

Date of Birth: 1/1/1989

Neuro Focus Panel

Parameters	Your Results (5/24/2022)	Reference Range	Plays a Role In
Serotonin	105.7	175-225	Sleep cycle, depression, anxiety, carbohydrate cravings, PMS
Dopamine	142.0	125-175	Focus, attention, memory, motivation/drive, mood, addictive disorders
Norepinephrine	15.4	30-55.9	Energy, drive, stimulation, "fight or flight "response, sleep cycle disturbances anxiety
Epinephrine	4.4	8-12.9	"Fight or flight" response, metabolism, energy, depression, cognitive function.
Norepi/Epi Ratio	3.5	3-6	Ratios < 3 = restlessness, over-training Ratio > 6 = stress, tiredness, lack of focus, energy & motivation, "burn out"
GABA	1267.0	820-1200	Reduces excess stimulation. Anxiety, nervousness, restlessness, and sleep cycle
Glutamate	12.2	5-16	Agitation, impulsivity, anxiety, focus issues, sleep cycle disturbances, tics, migraines, headaches when elevated. Depression when low.
Histamine	65.8	6-43	Responds to allergy and inflammation, low levels cause lethargy. High levels can contribute to poor concentration, focus, or memory, attention issues.
Creatinine	37.6	10-250	Determines whether sample is viable for testing (hydration/dehydration)



Phase I Protocol

Supplement	Morning Dosage	Lunchtime Dosage	Afternoon Dosage	Dinner Dosage	Before Bed Dosage
Designs for Health Digestzymes					
Daily	1 capsule(s)			2 capsule(s)	
Klaire Labs Therbiotic Complete					
Daily				1 capsule(s)	
M ² Neuro Nutrients					
Daily	1 capsule(s)			1 capsule(s)	
M ² MagComplex					
Daily	1 capsule(s)			1 capsule(s)	
Neurogistics 5HTP + Theanine					
Daily for Week 1	1 capsule(s)				
Daily for Week 2	2 capsule(s)				
Daily for Week 3	2 capsule(s)				
Daily for Week 4 and After	2 capsule(s)				

Prepared for: Jane Doe		Reported On: 5/24/2022		
Neurogistics Adrenal + C				
Daily	2 capsule(s)		1 capsule(s)	
Neurogistics DLPA				
Daily for Week 1				
Daily for Week 2				
Daily for Week 3	1 capsule(s)			
Daily for Week 4 and After	1 capsule(s)			
Neurogistics GABA				
4				
Daily				2 capsule(s)
Neurogistics Omega + 850				
Daily	1 softgel(s)		1 softgel(s)	

Clinical Notes



An evening dose of GABA support was included in this regimen. If additional support is needed please contact clinical services to update the dose.



Causes for neurotransmitter imbalances include genetics, stress, anxiety, excessive worries, lack of physical exercise or movement, excess alcohol intake, lack of sleep, poor nutrition, excess caffeine intake, trauma, and a lack of balance/rest/restoration.



Clinical Notes



Gut Health: Symptoms such as gas, bloating and trouble digesting food are signals the gut is in disrepair. Gut health plays a crucial role in our ability to properly absorb nutrients. Poor gut health can adversely affect both the synthesis and utilization of neurotransmitters. The body manufactures approximately 95% of serotonin in the GI Tract. Improving gut health is important for balancing and sustaining neurotransmitter levels.



Histamine: Elevated histamine levels are indicative of a gastrointestinal (GI) allergy or inflammation that can be the result of a food sensitivity and/or imbalance in gut flora. Histamine modulates dopamine causing excess excretions indicating that there is a physical stressor. Overtime, elevated histamine can contribute to the depletion of dopamine, norepi, and epi. Dietary changes may be necessary to reduce histamine and improve overall gut health.



Histamine: When the stimulating or excitatory neurotransmitter histamine is over-excreting, it can cause an "alarm system" to sound in the form of elevated dopamine, norepinephrine and/or epinephrine. When this occurs, most likely there is a food sensitivity or imbalance in the GI tract that is driving these large excretions.



Magnesium can provide relief from the reported frequent headaches.



Please be sure to include a multivitamin and Omega 3 supplement in your daily regimen. Failure to include these nutrients will delay the healing/re-balancing process. If you are currently taking an Omega 3 supplement and/or Multivitamin, the products included in your protocol are suggested in place of – not in addition to, your current regimen. Please refer to your practitioner to determine the best multivitamin and Omega-3 source for you.



Product: A broad-spectrum digestive enzyme has been suggested to improve digestion and overall gut health. Please note that the digestive enzyme dosages in your protocol should be taken with meals.



Product: If you experience any bowel distress with 5HTP such as loose stools or diarrhea, please just increase the dosage slowly and be sure to eat with your dosages. Many people to do not experience anything negative at all.



Product: If you experience any bowel distress with magnesium such as loose stools or diarrhea, simply decrease the dosage and be sure to eat with your dosages.



Product: Supplements containing GABA should be taken 1 hour away from medication(s) used for anxiety.



Clinical Notes



Serotonin: Low serotonin and frequent headaches correlate highly with gluten sensitivity. Gluten is a sticky protein that impairs absorption by adhering to the lining of the Gl tract. If you are not already doing so, please also consider a gluten free diet.



Serotonin: The optimal ratio between serotonin and dopamine is approximately 1.4:1 (in favor of serotonin). An inverse relationship between serotonin and dopamine can contribute to issues with cravings, focus, anxiety and depression.



Serotonin: When serotonin is low, our brain's ability to process stress can cause a depletion with the adrenals. Norepinephrine and epinephrine are reflective of adrenal function.



Sleep: The body is naturally inclined to rise with the sun and rest when it becomes dark. With the increase exposure to technology, having resources available 24 hours a day and excess stimulation (distractions, environments, diets, activities) it can be hard to fall asleep with ease. The human body produces melatonin (the sleep hormone) when there is an absence of light which is why we get tired. Too much light suppresses melatonin (even from electronic screens).



The observed values for norepinephrine indicate that your adrenals are tired.

Lifestyle Notes



Consider avoiding adrenal stimulants such as caffeine (coffee, energy drinks, etc.), guarana, kola nut, and licorice root as they can be too stimulating for the adrenals.



Diet: Consuming a protein snack before bedtime may help improve sleep cycle disturbances. Consider eating a light snack before bed such as hummus & veggie sticks, a handful of raw nuts and seeds (organic preferred; no peanuts), nut butter & crackers, or a turkey roll-up.



Diet: Increase your dietary intake of healthy fats from sources such as extra virgin olive oil, coconut oil, avocados, and nuts and seeds.



Gut Health: Colonizing a healthy layer of beneficial bacteria in the GI tract with probiotics can strengthen the immune system, improve digestion, promote bowel regularity, facilitate mineral absorption, help your body make vitamins (B and K) and properly metabolize cholesterol. To get your good probiotic bugs to stick around, eat daily servings of prebiotic- and probiotic-rich foods such as kefir, yogurt (dairy or nondairy), sauerkraut, kimchi, tempeh, and kombucha.



Lifestyle Notes



Gut Health: Consuming foods that contain fiber such as legumes, seeds, brown rice, fruits, and vegetables support a healthy gastrointestinal tract (GI) by feeding the healthy gut bacteria (probiotics). Restoring the gut microbiome by including these foods in the diet daily may reduce GI distress and promote normal GI function. Adults should aim to get 30 grams of fiber each day. Children (3-18 years old) should aim to get their age + 5 in grams of fiber each day.



Histamine: Consider reducing high histamine and histamine-releasing foods in your diet. These include alcohol, bananas, chocolate, cheese, cow's milk, peanuts, cashews, walnuts, papaya, pineapple, sauerkraut, shellfish, strawberries, tomatoes, wheat germ, and canned foods. Artificial flavors, preservatives (BHA, BHT, sodium nitrate/nitrite, sulfur dioxide, potassium bromate) and colors (Blue #1, Blue #2, Red #3 and Red #40 and Yellow #6 and Yellow Tartrazine) should also be avoided.



Sleep: Adults should aim to get 7-9 hours of undisrupted sleep each night. Experts estimate that preschoolers (3 to 5 years-old) need 11-13 hours of sleep, while school-aged children up to age 12 need approximately 10-11 hours of sleep. Teens need at least 9 hours.

Lab Descriptions



Serotonin

An inhibitory neurotransmitter, often referred to as the master neurotransmitter, that plays a role in sleep cycle, depression, anxiety, carbohydrate cravings, and PMS.



Dopamine

Dopamine is our focus or joy related neurotransmitter. When dopamine is either elevated (inefficient) or low, symptoms of poor focus or memory, attention issues or poor stress response can be noted.



Norepinephrine

An excitatory neurotransmitter that is responsible for stimulatory processes in the body. Norepinephrine also converts epinephrine. This neurotransmitter can cause anxiety at elevated excretion levels, as well as some "mood dampening" effects. Low levels of norepinephrine are associated with low energy and decreased focus ability. Elevated norepinephrine levels can also cause elevated blood pressure.



Epinephrine

An excitatory neurotransmitter involved in the body's "fight or flight" response and regulates brain functions such as metabolism, heart rate, and blood pressure. This neurotransmitter will often be elevated when hyperactivity or anxiety is present. Long-term over-stimulation can cause epinephrine levels to be depleted. Epinephrine also regulates heart rate and blood pressure.



Norepi/Epi Ratio

The Norepinephrine to epinephrine ratio is calculated to determine the amount of adrenal (our stress organ) fatigue or over-use that is present. Levels between 3-6 are found to be optimal. Levels less than 3 are indicative of stress whether it is emotional or physical. Ratios above 6 are indicative of fatigue. Often, this ratio will be high if the body needs more of the correct form of folic acid (methylation).



GABA

An inhibitory neurotransmitter that is often referred to as "nature's valium-like substance".



Lab Descriptions



Glutamate

Glutamate is an excitatory or stimulating neurotransmitter that is reflective of stress. It plays a role in focus. If Glutamate is elevated, one should check labels of foods that are being consumed since MSG (monosodium glutamate) and the many names that it is called as a food additive can be the culprit. Excess glutamate levels can cause significant anxiety, restlessness, sleep cycle disturbances, tics, migraines and headaches. The body will excrete more glutamate when serotonin is low as well.



Histamine

Histamine is a stimulating neurotransmitter that plays a role in responding to inflammation or allergy. Low levels of histamine are indicative of fatigue.



Creatinine

Determines whether the sample submitted is viable for testing (hydration/dehydration).



Product Descriptions

Designs for Health Digestzymes

Digestzymes™ is comprised of a proprietary blend of digestive enzymes along with betaine HCL to support optimal digestion of proteins, fats, and carbohydrates. This product contains the special protease DPP IV (dipeptidyl peptidase IV), which aids in the breakdown of casomorphin (from casein) and gluteomorphin (from gluten). Digestzymes™ also includes the enzyme lactase, which helps break down the dairy sugar lactose. The use of Digestzymes™ before meals may be helpful when patients experience gas and bloating after eating, constipation, or a feeling of fullness after eating only a small quantity of food.*



Klaire Labs Therbiotic Complete

Ther-Biotic® Complete is a robust, broad-spectrum, hypoallergenic blend of 12 probiotic species in a base of inulin. Designed to supply a complete component of synergistic and complementary species, each capsule provides 25 billion CFU protected by our proprietary InTactic® technology for maximum viability throughout the intestinal tract. It provides maximum probiotic support with colonizing and transient strains in a clean and hypoallergenic formula for optimal results.



M² Neuro Nutrients 3

Neuro Nutrients 3 contains optimal amounts of many nutrients not easily obtained in most diets. It uses higher quality ingredients than most multivitamins, including vitamin E as high gamma mixed-tocopherols, a proprietary NatureFolate™ blend of active isomer naturally-occurring folates, and TRAACS® true amino acid chelate minerals for optimal tolerance and absorption. These exceptional ingredients are combined in an up-to-date, science-based formulation to create a truly superior multivitamin.*



M² MagComplex

Magnesium is an essential mineral responsible for over 300 enzymatic reactions in the body including neuronal activity, cardiac health, bone metabolism, hormone regulation, relaxation, activation of muscle tissue, and energy (ATP) production. Magnesium helps to reduce excessive glutamate excretion and supports the adrenals. Magnesium is a smooth muscle relaxer and will also help to keep bowels regular. MagComplex is a blend of three bio-available forms of magnesium, designed to provide optimal absorption and utilization of magnesium, while being gentle on bowels. Each capsule contains 125 mg of magnesium.



Product Descriptions

Ō	Neurogistics 5HTP + Theanine Description to be added.
	Neurogistics Adrenal + C Vitamin C plays a significant role in improving adrenal health. Excessive cortisol excretion can be suppressed by Vitamin C supplementation. Vitamin C is also a critical for adrenal function. Your body's highest levels of vitamin C are found in the adrenal glands and brain tissues, and the urinary excretion of vitamin C is increased during stress. Vitamin C also acts as a mast cell inhibitor and can help to reduce histamine when it is excreting in excess. Excessive histamine can cause an elevation in anxiety and restlessness.
	Neurogistics DLPA The amino acid dl-phenylalanine is the precursor to the neurotransmitters norepinephrine, epinephrine and dopamine. These neurotransmitters are involved in mood regulation, cognitive function as well as maintaining metabolism and energy levels. Dl-phenylalanine is also the precursor to the neurotransmitter PEA (phenylethylamine), which is also involved in mood and cognitive function.
	Neurogistics GABA 4 GABA 4 is a unique formula containing Pharma GABA® and L-Tryptophan to support the inhibitory (calming) neurotransmitters serotonin and GABA
	Neurogistics Omega + 850 EPA and DHA from fish oil promote cardiovascular health by supporting optimal triglyceride and cholesterol levels and reducing platelet aggregation. Fish oil has also been shown to promote optimal joint function and overall brain and nervous system function.