



Health & Wellness Report

Sarah Mitchell

LAB DRAW

Mar 18, 2026

PRACTITIONER

Dr. Laura Bennett, NTP

RANGES USED

Functional

Practitioner Notes

Improved energy since our last visit. Vitamin D still trending low despite supplementation. Iron markers moving in the right direction. Continue current protocol and recheck in three months.

Marker Summary

FUNCTIONAL RANGES

HORMONES

Cycle phase: Luteal

Progesterone

4.1 ng/mL Optimal

Steroid hormone produced after ovulation; supports uterine lining and hormone balance.



Luteal phase 1.8-23.9 ng/mL

Estradiol

142 pg/mL Optimal

Primary estrogen; supports reproductive tissue, bone density, and cardiovascular health.



Luteal phase 43.8-211 pg/mL

AMH

2.4 ng/mL Optimal

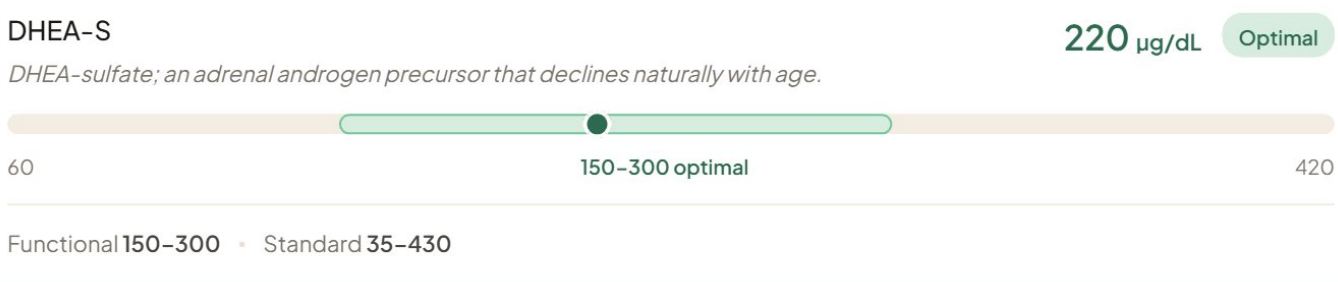
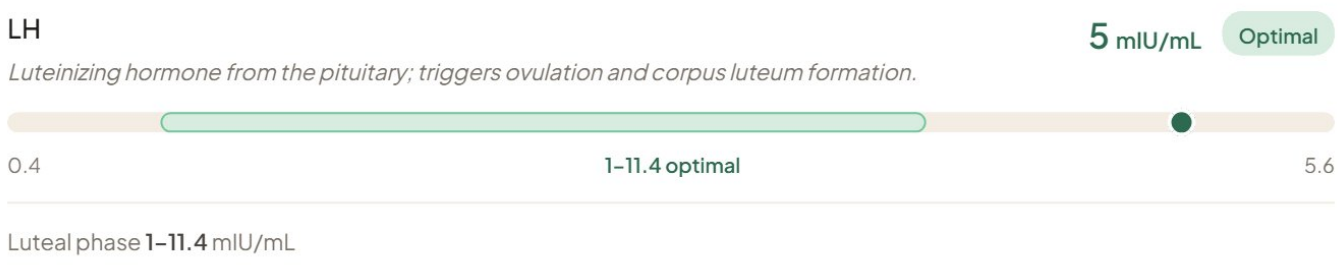
Anti-Müllerian hormone; reflects ovarian follicle pool and ovarian reserve.



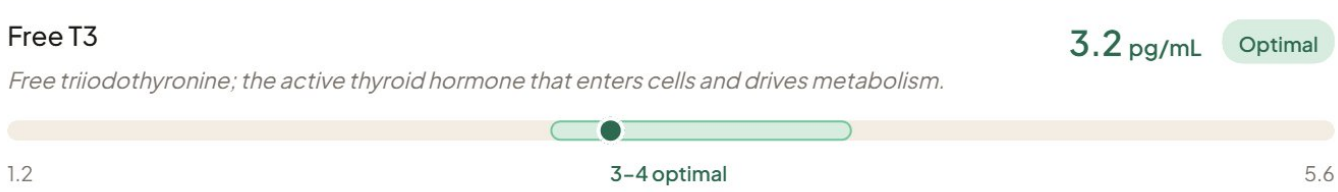
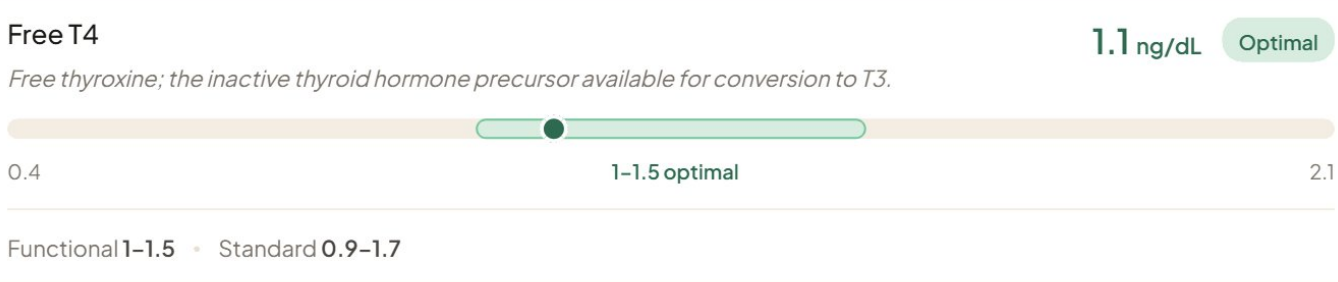
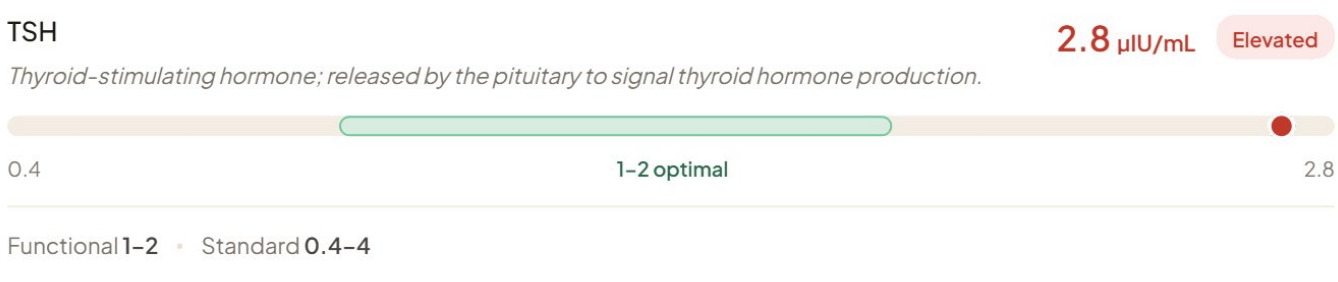
Functional 1-3.5 • Standard 0.7-3.5

FSH

6.2 mIU/mL Optimal



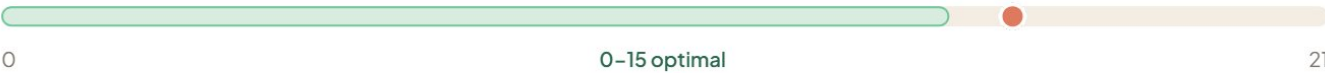
THYROID



Reverse T3

16 ng/dL Elevated

Reverse T3; an inactive form of T3 that the body produces from T4 alongside active T3.



Functional 0-15 • Standard 9-25

TPO Antibodies

8 IU/mL Optimal

Thyroid peroxidase antibodies; immune proteins directed against thyroid peroxidase, an enzyme the thyroid uses to produce its hormones.



Functional 0-25 • Standard 0-35

Thyroglobulin Ab

6 IU/mL Elevated

Thyroglobulin antibodies; immune proteins directed against thyroglobulin, a protein the thyroid uses to produce its hormones.



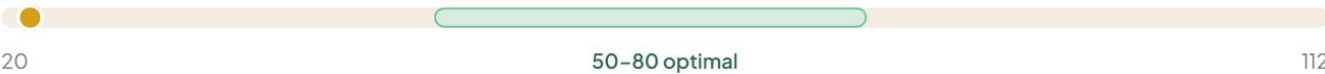
Functional 0-1 • Standard 0-40

VITAMINS & MINERALS

Vitamin D (25-OH)

22 ng/mL Low

25-OH Vitamin D; fat-soluble vitamin essential for immune function, calcium absorption, and bone health.



Functional 50-80 • Standard 20-50

Vitamin B12

700 pg/mL Optimal

Vitamin B12; essential for nerve function, DNA synthesis, and red blood cell formation.



Functional 500-900 • Standard 200-900

Folate

14 ng/mL Optimal

Vitamin B9; critical for DNA synthesis, cell division, and homocysteine metabolism.

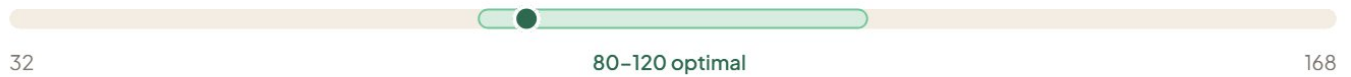


Functional 10–25 • Standard 2–20

Zinc

85 µg/dL Optimal

Essential trace mineral involved in immune function, enzyme activity, and wound healing.



Functional 80–120 • Standard 60–130

Calcium

9.4 mg/dL Optimal

Most abundant mineral in the body; essential for bone structure, nerve signaling, and muscle contraction.



Functional 9.2–10 • Standard 8.4–10.2

Magnesium

2 mg/dL Optimal

Essential mineral cofactor in over 300 enzymatic reactions including energy production.

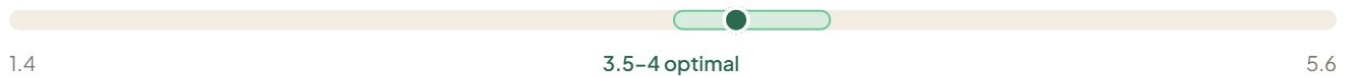


Functional 2–2.5 • Standard 1.5–2

Phosphorus

3.7 mg/dL Optimal

Essential mineral for bone structure, energy metabolism (ATP), and cell membrane function.



Functional 3.5–4 • Standard 3–4.5

IRON MARKERS

Serum Iron

75 µg/dL Optimal

Essential for hemoglobin production and oxygen transport in red blood cells.

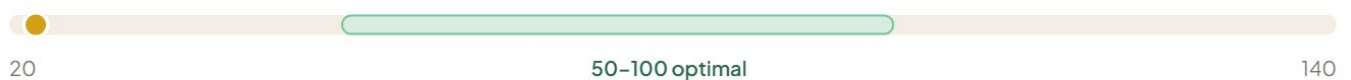


Functional 70–130 • Standard 50–170

Ferritin

18 ng/mL Low

The body's primary iron storage protein; a sensitive marker of iron reserves.



Functional 50–100 • Standard 12–150

TIBC

310 $\mu\text{g/dL}$ Optimal

Total iron-binding capacity; measures the blood's capacity to carry iron.

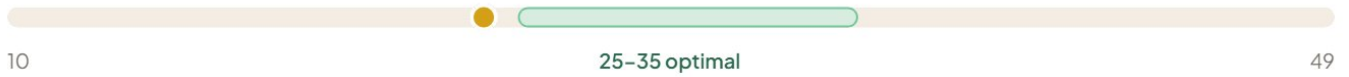


Functional 250-370 • Standard 250-400

% Transferrin Sat.

24 % Low

The percentage of iron-binding sites on transferrin that are occupied by iron.



Functional 25-35 • Standard 15-50

LIPIDS AND LIPOPROTEINS

Total Cholesterol

188 mg/dL Optimal

A lipid essential for cell membrane structure and hormone synthesis.

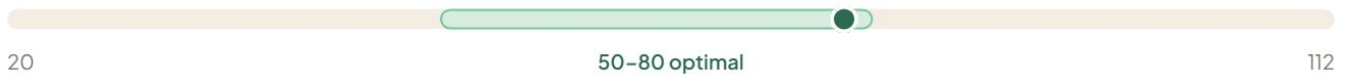


Functional 160-200 • Standard 0-200

Triglycerides

78 mg/dL Optimal

Blood fats derived from dietary fat and excess calories; stored as energy.



Functional 50-80 • Standard 0-150

LDL-C

118 mg/dL Elevated

Low-density lipoprotein; the primary cholesterol carrier to peripheral tissues.



Functional 80-100 • Standard 0-160

HDL-C

60 mg/dL Optimal

High-density lipoprotein; transports cholesterol back to the liver for processing.

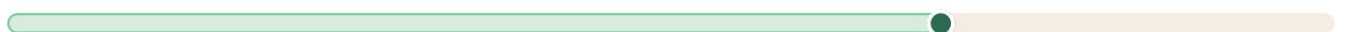


Functional 55-93 • Standard 40-40+

Non-HDL Cholesterol

128 mg/dL Optimal

Total cholesterol minus HDL; reflects all potentially atherogenic lipoproteins.



BLOOD SUGAR REGULATION

Fasting Glucose

82 mg/dL

Optimal

Blood sugar; the primary fuel source for cells, particularly the brain.

3075-86 optimal120

Functional 75-86 • Standard 65-100

HbA1c

4.9 %

Optimal

Glycated hemoglobin; reflects average blood glucose over the prior 2-3 months.

1.94.8-5.3 optimal7.4

Functional 4.8-5.3 • Standard 0-5.7

Fasting Insulin

6 µIU/mL

Optimal

Pancreatic hormone that regulates glucose uptake into cells; a key marker of metabolic health.

0.82-8 optimal11.2

Functional 2-8 • Standard 2-25

LIVER & GALLBLADDER

ALT

20 U/L

Optimal

Alanine aminotransferase; a liver enzyme used to evaluate liver health.

410-30 optimal42

Functional 10-30 • Standard 10-40

AST

18 U/L

Optimal

Aspartate aminotransferase; a liver and muscle enzyme used to assess liver health.

410-26 optimal36.4

Functional 10-26 • Standard 12-38

GGT

16 U/L

Optimal

Gamma-glutamyl transferase; a sensitive liver enzyme associated with bile duct function.

00-20 optimal28

Functional 0–20 • Standard 5–55

Alk. Phosphatase

68 U/L Low

Alkaline phosphatase; an enzyme found in liver, bone, and bile ducts.



Functional 70–100 • Standard 25–100

LDH

150 U/L Optimal

Lactate dehydrogenase; an enzyme found in cells throughout many body tissues.



Functional 140–170 • Standard 45–200

Bilirubin (Total)

0.5 mg/dL Optimal

A breakdown product of hemoglobin processed by the liver.



Functional 0.1–0.9 • Standard 0.1–1

KIDNEY HEALTH

BUN

13 mg/dL Optimal

Blood urea nitrogen; a waste product of protein metabolism filtered by the kidneys.



Functional 10–16 • Standard 7–18

Creatinine

0.8 mg/dL Optimal

A muscle metabolism waste product filtered by the kidneys; reflects kidney filtration rate.



Functional 0.65–0.9 • Standard 0.59–1.04

eGFR

93 mL/min Optimal

Estimated glomerular filtration rate; the primary marker of kidney filtering capacity.



Functional 90–90+ • Standard 60–60+

ELECTROLYTES & METABOLIC

Sodium

139 mEq/L Optimal

Primary extracellular electrolyte; regulates fluid balance and nerve/muscle function.



Functional 135-142 • Standard 136-146

Potassium

4.1 mEq/L Optimal

Primary intracellular electrolyte; critical for heart rhythm and muscle contraction.

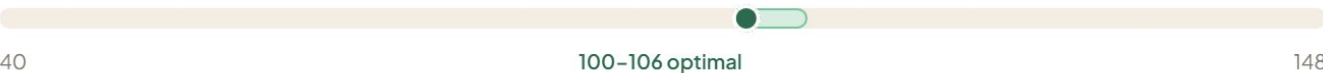


Functional 4-4.5 • Standard 3.5-5

Chloride

101 mEq/L Optimal

Electrolyte that works with sodium to regulate fluid balance and acid-base status.



Functional 100-106 • Standard 95-105

CO₂ (Bicarbonate)

26 mEq/L Optimal

Bicarbonate; reflects acid-base balance and respiratory function.



Functional 25-30 • Standard 22-28

Uric Acid

3.9 mg/dL Optimal

End product of purine metabolism, filtered from the blood by the kidneys.



Functional 2.5-5 • Standard 2.4-6

Total Protein

7.2 g/dL Optimal

Combined measure of albumin and globulin; reflects nutritional status and liver function.



Functional 7-7.5 • Standard 6-7.8

Albumin

4.4 g/dL Optimal

The most abundant blood protein; made by the liver; reflects nutritional and liver health.

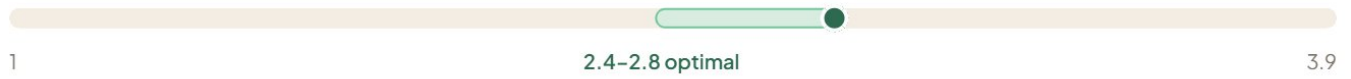


Globulin

2.8 g/dL

Optimal

A group of blood proteins that includes antibodies and transport proteins.



Functional 2.4–2.8 • Standard 2.3–3.5

INFLAMMATION

hs-CRP

0.6 mg/L

Optimal

High-sensitivity C-reactive protein; a sensitive marker of systemic inflammation.



Functional 0–1 • Standard 0–3

Homocysteine

7.8 μ mol/L

Optimal

An amino acid produced during metabolism and processed with the help of B vitamins.



Functional 5–8 • Standard 4–15

ESR

10 mm/hr

Optimal

Erythrocyte sedimentation rate; a non-specific measure of systemic inflammation.



Functional 0–15 • Standard 0–20

Fibrinogen

265 mg/dL

Optimal

A clotting protein that also acts as an acute-phase inflammatory marker.



Functional 200–300 • Standard 150–400

CBC — HEMATOLOGY

RBC

4.3 M/ μ L

Optimal

Red blood cell count; the total number of oxygen-carrying cells per unit of blood.



Hemoglobin

13 g/dL Optimal

The iron-containing protein in red blood cells that carries oxygen.



Functional 13–15.5 • Standard 12–15.5

Hematocrit

39 % Optimal

The proportion of blood volume occupied by red blood cells.



Functional 37–44 • Standard 36–46

MCV

90 fL Optimal

Mean corpuscular volume; the average size of red blood cells.

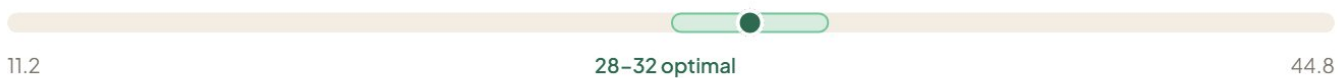


Functional 85–95 • Standard 80–100

MCH

30 pg Optimal

Mean corpuscular hemoglobin; average hemoglobin content per red blood cell.



Functional 28–32 • Standard 25–35

MCHC

34 g/dL Optimal

Mean corpuscular hemoglobin concentration; hemoglobin concentration within red blood cells.

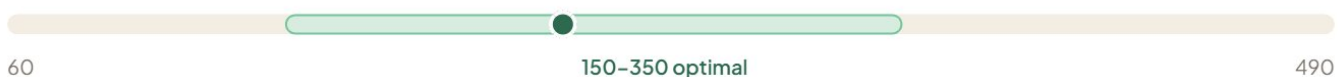


Functional 33–36 • Standard 31–36

Platelets

240 K/ μ L Optimal

Small blood cell fragments essential for clot formation and vascular repair.



Functional 150–350 • Standard 150–400

RDW

13 % Optimal

Red blood cell distribution width; reflects variability in red blood cell size.

4.8

12–13.5 optimal

18.9

Functional 12–13.5 • Standard 11.5–14.5

CBC — WHITE BLOOD CELLS

WBC (Total)

5.5 K/ μ L Optimal*White blood cell count; the total number of immune cells in circulation.*

Functional 5–7.5 • Standard 4.5–11

Neutrophils

56 % Optimal

The most abundant white blood cells; the first responders to bacterial infection.

Functional 50–65 • Standard 54–62

Lymphocytes

34 % Optimal

White blood cells including T-cells and B-cells; central to adaptive immunity.

Functional 25–40 • Standard 25–33

Monocytes

6 % Optimal

Larger white blood cells that become macrophages in tissues to clear debris and pathogens.

Functional 4–7 • Standard 3–7

Eosinophils

2 % Optimal

White blood cells involved in allergic responses and parasite defense.

Functional 0–3 • Standard 1–3

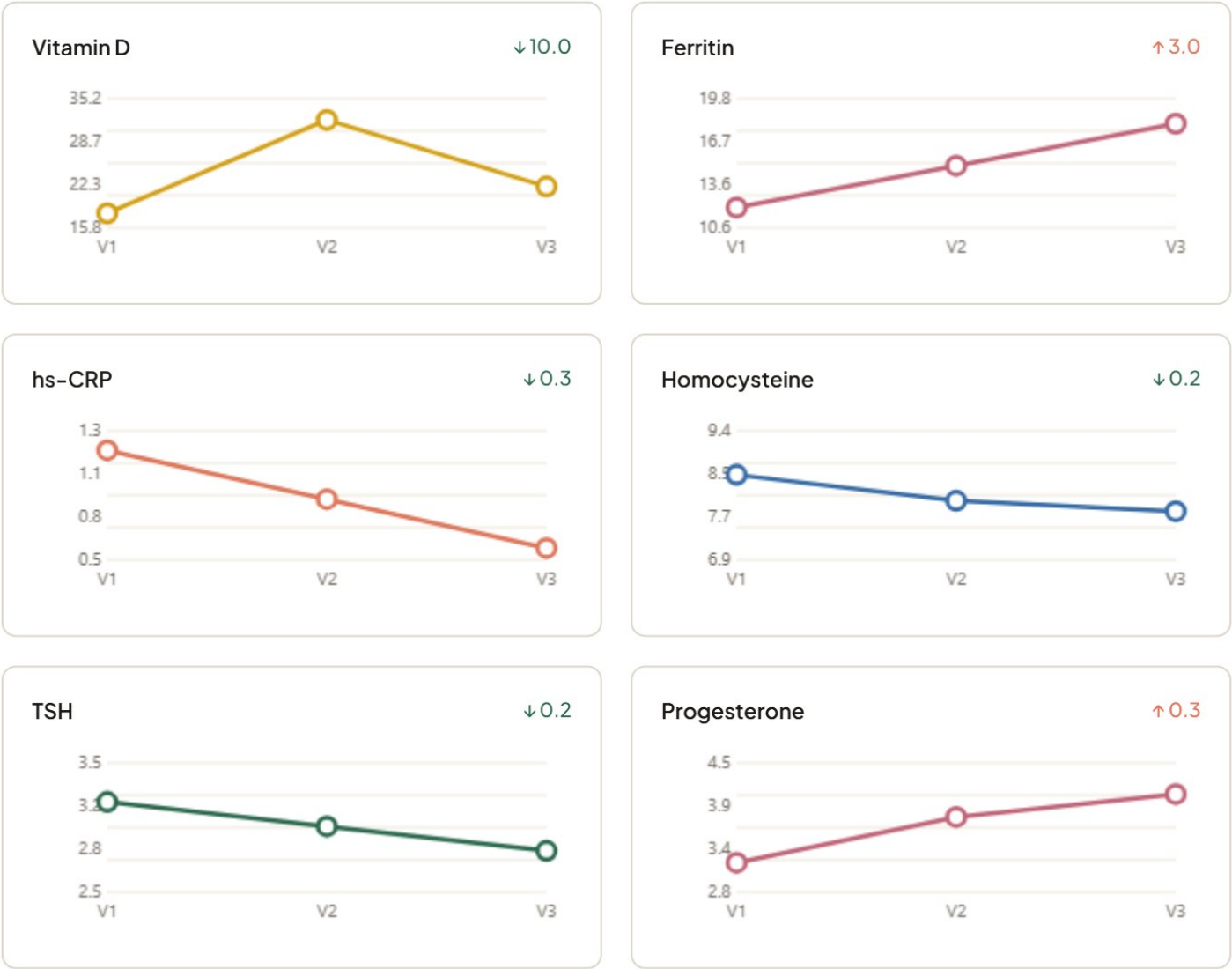
Basophils

1 % Optimal

The least common white blood cells; involved in allergic and inflammatory responses.

Functional 0–1 • Standard 0–1

Progress Trends — Last 3 Visits



Lab History — All Visits

Test	Oct 14, 2025	Jan 9, 2026	Mar 18, 2026
HORMONES			
Progesterone ng/mL	3.2	3.8	4.1
Estradiol pg/mL	130	138	142
AMH ng/mL	2.3	2.4	2.4
FSH mIU/mL	6.5	6.2	6.2
LH mIU/mL	5	5.1	5

DHEA-S µg/dL	210	215	220
SHBG nmol/L	55	52	50
THYROID			
TSH µIU/mL	3.2	3	2.8
Free T4 ng/dL	1.1	1.1	1.1
Free T3 pg/mL	2.9	3	3.2
Reverse T3 ng/dL	18	17	16
TPO Antibodies IU/mL	12	10	8
Thyroglobulin Ab IU/mL	8	7	6
VITAMINS & MINERALS			
Vitamin D (25- OH) ng/mL	18	32	22
Vitamin B12 pg/mL	620	660	700
Folate ng/mL	12	13	14
Zinc µg/dL	78	82	85
Calcium mg/dL	9.1	9.3	9.4
Magnesium mg/dL	1.8	1.9	2
Phosphorus mg/dL	3.5	3.6	3.7
IRON MARKERS			
Serum Iron µg/dL	68	72	75
Ferritin ng/mL	12	15	18
TIBC µg/dL	340	320	310
% Transferrin Sat. %	20	23	24
LIPIDS AND LIPOPROTEINS			

Total Cholesterol mg/dL	195	190	188
Triglycerides mg/dL	88	82	78
LDL-C mg/dL	125	120	118
HDL-C mg/dL	55	58	60
Non-HDL Cholesterol mg/dL	140	132	128
BLOOD SUGAR REGULATION			
Fasting Glucose mg/dL	84	83	82
HbA1c %	5	5	4.9
Fasting Insulin µIU/mL	6.8	6.5	6
LIVER & GALLBLADDER			
ALT U/L	22	21	20
AST U/L	20	19	18
GGT U/L	18	17	16
Alk. Phosphatase U/L	72	70	68
LDH U/L	155	152	150
Bilirubin (Total) mg/dL	0.6	0.6	0.5
KIDNEY HEALTH			
BUN mg/dL	14	13	13
Creatinine mg/dL	0.8	0.8	0.8
eGFR mL/min	90	92	93
ELECTROLYTES & METABOLIC			
Sodium mEq/L	139	140	139
Potassium	4.1	4	4.1

mEq/L	4.1	4	4.1
Chloride mEq/L	101	102	101
CO ₂ (Bicarbonate) mEq/L	25	26	26
Uric Acid mg/dL	4.2	4	3.9
Total Protein g/dL	7.1	7.2	7.2
Albumin g/dL	4.3	4.4	4.4
Globulin g/dL	2.8	2.8	2.8
INFLAMMATION			
hs-CRP mg/L	1.2	0.9	0.6
Homocysteine μmol/L	8.5	8	7.8
ESR mm/hr	12	11	10
Fibrinogen mg/dL	280	270	265
CBC — HEMATOLOGY			
RBC M/μL	4.1	4.2	4.3
Hemoglobin g/dL	12.5	12.8	13
Hematocrit %	38	39	39
MCV fL	88	89	90
MCH pg	29	30	30
MCHC g/dL	33	33	34
Platelets K/μL	230	235	240
RDW %	13.5	13.2	13
CBC — WHITE BLOOD CELLS			
WBC (Total) K/μL	5.8	5.6	5.5

Neutrophils %	58	57	56
Lymphocytes %	32	33	34
Monocytes %	6	6	6
Eosinophils %	2	2	2
Basophils %	1	1	1

Reference ranges reflect sex-specific functional optimal values where applicable, sourced from Weatherby & Ferguson's Blood Chemistry and CBC Analysis, published functional medicine reference texts, and standard laboratory reference intervals (LabCorp, WHO, AHA). These are not diagnostic standards.

This report is prepared by a certified nutrition professional and is intended for informational and educational purposes only. It does not constitute medical advice, diagnosis, or treatment. All content is for educational reference only. Please consult a licensed physician for any medical decisions.