransmitters such as serotonin and dopamine.

Glucose-Insulin Response - Optimal function helps cellular energy production which directly affects mood.

This list is non-exhaustive. Other nutrients affect depression.