

Casual Friday Presents

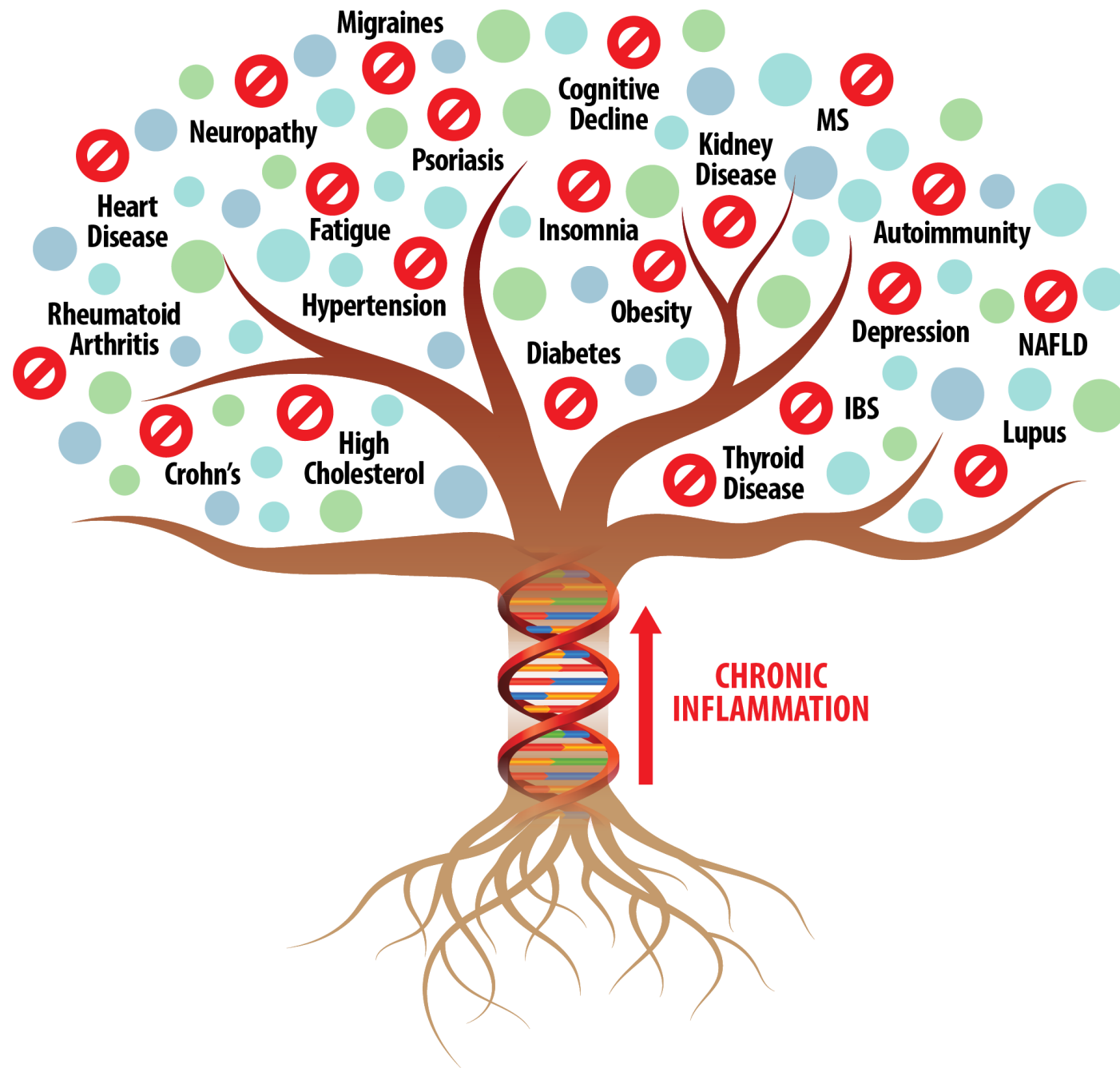
Case Review Friday

FM Strategies: Physiology, Pathology, Interventions.

A BIOGENETIX CLINICAL PRESENTATION

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CBC With Differential/Platelet

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
WBC ⁰¹	8.0		x10E3/uL	3.4-10.8
RBC ⁰¹	5.34		x10E6/uL	4.14-5.80
Hemoglobin ⁰¹	16.6		g/dL	13.0-17.7
Hematocrit ⁰¹	49.5		%	37.5-51.0
MCV ⁰¹	93		fL	79-97
MCH ⁰¹	31.1		pg	26.6-33.0
MCHC ⁰¹	33.5		g/dL	31.5-35.7
RDW ⁰¹	13.2		%	11.6-15.4
Platelets ⁰¹	181		x10E3/uL	150-450
Neutrophils ⁰¹	48		%	Not Estab.
Lymphs ⁰¹	43		%	Not Estab.
Monocytes ⁰¹	6		%	Not Estab.
Eos ⁰¹	3		%	Not Estab.
Basos ⁰¹	0		%	Not Estab.
Neutrophils (Absolute) ⁰¹	3.8		x10E3/uL	1.4-7.0
▲ Lymphs (Absolute) ⁰¹	3.5 High		x10E3/uL	0.7-3.1
Monocytes(Absolute) ⁰¹	0.5		x10E3/uL	0.1-0.9
Eos (Absolute) ⁰¹	0.2		x10E3/uL	0.0-0.4
Baso (Absolute) ⁰¹	0.0		x10E3/uL	0.0-0.2
Immature Granulocytes ⁰¹	0		%	Not Estab.
Immature Grans (Abs) ⁰¹	0.0		x10E3/uL	0.0-0.1

Comp. Metabolic Panel (14)

Test	Current Result and Flag		Previous Result and Date	Units	Reference Interval
▲ Glucose ⁰¹	151	High		mg/dL	70-99
BUN ⁰¹	14			mg/dL	8-27
▲ Creatinine ⁰¹	1.38	High		mg/dL	0.76-1.27
▼ eGFR	53	Low		mL/min/1.73	>59
BUN/Creatinine Ratio	10				10-24
Sodium ⁰¹	138			mmol/L	134-144
Potassium ⁰¹	5.0			mmol/L	3.5-5.2
Chloride ⁰¹	99			mmol/L	96-106
Carbon Dioxide, Total ⁰¹	24			mmol/L	20-29
Calcium ⁰¹	9.6			mg/dL	8.6-10.2
Protein, Total ⁰¹	6.7			g/dL	6.0-8.5
Albumin ⁰¹	4.6			g/dL	3.8-4.8

Comp. Metabolic Panel (14) (Cont.)

Globulin, Total	2.1	g/dL	1.5-4.5
Bilirubin, Total ⁰¹	0.5	mg/dL	0.0-1.2
Alkaline Phosphatase ⁰¹	80	IU/L	47-123
AST (SGOT) ⁰¹	22	IU/L	0-40
ALT (SGPT) ⁰¹	26	IU/L	0-44

Urinalysis (No Micro)

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Specific Gravity ⁰¹	1.019			1.005-1.030
pH ⁰¹	6.0			5.0-7.5
Urine-Color ⁰¹	Yellow			Yellow
Appearance ⁰¹	Clear			Clear
▶ WBC Esterase ⁰¹	1+ Abnormal			Negative
Protein ⁰¹	Trace			Negative/Trace
Glucose ⁰¹	Negative			Negative
▶ Ketones ⁰¹	Trace Abnormal			Negative
Occult Blood ⁰¹	Negative			Negative
Bilirubin ⁰¹	Negative			Negative
Urobilinogen, Semi-Qn ⁰¹	0.2		mg/dL	0.2-1.0
Nitrite, Urine ⁰¹	Negative			Negative

LP+Chol/HDL+LDL/HDL+CHD Risk

Test	Current Result and Flag		Previous Result and Date	Units	Reference Interval
Lipids ⁰¹					
▲ Cholesterol, Total ⁰¹	229	High		mg/dL	100-199
▲ Triglycerides ⁰¹	299	High		mg/dL	0-149
▼ HDL Cholesterol ⁰¹	31	Low		mg/dL	>39
▲ VLDL Cholesterol Cal	53	High		mg/dL	5-40
▲ LDL Chol Calc (NIH)	145	High		mg/dL	0-99

: Risk Assessment and Treatment Goals-Adults 30-79 years[1]				:
:				:
:	10 Yr "Prevent" ASCVD	:	LDL-C Goals	:
:	Risk Categories[2]	:	(mg/dL)	:
:	:	:	:	:
:	Low Risk	:	If LDL-C 160-189	:
:		:	treat to <100	:
:	Borderline	:	<100	:
:		:		:
:	Intermediate	:	<100	:
:		:		:
:	High	:	<70	:
:		:		:
:		:	Without ASCVD	:
:		:	<100	:
:	Severe	:		:
:	LDL-C: >=190	:		:

▲ T. Chol/HDL Ratio	7.4	High	ratio	0.0-5.0
Please Note: ⁰¹				
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				
▲ Estimated CHD Risk	1.5	High	times avg.	0.0-1.0
The CHD Risk is based on the T. Chol/HDL ratio. Other factors affect CHD Risk such as hypertension, smoking, diabetes, severe obesity, and family history of premature CHD.				
▲ LDL/HDL Ratio	4.7	High	ratio	0.0-3.6
LDL/HDL Ratio Men Women 1/2 Avg.Risk 1.0 1.5 Avg.Risk 3.6 3.2 2X Avg.Risk 6.2 5.0 3X Avg.Risk 8.0 6.1				

Thyroid Panel With TSH

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▲ TSH ⁰¹	5.420 High		uIU/mL	0.450-4.500
Thyroxine (T4) ⁰¹	7.7		ug/dL	4.5-12.0
T3 Uptake ⁰¹	27		%	24-39
Free Thyroxine Index	2.1			1.2-4.9

Iron and TIBC

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Iron Bind.Cap.(TIBC)	303		ug/dL	250-450
UIBC ⁰¹	197		ug/dL	111-343
Iron ⁰¹	106		ug/dL	38-169
Iron Saturation	35		%	15-55

Hgb A1c with eAG Estimation

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▲ Hemoglobin A1c ⁰¹	6.8 High		%	4.8-5.6

Please Note:⁰¹

Prediabetes: 5.7 - 6.4
Diabetes: >6.4

Hgb A1c with eAG Estimation (Cont.)

Glycemic control for adults with diabetes: <7.0

Estim. Avg Glu (eAG)	148	mg/dL
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Thyroxine (T4) Free, Direct

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
T4,Free(Direct) ⁰¹	1.18		ng/dL	0.82-1.77

C-Peptide, Serum

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
C-Peptide, Serum ⁰¹	3.4		ng/mL	1.1-4.4
C-Peptide reference interval is for fasting patients.				

Vitamin D, 25-Hydroxy

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Vitamin D, 25-Hydroxy ⁰¹	62.0		ng/mL	30.0-100.0
Vitamin D deficiency has been defined by the Institute of Medicine and an Endocrine Society practice guideline as a level of serum 25-OH vitamin D less than 20 ng/mL (1,2). The Endocrine Society went on to further define vitamin D insufficiency as a level between 21 and 29 ng/mL (2). 1. IOM (Institute of Medicine). 2010. Dietary reference intakes for calcium and D. Washington DC: The National Academies Press. 2. Holick MF, Binkley NC, Bischoff-Ferrari HA, et al. Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. JCEM. 2011 Jul; 96(7):1911-30. **Effective September 14, 2026 Vitamin D, 25-Hydroxy reference** interval will be changing to 20.0-100.0 ng/mL.				

C-Reactive Protein, Cardiac

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
C-Reactive Protein, Cardiac ⁰¹	1.07		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	13.0		umol/L	0.0-19.2

Uric Acid

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Uric Acid ⁰¹	5.6		mg/dL	3.8-8.4
Therapeutic target for gout patients: <6.0				

Magnesium

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Magnesium ⁰¹	2.0		mg/dL	1.6-2.3

Fibrinogen Activity

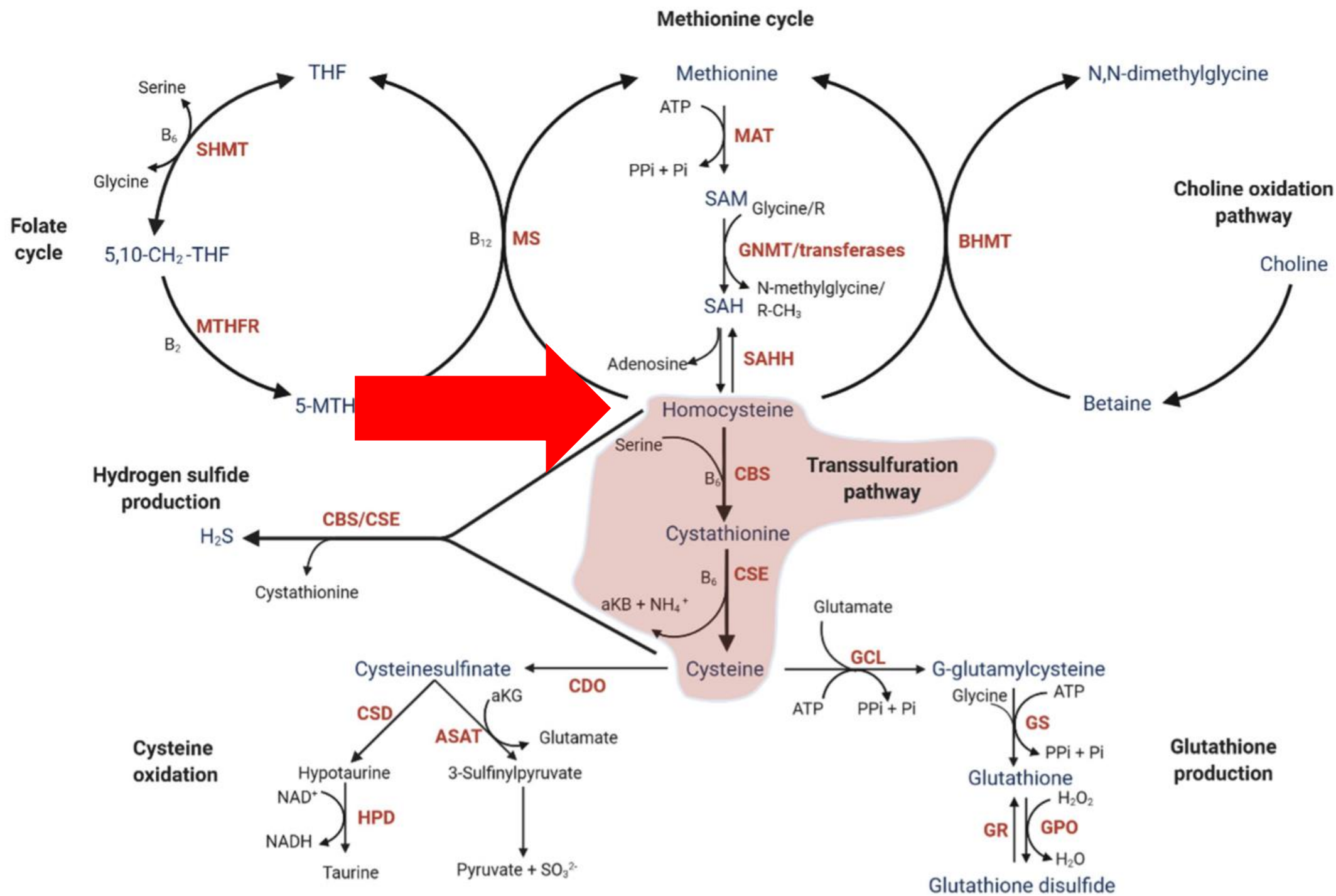
Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Fibrinogen Activity ⁰¹	310		mg/dL	209-464

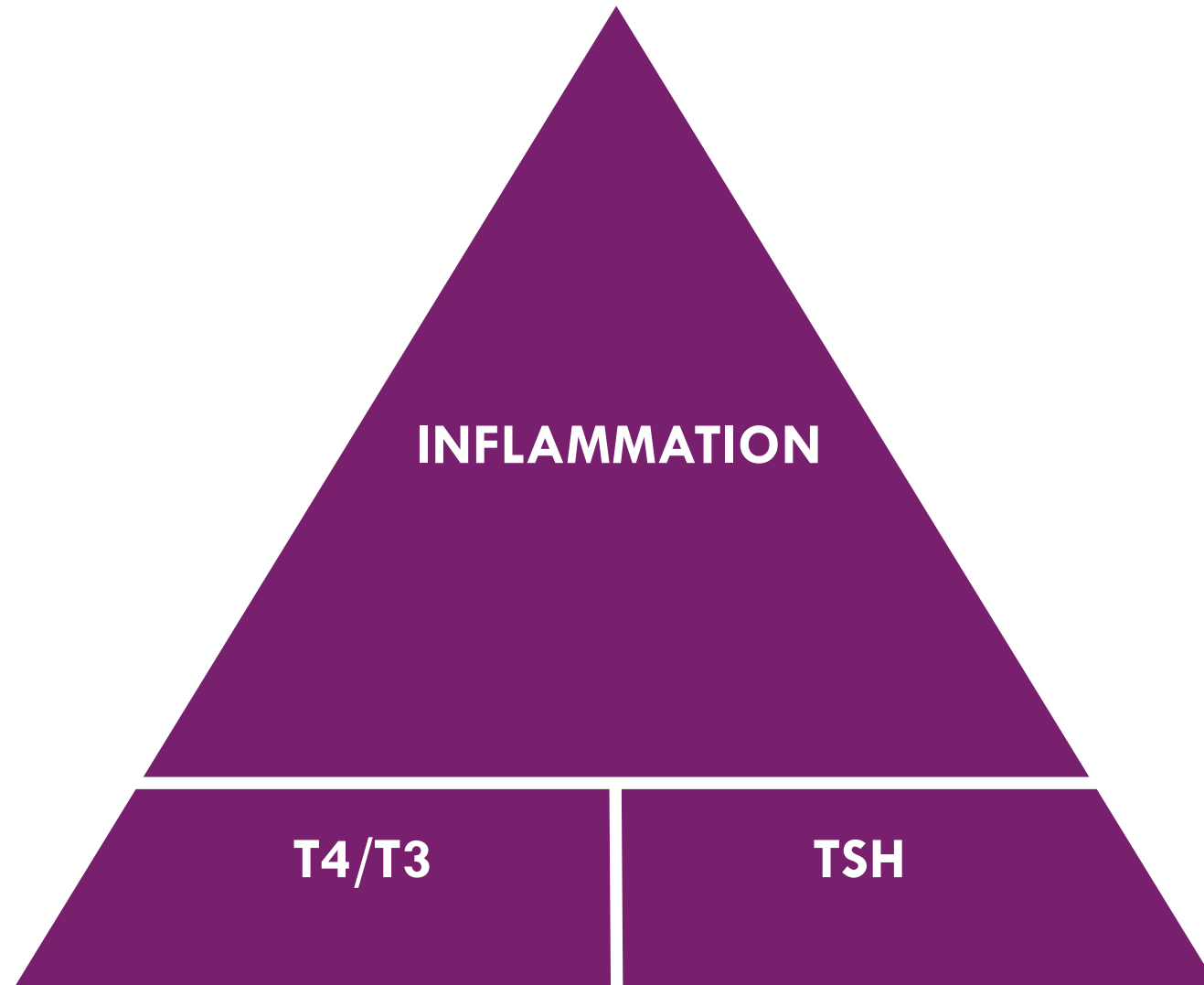
Ferritin

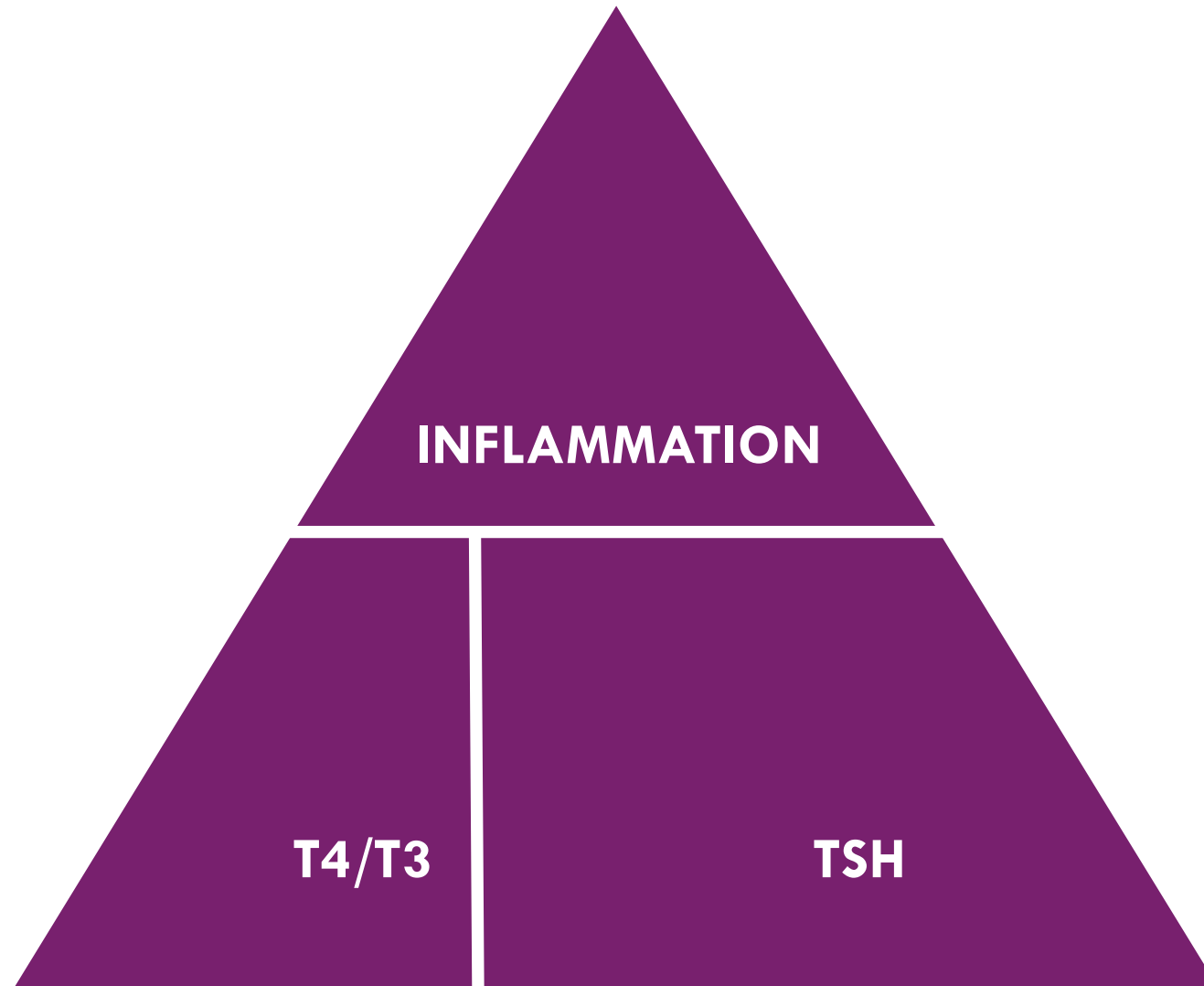
Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Ferritin ⁰¹	342		ng/mL	30-400

Triiodothyronine (T3), Free

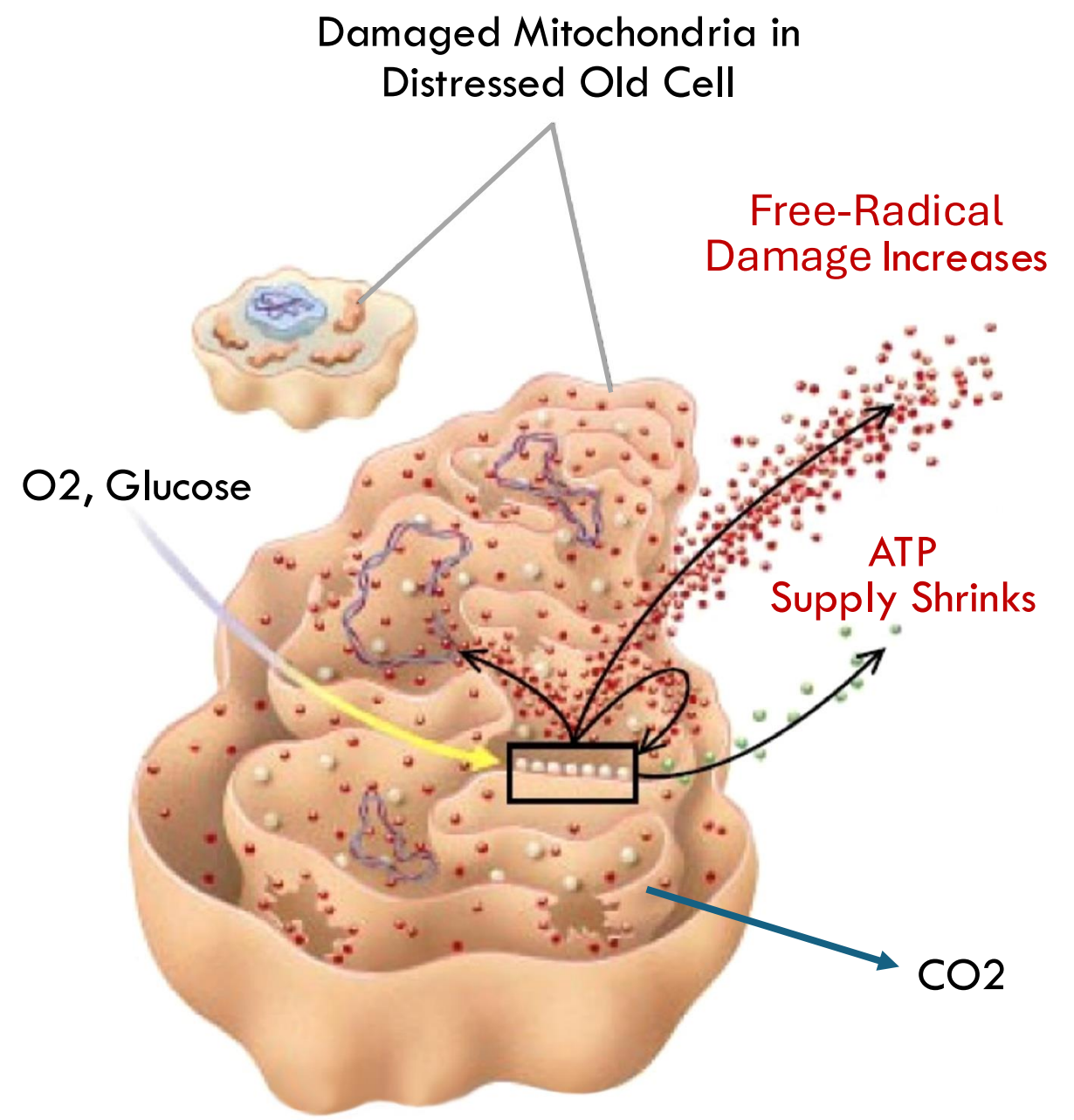
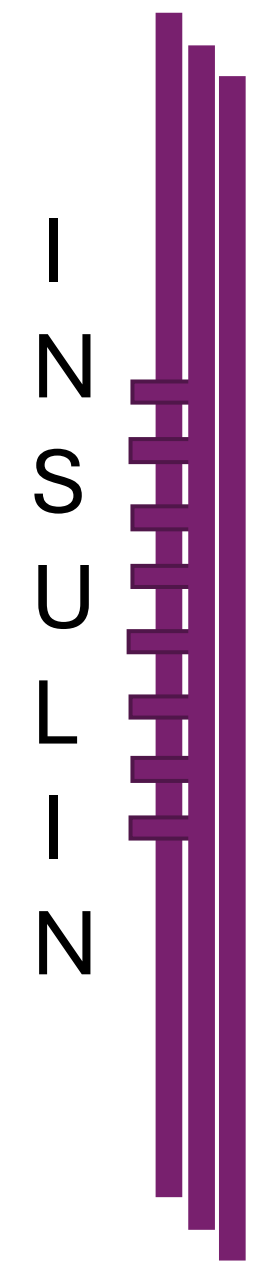
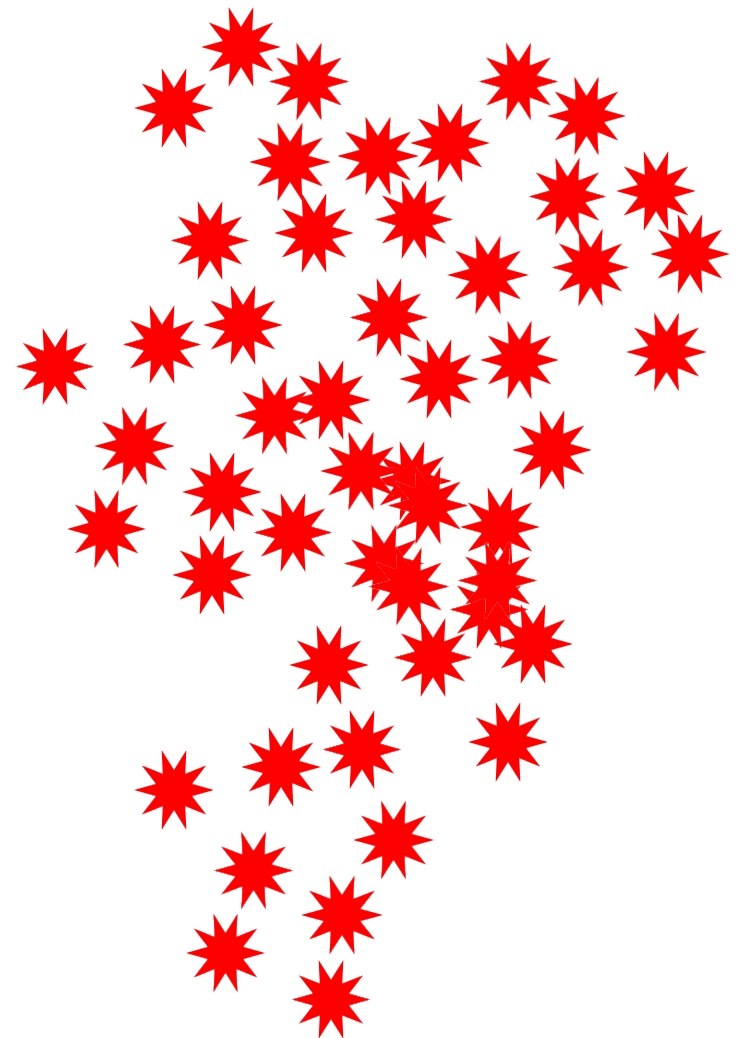
Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Triiodothyronine (T3), Free ⁰¹	3.3		pg/mL	2.0-4.4







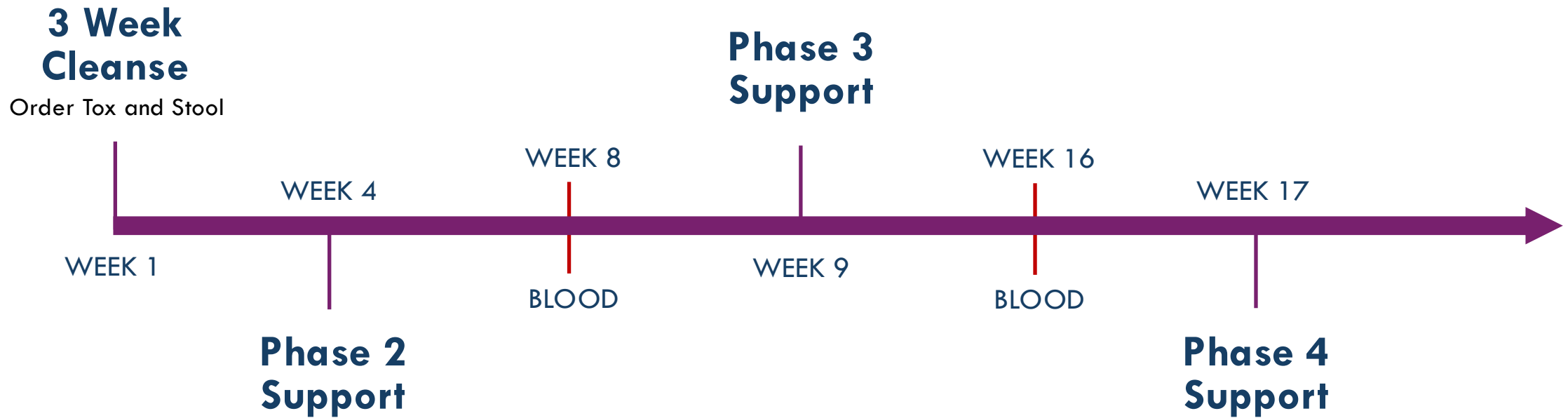
 = Glucose Molecule



High (>95th percentile)					
 Mycotoxins  Heavy Metals  Environmental Toxins					
TEST NAME	CURRENT RESULT	PREVIOUS RESULT	CURRENT RESULT	PREVIOUS RESULT	REFERENCE
 Chaetoglobosin A (CHA)	35.32				≤31.87 ng/g
 Citrinin (CTN)	18.94				≤12.53 ng/g
 Fumonisin B3	11.34				≤10.8 ng/g
 Ochratoxin A (OTA)	9.97				≤6.8 ng/g
 Sterigmatocystin (STC)	0.54				≤0.53 ng/g
 Barium*	7.66				≤5.59 ug/g

Moderate (75th-95th percentile)					
		Mycotoxins		Heavy Metals	
		Environmental Toxins			
TEST NAME	CURRENT RESULT	PREVIOUS RESULT	CURRENT RESULT	PREVIOUS RESULT	REFERENCE
 Lead*	0.61				≤1.16 ug/g
 Thorium	0.03				≤0.07 ug/g
 Tin*	1.23				≤3.72 ug/g
 3-Phenoxybenzoic Acid (3PBA)*	1.34				≤5.44 ug/g
 Atrazine *	0.05				≤0.05 ug/g
 Bisphenol A (BPA)*	3.88				≤5.09 ug/g
 Ethylparaben *	6.31				≤99.3 ug/g
 N-acetyl phenyl cysteine (NAP)*	1.35				≤3.03 ug/g

* Indicates NHANES population data reference ranges.



We Want to Hear from You!

Give us your Casual Friday feedback
with this short 5-question survey.



biogenetix.com/survey