Casual Friday Presents

Your Case Reviews

A BIOGENETIX CLINICAL PRESENTATION

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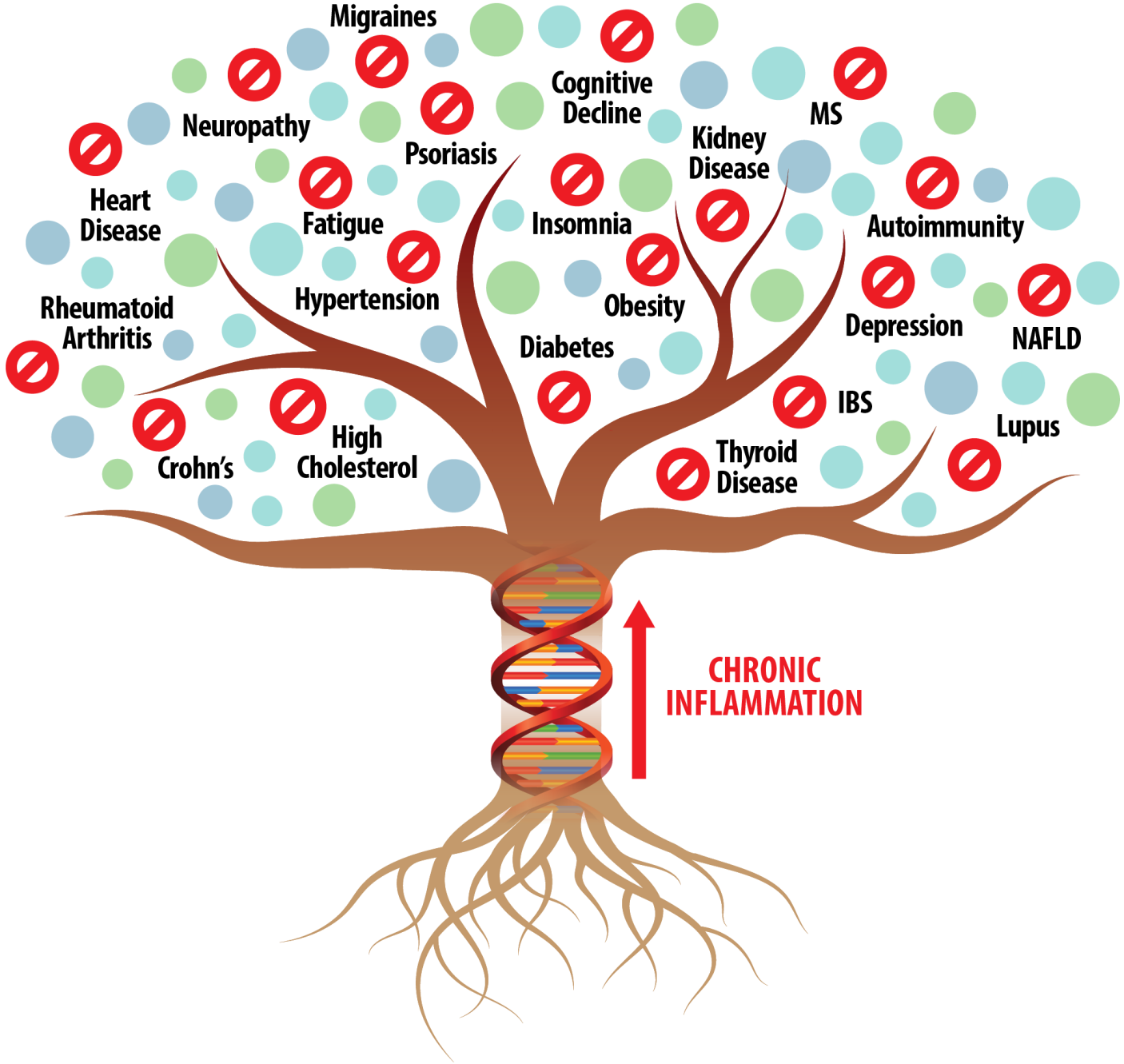
Migraines
Neuropathy
Psoriasis
Cognitive Decline
MS
Kidney Disease
Heart Disease
Fatigue
Insomnia
Autoimmunity
Hypertension
Obesity
Depression
NAFLD
Rheumatoid Arthritis
Diabetes
IBS
Lupus
Crohn's
High Cholesterol
Thyroid Disease
CHRONIC INFLAMMATION

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Case #1:

55 yo male
GERD, IBS-c, hx of head injury, hx mono w/hepatitis
1-5 bowel movements a week

RX:
Omeprazole
Various Fibers

Drs. Note: Patient struggles with excessive GERD, dizziness, fatigue and would like to have md remove medications that he's been treating these issues with. He will have occasional flare ups of pain in lower abdomen.

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GNC Mega Men Energy & Metabolism
Fexofenadine Hydrochloride 180MG
Eye Health Complex 1 Daily
Omega-3 600Mg 1 Daily

PART II

Please circle the appropriate number "0 - 3" on all questions below.

0 = never, 1 = occasionally, 2 = somewhat frequently, 3 = very frequently

Category I: Colon					
Feeling that bowels do not empty completely	0	1	2	(3)	
Lower abdominal pain relief by passing stool or gas	0	1	2	(3)	
Alternating constipation and diarrhea	0	(1)	2	3	Better with Desipramine
Diarrhea	0	(1)	2	3	
Constipation	0	1	2	(3)	
Hard dry or small stool	0	1	(2)	3	
Coated tongue of "fuzzy" debris on tongue	(0)	1	2	3	
Pass large amount of foul smelling gas	0	(1)	2	3	
More than 3 bowel movements daily	0	1	2	(3)	
Do you use laxatives frequently	0	(1)	2	3	Not using since Desipramine
Category II: Hypochlorydia					
Excessive belching burping or bloating	(0)	1	2	3	
Gas immediately following a meal	(0)	1	2	3	
Offensive breath	(0)	1	2	3	
Difficult bowel movements	0	(1)	2	3	
Sense of fullness during and after meals	0	1	(2)	3	
Difficulty digesting fruits and vegetables; undigested foods found in stools	0	1	2	(3)	
Category III: Hyperacidity (Ulcer)					
Stomach pain, burning or aching 1- 4 hours after eating	(0)	1	2	3	
Do you frequently use ~~antacids~~ Esomeprazole	0	1	2	(3)	
Feeling hungry an hour or two after eating	(0)	1	2	3	
Heartburn when lying down or bending forward	(0)	1	2	3	
Temporary relief from antacids, food, milk, carbonated beverages - eliminate	(0)	1	2	3	
Digestive problems subside with rest and relaxation	0	1	(2)	3	
Heartburn due to spicy foods, chocolate, citrus, peppers, alcohol and caffeine	0	1	2	(3)	
Category IV: Small Intestine (Pancreas)					
Roughage and fiber cause constipation	0	1	2	3	Maybe
Indigestion and fullness lasts 2-4 hours after eating	0	(1)	2	3	
Pain, tenderness, soreness on left side under rib cage bloated	(0)	1	2	3	
Excessive passage of gas	(0)	1	2	3	
Nausea and/or vomiting	0	(1)	2	3	
Stool undigested, foul smelling, mucous-like, greasy or poorly formed	0	(1)	2	3	- Fruits/veg
Frequent urination	0	(1)	2	3	
Increased thirst and appetite	(0)	1	2	3	
Difficulty losing weight	(0)	1	2	3	- lost >40lbs

Category V: Biliary Insufficiency/Statis					
Greasy or high fat foods cause distress	0	1	(2)	3	
Lower bowel gas and or bloating several hours after eating	(0)	1	2	3	
Bitter metallic taste in mouth,	(0)	1	2	3	
especially in the morning	0	1	2	3	
Unexplained itchy skin	(0)	1	2	3	
Yellowish cast to eyes	(0)	1	2	3	
Stool color alternates from clay colored to normal brown	(0)	1	2	3	
Reddened skin, especially palms	(0)	1	2	3	
Dry or flaky skin and/or hair	(0)	1	2	3	
History of gallbladder attacks or stones	(0)	1	2	3	
Have you had your gallbladder removed	Yes			(No)	
Category VI: Hypoglycemia					
Crave sweets during the day	0	(1)	2	3	
Irritable if meals are missed	0	(1)	2	3	
Depend on coffee to keep yourself going or started	(0)	1	2	3	
Get lightheaded and if meals are missed	(0)	1	2	3	
Eating relieves fatigue	(0)	1	2	3	
Feel shaky, jittery, tremors	(0)	1	2	3	
Agitated, easily upset, nervous	(0)	1	2	3	
Poor memory, forgetful	(0)	1	2	3	
Blurred vision	0	1	(2)	3	
Category VII: Insulin Resistance					
Fatigue after meals	0	(1)	2	3	
Crave sweets during the day	(0)	1	2	3	
Eating sweets does not relieve cravings for sugar	(0)	1	2	3	
Must have sweets after meals	(0)	1	2	3	
Waist girth is equal or larger than hip girth	(Yes)			No	
Frequent urination	0	(1)	2	3	
Increased thirst & appetite	(0)	1	2	3	
Difficulty losing weight	(0)	1	2	3	
Category VIII: Adrenal Hypofunction					
Cannot stay asleep	0	1	(2)	3	
Crave salt	(0)	1	2	3	
Slow starter in the morning	0	(1)	2	3	
Afternoon fatigue	0	1	(2)	3	
Dizziness when standing up quickly	0	1	2	(3)	
Afternoon headaches	(0)	1	2	3	
Headaches with exertion or stress	(0)	1	2	3	
Weak nails	(0)	1	2	3	

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Category IX: Adrenal Hyperfunction				
Cannot fall asleep	0	(1)	2	3
Perspire easily	(0)	1	2	3
Under high amounts of stress	0	1	(2)	3
Weight gain when under stress	(0)	1	2	3
Wake up tired even after 6 or more hours of sleep	0	(1)	2	3
Excessive perspiration or perspiration with little or no activity	(0)	1	2	3
Category X: Hypothyroid				
Tired, sluggish	0	(1)	2	3
Feel cold – hands, feel, all over .	(0)	1	2	3
Require excessive amounts of sleep to function properly	0	(1)	2	3
Increase in weight gain even with low-calorie diet	(0)	1	2	3
Gain weight easily	(0)	1	2	3
Difficult, infrequent bowel movements	0	(1)	2	3
Depression, lack of motivation	(0)	1	2	3
Morning headaches that wear off as the day progresses	(0)	1	2	3
Outer third of eyebrow thins	(0)	1	2	3
Thinning of hair on scalp, face or genitals or excessive falling hair	0	1	2	(3)
Dryness of skin and/or scalp	(0)	1	2	3
Mental sluggishness	(0)	1	2	3
Category XI: Thyroid Hyperfunction				
Heart palpations	(0)	1	2	3
Inward trembling	(0)	1	2	3
Increased pulse even at rest	0	(1)	2	3
Nervous and emotional	(0)	1	2	3
Insomnia	(0)	1	2	3
Night sweats	(0)	1	2	3
Difficulty gaining weight	(0)	1	2	3
Category XII: Pituitary Hypofunction				
Diminished sex drive	(0)	1	2	3
Menstrual disorders or lack of menstruation	0	1	2	3
Increased ability to eat sugars without symptoms	(0)	1	2	3
Category XIII: Pituitary Hyperfunction				
Increased sex drive	(0)	1	2	3
Tolerance to sugars reduced	0	1	(2)	3
"Splitting" type headaches	(0)	1	2	3
Category XIV *(Male Only)*:				
Urination difficulty or dribbling	(0)	1	2	3
Urination frequent	0	(1)	2	3
Pain inside of legs or heels	(0)	1	2	3
Feeling of incomplete bowel evacuation	0	1	2	(3)
Leg nervousness at night	(0)	1	2	3

Category XV (*Males Only*): Male Physiology				
Decrease in libido	0	(1)	2	3
Decrease in spontaneous morning erections	(0)	1	2	3
Decrease in fullness of erections	0	(1)	2	3
Difficulty in maintain morning erections	(0)	1	2	3
Spells of mental fatigue	0	(1)	2	3
Inability to concentrate	(0)	1	2	3
Episodes of depression	(0)	1	2	3
Muscle soreness	0	(1)	2	3
Decrease in physical stamina	0	(1)	2	3
Unexplained weight gain	(0)	1	2	3
Increase in fat distribution around chest and hips	(0)	1	2	3
Sweating attacks	(0)	1	2	3
More emotional then in the past	0	(1)	2	3

Category XVI (*Menstruating* Females Only)				
Are you perimenopausal	Yes		No	
Alternating menstrual cycle lengths	Yes		No	
Extended menstrual cycle, greater than 32 days	Yes		No	
Shortened menses, less than every 24 days	Yes		No	
Pain and cramping during periods	0	1	2	3
Scanty blood flow	0	1	2	3
Heavy blood flow	0	1	2	3
Breast pain and swelling during menses	0	1	2	3
Pelvic pain during menses	0	1	2	3
Irritable and depressed during menses	0	1	2	3
Acne break outs	0	1	2	3
Facial hair growth	0	1	2	3
Hair loss/thinning	0	1	2	3

Date of last menstual period: _____ **Date of last Pap:** _____

Category XVII (*Menopausal* Females only)				
How many years have you been menopausal? _____				
Do you ever have uterine bleeding since menopause?	Yes		No	
Hot flashes	0	1	2	3
Mental fogginess	0	1	2	3
Disinterest in sex	0	1	2	3
Mood swings	0	1	2	3
Depression	0	1	2	3
Painful intercourse	0	1	2	3
Shrinking breast	0	1	2	3
Facial hair growth	0	1	2	3
Acne	0	1	2	3
Increased vaginal, pain, dryness or itching	0	1	2	3

Date of last menstual period: _____ **Date of last Pap:** _____

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Fe+TIBC+Fer

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
Iron Bind.Cap.(TIBC)	322	289	07/01/2025	ug/dL	250-450
UIBC [01]	254	202	07/01/2025	ug/dL	111-343
Iron [01]	68	87	07/01/2025	ug/dL	38-169
Ferritin [01]	332	370	07/01/2025	ng/mL	30-400

CBC With Differential/Platelet

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
WBC [01]	4.6	5.2	07/01/2025	x10E3/uL	3.4-10.8
RBC [01]	4.83	4.51	07/01/2025	x10E6/uL	4.14-5.80
Hemoglobin [01]	14.4	13.8	07/01/2025	g/dL	13.0-17.7
Hematocrit [01]	44.6	41.2	07/01/2025	%	37.5-51.0
MCV [01]	92	91	07/01/2025	fL	79-97
MCH [01]	29.8	30.6	07/01/2025	pg	26.6-33.0
MCHC [01]	32.3	33.5	07/01/2025	g/dL	31.5-35.7
RDW [01]	12.6	13.1	07/01/2025	%	11.6-15.4
Platelets [01]	216	204	07/01/2025	x10E3/uL	150-450
Neutrophils [01]	63	68	07/01/2025	%	Not Estab.
Lymphs [01]	24	22	07/01/2025	%	Not Estab.
Monocytes [01]	9	7	07/01/2025	%	Not Estab.
Eos [01]	3	2	07/01/2025	%	Not Estab.
Basos [01]	1	1	07/01/2025	%	Not Estab.
Neutrophils (Absolute) [01]	3.0	3.6	07/01/2025	x10E3/uL	1.4-7.0
Lymphs (Absolute) [01]	1.1	1.2	07/01/2025	x10E3/uL	0.7-3.1
Monocytes(Absolute) [01]	0.4	0.3	07/01/2025	x10E3/uL	0.1-0.9
Eos (Absolute) [01]	0.1	0.1	07/01/2025	x10E3/uL	0.0-0.4
Baso (Absolute) [01]	0.0	0.0	07/01/2025	x10E3/uL	0.0-0.2
Immature Granulocytes [01]	0	0	07/01/2025	%	Not Estab.
Immature Grans (Abs) [01]	0.0	0.0	07/01/2025	x10E3/uL	0.0-0.1

Comp. Metabolic Panel (14)

Test	Current Result and Flag		Previous Result and Date		Units	Reference Interval
▲ **Glucose** [01]	**102**	**High**	**107**	07/01/2025	mg/dL	70-99

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Comp. Metabolic Panel (14) (Cont.)

BUN [01]	19	17	07/01/2025	mg/dL	6-24
Creatinine [01]	1.11	0.95	07/01/2025	mg/dL	0.76-1.27
eGFR	78	95	07/01/2025	mL/min/1.73	>59
BUN/Creatinine Ratio	17	18	07/01/2025		9-20
Sodium [01]	141	141	07/01/2025	mmol/L	134-144
Potassium [01]	4.0	3.8	07/01/2025	mmol/L	3.5-5.2
Chloride [01]	104	104	07/01/2025	mmol/L	96-106
Carbon Dioxide, Total [01]	23	24	07/01/2025	mmol/L	20-29
Calcium [01]	9.1	9.0	07/01/2025	mg/dL	8.7-10.2
Protein, Total [01]	6.8	6.6	07/01/2025	g/dL	6.0-8.5
Albumin [01]	4.6	4.5	07/01/2025	g/dL	3.8-4.9
Globulin, Total	2.2	2.1	07/01/2025	g/dL	1.5-4.5
Bilirubin, Total [01]	0.5	0.4	07/01/2025	mg/dL	0.0-1.2
Alkaline Phosphatase [01]	57	65*	07/01/2025	IU/L	47-123
AST (SGOT) [01]	17	33	07/01/2025	IU/L	0-40
ALT (SGPT) [01]	16	**71**	07/01/2025	IU/L	0-44

* Previous Reference Interval: (Alkaline Phosphatase: 44-121 IU/L)

UA/M w/rflx Culture, Routine

Test	Current Result and Flag		Previous Result and Date		Units	Reference Interval
Urinalysis Gross Exam [01]						
Specific Gravity [01]	1.010		1.015	07/01/2025		1.005-1.030
pH [01]	6.5		6.5	07/01/2025		5.0-7.5
Urine-Color [01]	Yellow		Yellow	07/01/2025		Yellow
Appearance [01]	Clear		Clear	07/01/2025		Clear
WBC Esterase [01]	Negative		Negative	07/01/2025		Negative
Protein [01]	Negative		Negative	07/01/2025		Negative/Trace
Glucose [01]	Negative		Negative	07/01/2025		Negative
Ketones [01]	Negative		Negative	07/01/2025		Negative
▶ **Occult Blood** [01]	**Trace**	**Abnormal**	Negative	07/01/2025		Negative
Bilirubin [01]	Negative		Negative	07/01/2025		Negative
Urobilinogen,Semi-Qn [01]	0.2		0.2	07/01/2025	mg/dL	0.2-1.0
Nitrite, Urine [01]	Negative		Negative	07/01/2025		Negative
Microscopic Examination [01]	See below:					
	`Microscopic was indicated and was performed.`					
WBC [01]	None seen		None seen	07/01/2025	/hpf	0-5
▶ **RBC** [01]	**3-10**	**Abnormal**	None seen	07/01/2025	/hpf	0-2
Epithelial Cells (non renal) [01]	None seen		None seen	07/01/2025	/hpf	0-10
Casts [01]	None seen		None seen	07/01/2025	/lpf	None seen
Bacteria [01]	None seen		None seen	07/01/2025		None seen/Few
Urinalysis Reflex [01]						
	`This specimen will not reflex to a Urine Culture.`					

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LP+Non HDL Cholesterol

	Test	Current Result	Flag	Previous Result	Date	Units	Reference Interval
▲	**Cholesterol, Total**[01]	**213**	**High**	**214**	07/01/2025	mg/dL	100-199
	Triglycerides[01]	116		124	07/01/2025	mg/dL	0-149
	HDL Cholesterol[01]	47		49	07/01/2025	mg/dL	>39
	VLDL Cholesterol Cal	21		22	07/01/2025	mg/dL	5-40
▲	**LDL Chol Calc (NIH)**	**145**	**High**	**143**	07/01/2025	mg/dL	0-99
	T. Chol/HDL Ratio	4.5		4.4	07/01/2025	ratio	0.0-5.0
	Please Note:[01]						

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              T. Chol/HDL Ratio
                         Men  Women
       1/2 Avg.Risk  3.4    3.3
           Avg.Risk  5.0    4.4
        2X Avg.Risk  9.6    7.1
        3X Avg.Risk 23.4   11.0
```

	Test	Current Result	Flag	Previous Result	Date	Units	Reference Interval
▲	**Non-HDL Cholesterol**	**166**	**High**	**165**	07/01/2025	mg/dL	0-129

Thyroid Panel With TSH

Test	Current Result	Flag	Previous Result	Date	Units	Reference Interval
TSH[01]	1.100		1.080	07/01/2025	uIU/mL	0.450-4.500
Thyroxine (T4)[01]	8.9		7.6	07/01/2025	ug/dL	4.5-12.0
T3 Uptake[01]	29		24	07/01/2025	%	24-39
Free Thyroxine Index	2.6		1.8	07/01/2025		1.2-4.9

Hgb A1c with eAG Estimation

Test	Current Result	Flag	Previous Result	Date	Units	Reference Interval
Hemoglobin A1c[01]	5.1		5.3	07/01/2025	%	4.8-5.6
Please Note:[01]						

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Prediabetes: 5.7 - 6.4
Diabetes: >6.4
Glycemic control for adults with diabetes: <7.0
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Test	Current Result	Flag	Previous Result	Date	Units	Reference Interval
Estim. Avg Glu (eAG)	100		105	07/01/2025	mg/dL	

Vitamin D, 25-Hydroxy

Test	Current Result	Flag	Previous Result	Date	Units	Reference Interval
Vitamin D, 25-Hydroxy[01]	49.0		47.3	07/01/2025	ng/mL	30.0-100.0

Vitamin D deficiency has been defined by the Institute of

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C-Reactive Protein, Cardiac

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
C-Reactive Protein, Cardiac [01]	0.35	0.49	07/01/2025	mg/L	0.00-3.00
		Relative Risk for Future Cardiovascular Event			
		Low		<1.00	
		Average		1.00 - 3.00	
		High		>3.00	

Homocyst(e)ine

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
Homocyst(e)ine [01]	7.7	9.1	07/01/2025	umol/L	0.0-14.5

Phosphorus

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
Phosphorus [01]	3.5	2.9	07/01/2025	mg/dL	2.8-4.1

LDH

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
LDH [01]	158	153	07/01/2025	IU/L	121-224

GGT

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
GGT [01]	41	53	07/01/2025	IU/L	0-65

Triiodothyronine (T3)

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
Triiodothyronine (T3) [01]	97	103	07/01/2025	ng/dL	71-180

Thyroid Antibodies

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
Thyroid Peroxidase (TPO) Ab [01]	<9	<9	07/01/2025	IU/mL	0-34
Thyroglobulin Antibody [01]	<1.0	<1.0	07/01/2025	IU/mL	0.0-0.9
	Thyroglobulin Antibody measured by Beckman Coulter Methodology It should be noted that the presence of thyroglobulin antibodies may not be pathogenic nor diagnostic, especially at very low levels. The assay manufacturer has found that four percent of individuals without evidence of thyroid disease or autoimmunity will have positive TgAb levels up to 4 IU/mL.				

Magnesium

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
Magnesium [01]	2.2	2.0	07/01/2025	mg/dL	1.6-2.3

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TEST	RESULTS			
Array 4 - Gluten-Associated Cross-Reactive Foods and Foods Sensitivity **	**IN RANGE** (Normal)	**EQUIVOCAL***	**OUT OF RANGE**	**REFERENCE RANGE** (ELISA Index)
GLUTEN-CONTAINING/GLUTEN-CONTAMINATED				
Rye, Barley, Spelt, Polish Wheat	0.54			0.0 - 1.11
Instant Coffee			>3.30	0.0 - 1.51
GLIADIN CROSS-REACTIVE FOODS				
Cow's Milk	0.29			0.0 - 2.01
Alpha-Casein + Beta-Casein	0.22			0.1 - 1.71
Casomorphin	0.41			0.0 - 1.81
Milk Butyrophilin	0.40			0.0 - 1.41
Whey Protein	0.76			0.1 - 1.31
Milk Chocolate	0.29			0.0 - 1.81
Yeast			2.35	0.0 - 1.51
Oats	0.33			0.0 - 1.31
Millet	0.35			0.3 - 1.51
Rice	0.20			0.0 - 1.21
Corn	1.29			0.0 - 2.71
NEWLY-INTRODUCED AND/OR OVER-CONSUMED ON GLUTEN FREE DIET				
Buckwheat		0.79		0.0 - 0.81
Sorghum	0.53			0.3 - 1.21
Hemp	1.02			0.0 - 2.31
Sesame			2.01	0.1 - 1.11
Amaranth	0.43			0.0 - 1.81
Quinoa	0.78			0.5 - 1.51
Tapioca	0.27			0.0 - 1.41
Teff	0.49			0.0 - 1.31
Potato	1.34			0.7 - 1.81
COMMON ANTIGENIC FOODS				
Egg, Raw	0.78			0.0 - 1.81
Soy	0.34			0.2 - 1.21

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BEANS and LEGUMES, Modified				
Black Bean, cooked	0.74			0.0 - 1.31
Bean Agglutinins	0.47			0.2 - 1.51
Dark Chocolate + Cocoa		0.76		0.2 - 0.91
Fava Bean, cooked	0.40			0.0 - 1.11
Garbanzo Bean, cooked		1.52		0.2 - 1.81
Kidney Bean, cooked		0.61		0.0 - 0.81
Lentil, cooked	0.53			0.1 - 1.51
Lentil Lectin	0.66			0.5 - 1.51
Lima Bean, cooked	1.00			0.2 - 1.51
Pinto Bean, cooked	0.72			0.0 - 2.01
Soybean Agglutinin	0.63			0.0 - 1.11
Soybean Oleosin + Aquaporin	0.64			0.0 - 0.91
Soy Sauce, gluten-free		1.85		0.1 - 2.31
Tofu		1.17		0.0 - 1.51
NUTS and SEEDS, Raw and Modified				
Almond	0.54			0.1 - 1.11
Almond, roasted	0.25			0.0 - 0.61
Brazil Nut, raw + roasted	0.32			0.0 - 1.11
Cashew	0.35			0.0 - 2.51
Cashew, roasted	0.69			0.0 - 2.91
Cashew Vicilin	0.22			0.3 - 1.71
Chia Seed			>2.70	0.1 - 2.31
Flax Seed	<0.30			0.0 - 0.91

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Pumpkin Seeds, roasted	0.55			0.1 - 1.11
Sesame Albumin		1.59		0.0 - 1.61
Sesame Oleosin			3.27	0.1 - 1.21
Sunflower Seeds, roasted	0.73			0.2 - 1.51
Walnut		1.26		0.4 - 1.31
VEGETABLES, Raw and Modified				
Artichoke, cooked		1.54		0.1 - 2.01
Asparagus	0.97			0.2 - 1.41
Asparagus, cooked	0.73			0.1 - 2.21
Beet, cooked	0.29			0.0 - 0.71
Bell Pepper		1.31		0.0 - 1.71
Broccoli		1.62		0.0 - 1.81
Broccoli, cooked	0.57			0.0 - 1.11
Brussels Sprouts, cooked		1.63		0.0 - 2.01
Cabbage, red + green	1.45			0.1 - 2.51
Cabbage, red + green, cooked	1.40			0.0 - 2.21
Canola Oleosin			1.80	0.4 - 1.31
Carrot	1.29			0.5 - 1.51
Carrot, cooked			2.27	0.0 - 1.71
Cauliflower, cooked	0.42			0.0 - 1.01
Celery		2.05		0.1 - 2.31
Chili Pepper	0.66			0.2 - 1.11
Corn + Aquaporin, cooked	0.76			0.0 - 1.81
Popped Corn	0.38			0.1 - 1.91
Corn Oleosin	0.59			0.1 - 1.41
Cucumber, pickled	0.46			0.0 - 1.41
Eggplant, cooked	1.18			0.0 - 1.91
Garlic	0.53			0.0 - 1.21
Garlic, cooked	0.58			0.1 - 1.91
Green Bean, cooked	0.72			0.1 - 1.51
Lettuce	0.48			0.1 - 1.51
Mushroom, raw + cooked		1.51		0.0 - 2.11

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Latex Hevein	0.34			
Blueberry		1.51		0.1 - 1.61
Cantaloupe + Honeydew Melon	0.60			0.1 - 1.21
Cherry	0.52			0.2 - 1.41
Coconut, meat + water	0.30			0.0 - 1.11
Cranberry			2.21	0.0 - 2.21
Date	0.94			0.3 - 2.01
Fig	0.60			0.0 - 1.81
Grape, red + green	0.45			0.2 - 1.01
Red Wine			1.97	0.1 - 1.91
White Wine			3.61	0.1 - 2.61
Grapefruit	0.38			0.3 - 1.21
Kiwi			>2.60	0.0 - 2.01
Lemon + Lime	0.29			0.0 - 0.81
Mango	0.24			0.0 - 0.91
Orange	1.10			0.2 - 1.71
Orange Juice	0.45			0.0 - 1.61
Papaya	0.66			0.2 - 1.51
Peach + Nectarine	0.79			0.2 - 2.01
Pear	0.41			0.2 - 2.11
Pineapple	0.88			0.0 - 2.71
Pineapple Bromelain	0.61			0.0 - 2.01
Plum	0.65			0.3 - 2.21
Pomegranate	1.31			0.3 - 1.91
Strawberry	0.74			0.3 - 2.31
Watermelon			1.11	0.2 - 1.01

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Gut Commensals

Test Name	Current	Prev	Risk Association
Intestinal Permeability	 2.5		Low butyrate production, Low propionate production, Low acetate production
	Genus/Species Imbalance *Ruminococcus*		
Intestinal Gas	 1.3		
SIBO	 2.9		SIBO syndrome
	Genus/Species Imbalance *Acinetobacter*		
Irritable Bowel Syndrome	 1.0		
Inflammatory Bowel Disease	 1.1		
Autoimmune Health	 0.7		
Metabolic Health	 2.5		Glucose dysregulation and obesity, Altered bile acid metabolism
	Genus/Species Imbalance *Collinsella, Ruminococcus*		
Liver Health	 0.7		
Hormones	 2.9		

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Gut Commensals

Test Name	Current	Prev	Risk Association
Nutrition	 2.9		Poor vitamin synthesis
	Genus/Species Imbalance *Ruminococcus*		
Cardiovascular Health	 3.0		Atherosclerosis
	Genus/Species Imbalance *Collinsella*		
Neurological Health	 3.1		Depression
	Genus/Species Imbalance *Alistipes*		
Probiotic Health	 2.5		Low probiotic diversity
	Genus/Species Imbalance *Bifidobacterium breve, Lactobacillus reuteri, Lactobacillus rhamnosus, Lactobacillus rhamnosus GG*		
Keystone Health	 2.9		Reduced keystone species
	Genus/Species Imbalance *Ruminococcus*		

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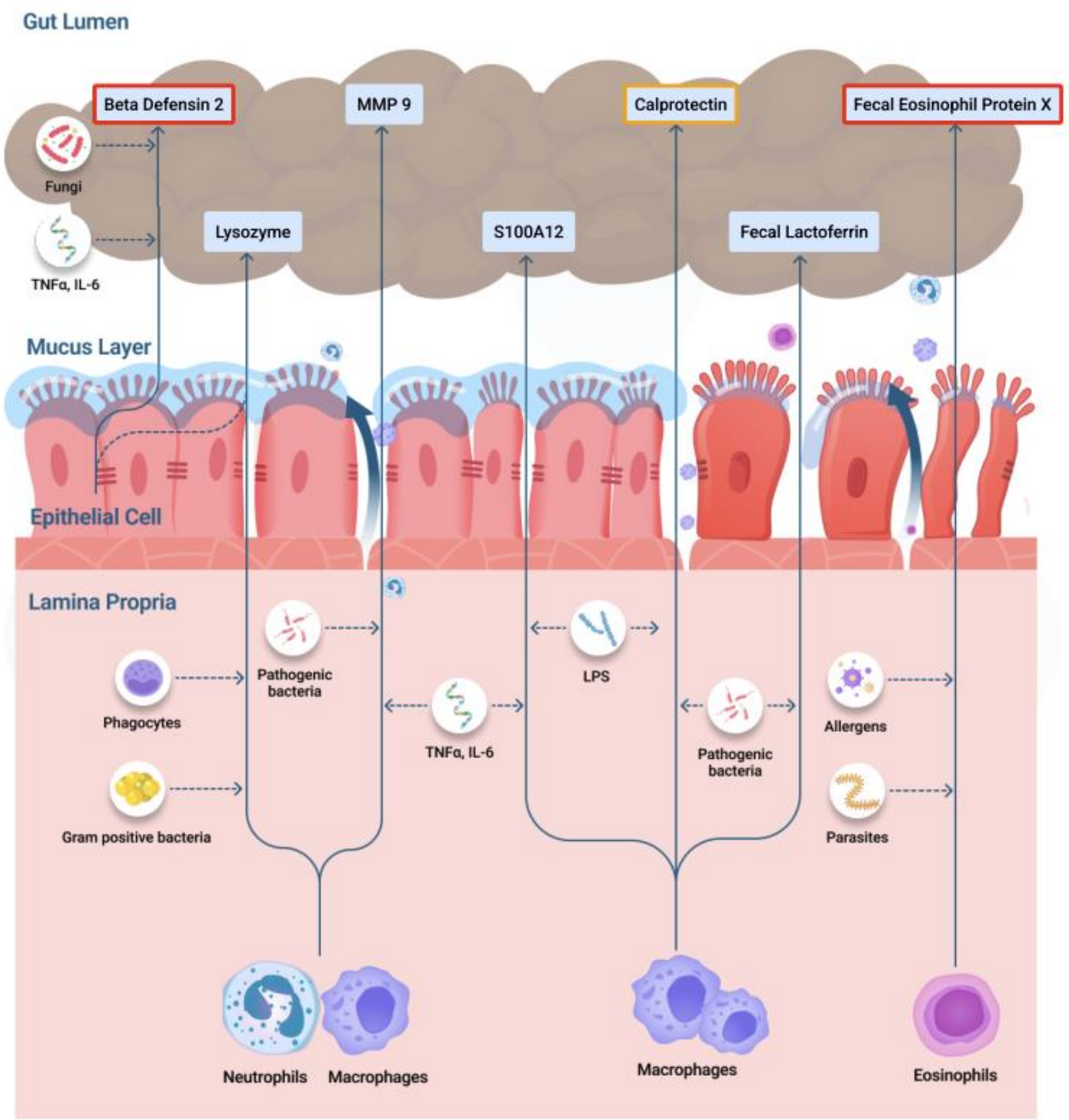
Gut Lumen
Beta Defensin 2
MMP 9
Calprotectin
Fecal Eosinophil Protein X
Fungi
TNFα, IL-6
Lysozyme
S100A12
Fecal Lactoferrin
Mucus Layer
Epithelial Cell
Lamina Propria
Pathogenic bacteria
LPS
Phagocytes
TNFα, IL-6
Pathogenic bacteria
Allergens
Gram positive bacteria
Parasites
Neutrophils
Macrophages
Macrophages
Eosinophils

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GUT INFLAMMATORY MARKERS

Test Name	Current	Ref Range	Prev	Comments
Beta Defensin 2	80.3 H	≤34.9		Beta-defensin is an antimicrobial peptide produced by epithelial cells lining the gut mucosa. It is secreted in response to microbial overgrowth, particularly involving gram-negative bacteria and fungi. Elevated levels of beta-defensin indicate an active immune response to these microorganisms or the presence of inflammation. Sustained elevation may signal persistent gut inflammation and damage to the epithelial barrier. Symptoms associated with elevated beta-defensin include abdominal pain and diarrhea, which are commonly observed in inflammatory bowel disease (IBD) and Candida overgrowth.
Lysozyme	498.4	≤575.0		
MMP 9	0.1	≤0.2		
S100A12	2.2	≤50.0		
Calprotectin	88.0 H	≤50.0		Calprotectin, a protein released by neutrophils, is a hallmark of inflammation in the gastrointestinal tract. Elevated calprotectin levels indicate active disease and immune cell infiltration, which can result in tissue damage and disrupted gut function. Symptoms may include abdominal pain and loose stools. The presence of elevated calprotectin in stool serves as a marker of neutrophil activity and gastrointestinal inflammation. This makes it a valuable biomarker for conditions such as inflammatory bowel disease (IBD), including ulcerative colitis (UC) and Crohn's disease, and for distinguishing these conditions from irritable bowel syndrome (IBS), which typically does not involve significant inflammation.
Fecal Lactoferrin	5.9	≤6.4		
Fecal Eosinophil Protein X	10.2 H	≤4.8		Eosinophil Protein X (EPX) is a water-soluble protein produced by eosinophils and reflects their activity in the gastrointestinal tract. Elevated levels of EPX may result from food allergies, parasitic infections, or inflammatory conditions. High EPX levels signify active tissue damage and inflammation associated with eosinophilic activity. Prolonged elevation of EPX is commonly associated with symptoms such as bloating and abdominal pain and is indicative of conditions such as inflammatory bowel disease (IBD).

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DIGESTION AND IMMUNE BALANCE

Test Name	Current	Ref Range	Prev	Comments
Pancreatic Elastase 1	153.8 L	≥200.0		Pancreatic Elastase, an enzyme produced by the exocrine pancreas, plays a vital role in protein digestion and serves as a non-invasive marker of exocrine pancreatic function. In the digestive tract, elastase is not broken down by other enzymes and is eventually excreted in the stool. Normal pancreatic function results in detectable levels of elastase in stool, while decreased levels indicate exocrine pancreatic insufficiency (EPI). EPI leads to insufficient production of digestive enzymes, causing malabsorption and symptoms such as steatorrhea (fatty stools), weight loss, bloating, and abdominal discomfort. Low elastase levels are associated with conditions such as chronic pancreatitis, cystic fibrosis, diabetes, and pancreatic cancer.
Fecal Immunochemical Test (FIT)	8.7	≤10.0		
Fecal Zonulin	38.1	25.1-160.8		
pH	7.6	6.1-7.8		

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DIGESTION AND IMMUNE BALANCE

Test Name	Current	Ref Range	Prev	Comments
sIgA	164.0 L	426.0-1450.0		Secretory IgA (SIgA) is an antibody that plays a critical role in mucosal immunity, protecting epithelial barriers by neutralizing pathogens and modulating the intestinal microbiota. SIgA is secreted by plasma cells in the lamina propria and transported across the gut epithelium. Low SIgA levels reflect compromised mucosal immunity, potentially leaving the gut epithelial barrier more vulnerable to pathogens. This deficiency is often linked to chronic stress, malnutrition, or underlying immunodeficiency conditions. Insufficient SIgA production can result in increased susceptibility to infections, digestive disturbances, and food intolerances. Associated symptoms may include bloating, diarrhea, and recurrent infections. Monitoring SIgA levels is crucial for identifying weakened immune function and addressing the underlying factors to restore intestinal homeostasis and enhance mucosal defense.

Supplement Suggestions

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MALABSORPTION

DIETARY FIBER	Current	Ref Range	Prev	Comments
Meat Fiber	NOT DETECTED	-		
Vegetable Fiber	NOT DETECTED	-		
FAT MALABSORPTION	**Current**	**Ref Range**	**Prev**	**Comments**
Total Fecal Fat	58.0 H	2.9-37.5		Total fecal fat is the amount of undigested fat excreted in the stool and is used as a marker to assess fat digestion and absorption efficiency. Excess fecal fat, or steatorrhea, indicates malabsorption disorders caused by inadequate bile production, pancreatic enzyme deficiencies, or impaired intestinal function. Conditions such as celiac disease, Crohn's disease, pancreatitis, or cystic fibrosis can lead to fat malabsorption. Elevated fecal fat may signify digestive insufficiency and is often associated with symptoms such as greasy stools, abdominal discomfort, and nutrient deficiencies due to poor absorption of essential fatty acids and fat-soluble vitamins.
Total Fecal Triglycerides	0.7	0.3-2.5		
Long Chain Fatty Acids	36.8 H	0.9-28.1		Long-chain fatty acids (LCFAs), including omega-3 and omega-6 families, are essential for immune regulation, brain health, and membrane structure. However, elevated LCFA levels in stool indicate malabsorption, often due to bile salt insufficiency, excessive dietary fat intake, or intestinal inflammation. Conditions impairing pancreatic lipase activity or bile acid production can also contribute to LCFA malabsorption. Elevated fecal LCFAs may cause symptoms such as greasy stools, bloating, and systemic nutrient deficiencies. Efficient lipid digestion is crucial for maintaining energy balance and supporting vital physiological functions.
Total Cholesterol	1.6	0.5-5.3		
Total Phospholipids	16.8 H	0.3-6.4		Phospholipids are vital components of cell membranes, contributing to structural integrity and cellular function. They include glycerophospholipids and sphingolipids, characterized by hydrophobic tails and hydrophilic heads. Elevated stool phospholipid levels suggest malabsorption due to bile salt resorption issues or increased mucosal turnover. This may result in symptoms like diarrhea, malnutrition, and compromised gut barrier integrity. Addressing these imbalances is essential to restore digestive and systemic health.

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High (>95th percentile)

Mycotoxins | Heavy Metals | Environmental Toxins

TEST NAME	CURRENT RESULT	PREVIOUS RESULT	CURRENT RESULT / PREVIOUS RESULT	REFERENCE
Zearalenone (ZEN)	2.06		0 – 0.38 – 0.67	≤0.67 ng/g
Tellurium	1		0 – 0.42 – 0.89	≤0.89 ug/g
Diethyldithiophosphate (DEDTP)*	1.01		0 – 0.17 – 0.3	≤0.3 ug/g

* Indicates NHANES population data reference ranges.

Moderate (75th-95th percentile)

Mycotoxins | Heavy Metals

TEST NAME	CURRENT RESULT	PREVIOUS RESULT	CURRENT RESULT / PREVIOUS RESULT	REFERENCE
Aflatoxin B2 (AFB2)	4.98		0 – 4.58 – 8.13	≤8.13 ng/g
Mycophenolic Acid	4.23		0 – 3.6 – 6.4	≤6.4 ng/g
Patulin	10.56		0 – 6.53 – 11.6	≤11.6 ng/g
Roridin E	1.17		0 – 0.75 – 1.33	≤1.33 ng/g
Antimony*	0.13		0 – 0.07 – 0.16	≤0.16 ug/g
Arsenic*	13.88		0 – 11.9 – 52	≤52 ug/g
Cadmium*	0.35		0 – 0.29 – 0.8	≤0.8 ug/g
Cesium*	8.01		0 – 6.37 – 10.3	≤10.3 ug/g
Platinum*	0.39		0 – 0.1 – 0.9	≤0.9 ug/g

* Indicates NHANES population data reference ranges.

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GI-ResQ+, 1 scoop AM
Multi+, 2 scoops AM/PM
UltraBiotix, 1 dose daily
Hypaax Balance, 1 cap/meal
SuperG-Antioxidant, 1 cap/meal
Omega-3, 2 softgels AM/PM
Zymetix, 2 caps AM/PM
Binder Pro, 4 caps @ bedtime

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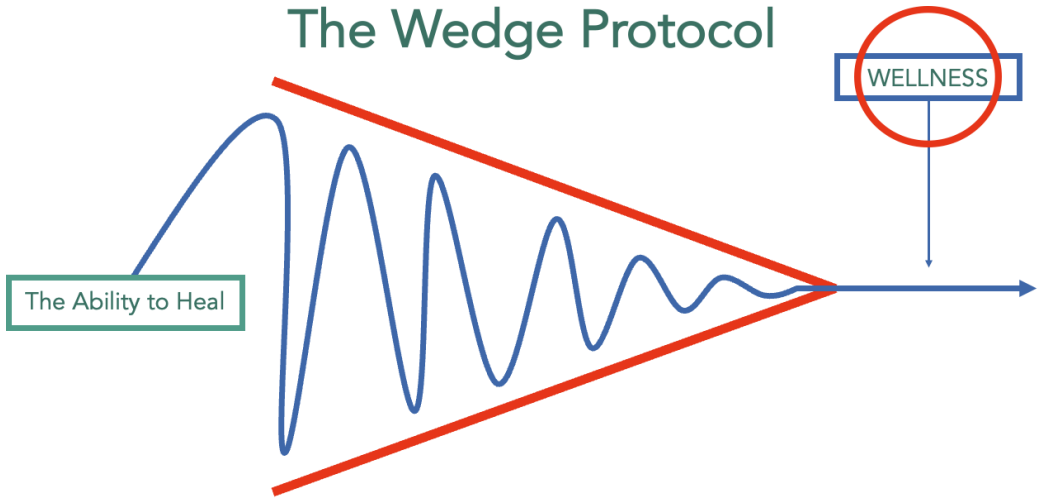
Phase 1:
21-day MCP c/Binder Pro
Diet: Book

Phase 2:
GI-ResQ+, 1 scoop AM
Multi+, 2 scoops AM/PM
UltraBiotix, 1 dose daily
Hypaax Balance, 1 cap/meal
SuperG-Antioxidant, 1 cap/meal
Omega-3, 2 softgels AM/PM
Zymetix, 2 caps AM/PM
Binder Pro, 4 caps @ bedtime
Diet: Paleo



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