Blood Work Comparison Report

Prepared for

MaryAnn Marks

Prepared by

MaryAnn Marks, Founder LabSmarts

Most Recent Collection Date

02/25/2026

Analysis Date

04/21/2026

Red Blood Cell (RBC) Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
RBC	m/mcL	4.86 ↑	4.65	4.53		3.35	3.72	4.09	4.83	5.2	5.57
HGB	g/dL	13.8	13.1	13.1		10.275	11.4	12.525	14.775	15.9	17.025
HCT	%	39	39.1	38.1		31.05	34.2	37.35	43.65	46.8	49.95
MCV	fL	80.25	84.09	84.11		64.7	71.6	78.5	92.3	99.2	106.1
MCH	pg	28.4	28.17	28.92		22.3	24.7	27.1	31.9	34.3	36.7
MCHC	g/dL	35.38 ↑	33.5	34.38		31.18	32.1	33.03	34.88	35.8	36.72
RDW	%	13.3 ↑	13.4 ↑	13.1 ↑	👍	10.35	11.4	0	13	15.6	16.65
CRC	%	0.67 ↓				0	0.5	1	2	2.5	3
RPI		0.67 ↓				0.25	0.5	1	2	3	5

Iron Related Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
Iron	mcg/dL	75	102	72 ↓	👎	22.5	45	73.75	131.25	160	188.75
TIBC	mcg/dL	336	303	324		200	250	300	341	450	500
% Saturation	%	22.3 ↓	33.7	22.2 ↓	👎	8.75	16	24	35	45	52.25
Ferritin	ng/mL	117 ↑	150 ↑	61	👍	6	12	40	75	150	184.5
Ceruloplasmin	mg/dL	27.5 ↑	30 ↑			14	19	19.1	27	39	44
Copper, serum	µg/dL	128 ↑				46.75	69	70	110	158	180.25
Free Copper	%	35.55 ↑				0	2.5	5	20	30	40

Immune System Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
WBC	k/mcL	5.1	4.9	5.6		1.68	3.11	4.54	7.4	8.83	10.26
Neutrophils	%	46	44	44		26.9	35.3	43.7	60.5	68.9	77.3
Lymphocytes	%	48 ↑	49 ↑	48.4 ↑		13.48	21.3	29.13	44.78	52.6	60.43
Monocytes	%	5 ↓	6	6.3		1.81	3.53	5.25	8.68	10.4	12.12
Eosinophils	%	1 ↓	1 ↓	0.9 ↓		0	0.47	2.33	6.04	7.89	9.75
Basophils	%	0	0	0.4		0	0	0	0.95	1.27	1.59
Abs Neutro	k/mcL	2.346	2.156	2.464		0.02	1.06	2.1	4.18	5.22	6.26
Abs Lympho	k/mcL	2.448	2.401	2.71		0.32	0.94	1.56	2.8	3.42	4.04
Abs Mono	k/mcL	0.255 ↓	0.294	0.353		0.05	0.17	0.29	0.53	0.65	0.77
Abs Eosino	k/mcL	0.051 ↓	0.049 ↓	0.05 ↓		0	0.03	0.148	0.382	0.5	0.618
Abs Baso	k/mcL	0	0	0.022		0	0	0	0.056	0.075	0.094
NLR	Ratio	0.96 ↓	0.9 ↓	0.91 ↓		0.5	1	1.5	2	2.5	3
Globulin	g/dL	2.5	2.5	2.5		1.5	1.9	2.4	2.8	3.7	4.2
Alk Phos	U/L	62 ↓	68	57 ↓		8	37	66	124	153	182

Coagulation Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
Platelets	k/mcL	188 ↓	187 ↓	205		103	144	186	269	310	352
MPV	fL			11.3 ↑		6.1	7.2	8.3	10.6	11.7	12.8
D-Dimer	mg/L FEU	0.21				0	0	0	0.53	0.54	1.5
Fibrinogen	mg/dL	248				150	175	200	350	400	450

Glucose Regulation / Metabolic Function Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
Glucose	mg/dL	85	87	94 ↑	👎	62.75	70	82	88	99	125
HbA1c	%	5.1	5.5 ↑	5.1	👍	3.6	4	5	5.4	5.6	6.4
C-peptide	ng/mL	1.1	1.1			0.6	0.8	0.9	1.8	3.85	4.61

Kidney Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
BUN	mg/dL	9 ↓	16	16		7.5	10	12.5	17.5	20	22.5
Creatinine	mg/dL	0.77	0.78	0.76		0.367	0.5	0.633	0.897	1.03	1.163
eGFR	mL/min/1.73m2	93	91	93		30	60	90	120	180	210
BUN/Creat Ratio	Ratio	11.69	20.51 ↑	21.05 ↑	👎	2	6	10	18	22	26
Uric Acid	mg/dL	5 ↑	4.6 ↑	4.2	👍	1.7	2.5	3.2	4.4	5.7	7

Protein Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
Protein, Total	g/dL	7.5	7.1	7		5.6	6.1	6.9	7.8	8.1	8.6
Albumin	g/dL	5	4.6	4.5		3.2	3.6	4.5	5	5.1	5.5
Globulin	g/dL	2.5	2.5	2.5		1.5	1.9	2.4	2.8	3.7	4.2
A/G Ratio	Ratio	2 ↑	1.84	1.8		0.95	1.2	1.45	1.95	2.2	2.45

Nutrient Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
Calcium (Ca) corr	mg/dL	9.9 ↑	9.6	9.2 ↓	👎	8.2	8.6	9.3	9.8	10.3	10.7
Ceruloplasmin	mg/dL	27.5 ↑	30 ↑			14	19	19.1	27	39	44
Copper, serum	µg/dL	128 ↑				46.75	69	70	110	158	180.25
Cu/Zn Ratio	Ratio	1.94 ↑				0.5	0.7	0.8	1	1.5	1.7
Free Copper	%	35.55 ↑				0	2.5	5	20	30	40
Folate, serum	ng/mL	11.8 ↓				9	13	17	25	29	33
Magnesium, RBC	mg/dL	4.9 ↓	5 ↓			3.55	4.2	6	6.7	6.8	7.45
Phosphorus	mg/dL	3.9	3.6			2.05	2.5	2.95	3.9	4.3	4.75
Vitamin B6	µg/L	14.9				3.4	5.2	12.4	65	65.2	80.2
Vitamin B12	pg/mL	1812 ↑				149	300	400	800	1100	1245
Vitamin D (25-OH)	ng/mL	60.3	63	46 ↓	👎	12.5	30	50	80	100	150
Vit D 1,25 (OH)2	pg/mL		43.5			10.63	24.8	38.98	81	81.5	95.68
Zinc, serum	µg/dL	66 ↓				42.5	60	95	129	130	147.5

Electrolyte Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
Sodium	mmol/L	140	137 ↓	138 ↓		132	135	139	142	146	149
Potassium	mmol/L	3.8 ↓	4.7 ↑	4.5 ↑		3.1	3.5	4	4.4	5.2	5.6
Na/K Ratio	Ratio	36.8 ↑	29.1 ↓	30.7		25	27.5	30	35	37.5	40
Chloride	mmol/L	100 ↓	97 ↓	100 ↓		95	98	101	107	110	113
Carbon Dioxide	mmol/L	23	22 ↓	28		17	20	23	29	32	35
Anion Gap	mmol/L	17 ↑	18 ↑	10		0	3	6	12	15	18
Anion Gap w/ K	mmol/L	20.8 ↑	22.7 ↑	14.5		4	7	10	16	19	22

Lipids / Inflammation Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
Cholesterol, Total	mg/dL	265 ↑	206	221		130	160	180	240	270	300
HDL Cholesterol	mg/dL	98 ↑	88 ↑	92 ↑		40	50	65	85	95	105
Triglycerides (TG)	mg/dL	61	44 ↓	45 ↓		15	25	50	100	150	199
LDL Cholesterol	mg/dL	158 ↑	110	116		30	55	80	130	159	190
Chol/HDL Ratio	Ratio	2.7	2.34	2.4		0	0	0	3	3.3	4.4
TG/HDL Ratio	Ratio	0.62	0.5	0.49		0	0	0	2	4	5
Apo A-1	mg/dL		206			86	116	150	210	240	270
Apo B	mg/dL		91 ↑	90 ↑		11	28	45	79	99	120
Apo B/Apo A-1	Ratio		0.44			0	0	0	0.59	0.62	0.78
hs-CRP	mg/L	0.42	0.43	0.2		0	0	0	0.9	3	10
Sed Rate (ESR)	mm/h	6				0	0	1	10	30	37.5

Liver / Biliary Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
Bile Acids	µmol/L	0.9 ↓				1.25	3	4.75	8.25	10	19
Bilirubin, Total	mg/dL	0.3 ↓	0.19 ↓	0.4 ↓	👍	0.1	0.2	0.45	0.8	1.2	1.45
Bilirubin, Direct	mg/dL	0.12		0.1		0	0	0	0.2	0.3	0.4
Bilirubin, Indirect	mg/dL	0.18		0.3		0	0.1	0.11	0.78	1	1.23
Alk Phos	U/L	62 ↓	68	57 ↓	👎	8	37	66	124	153	182
AST (SGOT)	U/L	16	15	15		4	10	12	29	35	41
ALT (SGPT)	U/L	16	13	15		3	6	12	19	29	35
GGT	UL	11 ↑	8	8		0	3	5	9	18	60
LDH, LD	U/L	160	132 ↓			87.5	120	152.5	217.5	250	282.5

Thyroid Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
TSH	µIU/mL	3 ↑	2	1.54		0.1	0.4	1	2	4.5	5.525
T4, Total	mcg/dL	9.1	7	7.7		3.4	5.1	6.8	11.8	11.9	13.6
T4, Free	ng/dL	1.35	1.3			0.55	0.8	1.3	1.7	1.8	2.05
T3, Total	ng/dL	108	78 ↓			49.75	76	100	180	181	207.25
T3, Free	pg/mL	2.6 ↓	2.1 ↓			1.4	2	3.2	3.6	4.4	5
Reverse T3	ng/dL	20.6	17.1			3.75	8	9	24	25	29.25
TPO Ab	IU/mL	103 ↑	34 ↑			0	0	0	8.8	8.9	11.13
Tg Ab	IU/mL	14 ↑	1.3 ↑			0	0	0	0.9	1	1.25
T3 Uptake	%	37 ↑	32	29		20.25	24	27.75	35.25	39	42.75
FTI	Ratio	3.4	2.2	2.2		0.8	1.4	1.5	3.7	3.8	4.4

Hormone Markers

Marker	Units	06/21/2023	04/22/2024	02/25/2026	Trend	Alarm Min	Lab Min	Optimal Min	Optimal Max	Lab Max	Alarm Max
Cortisol, AM	mcg/dL			12.4 ↓		2.8	4	13	21	22	26.5
DHEA-S	µg/dL			77 ↓		28.84	41.2	142.45	243.6	243.7	316.81
Estradiol (E2)	pg/mL		5.7 ↓	29		4.2	6	6.1	30	31	54.7
IGF-1	ng/mL		124			45.5	65	102.8	178.3	216	253.8
Progesterone	ng/mL		0.6 ↑			0	0	0.05	0.09	0.1	0.13
SHBG	nmol/L			102		8.4	12	13	149	150	195
BioT	ng/dL			1.5 ↓		0	2.02	5.76	9.4	9.5	16
FreeT, Direct	pg/mL		0.19 ↓	0.7 ↓		0.7	1.16	1.16	4.1	4.2	5.5
TotalT, LC/MS	ng/dL			16 ↓		1.4	2	23.5	44	45	58.5

Practitioner Notes by Collection Date

Collection Date	Practitioner Notes
02/25/2026	Overall Summary • There are signs of reduced hormone activity, which may be affecting energy, recovery, and overall resilience. • The body's stress response system may not be providing the same level of support as before. • Early changes in blood sugar regulation suggest the body may be under increased metabolic demand. • Nutrient levels and overall system support may not be fully optimized, which can affect how well the body adapts and recovers. ~~~~~~ Top Themes Identified • Hormone levels appear to be lower than optimal • Stress response may be reduced or less responsive • Early signs of metabolic imbalance are emerging • Nutrient levels may not be fully supporting optimal function ~~~~~~ Big-Picture Interpretation • Hormone activity appears lower than optimal, which may be influencing overall energy and recovery capacity. • The stress response system may be contributing less support, which can impact how the body adapts to daily demands. • Early signs of blood sugar imbalance are present within this context. • Nutrient status may be contributing to reduced system efficiency and overall balance. ~~~~~~ Top 5 Priority Systems to Address 1. Hormone Balance 2. Stress & Adrenal Balance 3. Blood Sugar Balance 4. Nutrient Status 5. Immune Function ~~~~~~ Follow-Up Considerations • Continued monitoring and follow-up testing can help track progress and guide next steps • Addressing thyroid, immune, and metabolic systems together may support better outcomes • Lifestyle factors such as nutrition, sleep, and stress play an important role in overall balance • Supporting nutrient levels may help improve energy, recovery, and system function
04/22/2024	

Practitioner Notes by Collection Date

Collection Date	Practitioner Notes
04/22/2024 (cont.)	Overall Summary • There are signs that thyroid function may be affected by immune system activity, which can influence energy, metabolism, and overall balance. • Early changes in blood sugar regulation suggest the body may be under increased metabolic stress. • Nutrient levels and overall system support may not be fully optimized, which can affect how well the body adapts and recovers. ~~~~~~ Top Themes Identified • Thyroid function appears to be under immune-related stress • Early signs of metabolic imbalance are emerging • Immune activity appears elevated beyond baseline • Nutrient levels may not be fully supporting optimal function ~~~~~~ Big-Picture Interpretation • Thyroid function appears to be influenced by immune system activity, which may be affecting hormone production and utilization. • The body appears to be compensating, but overall hormone activity remains lower than optimal. • Early signs of blood sugar imbalance are also present within this context. • Immune activity and nutrient status may be contributing to overall system imbalance. ~~~~~~ Top 5 Priority Systems to Address 1. Thyroid Function 2. Immune Function 3. Blood Sugar Balance 4. Nutrient Status 5. Stress & Adrenal Balance ~~~~~~ Follow-Up Considerations • Continued monitoring and follow-up testing can help track progress and guide next steps • Addressing thyroid and immune system activity together may support better outcomes • Lifestyle factors such as nutrition, sleep, and stress play an important role in overall balance • Supporting nutrient levels may help improve energy, recovery, and system function
06/21/2023	

Practitioner Notes by Collection Date

Collection Date	Practitioner Notes
06/21/2023 (cont.)	Overall Summary • There are strong signs that thyroid function may be significantly affected by immune system activity, which can influence energy, metabolism, and overall balance. • Immune activity appears to be elevated and may be contributing to ongoing internal stress. • Changes in lipid and metabolic patterns suggest increased strain on overall metabolic regulation. • Nutrient imbalances may be present and could be affecting multiple systems. ~~~~~~ Top Themes Identified • Strong thyroid immune activity impacting function • Elevated immune activity beyond baseline • Increased metabolic and lipid strain • Nutrient imbalance affecting system efficiency ~~~~~~ Big-Picture Interpretation • Thyroid function appears to be heavily influenced by immune system activity, which may be limiting effective hormone function. • The immune system appears to be in a more activated state, contributing to overall system stress. • Metabolic patterns suggest the body may be under increased strain in managing energy and lipid balance. • Nutrient imbalances may be contributing to reduced system efficiency and resilience. ~~~~~~ Top 5 Priority Systems to Address 1. Thyroid Function 2. Immune Function 3. Cholesterol & Lipid Balance 4. Nutrient Status 5. Blood Sugar Balance ~~~~~~ Follow-Up Considerations • Continued monitoring and follow-up testing can help track progress and guide next steps • Focusing on thyroid and immune system balance may help reduce overall system strain • Lifestyle factors such as nutrition, sleep, and stress play an important role in overall balance • Improving nutrient status may help support metabolic function and long-term resilience

Overall Practitioner Notes

What's Changed Since Your Last Test

- Thyroid-related immune activity appears to have improved, suggesting less immune-driven stress on thyroid function.
- Hormone and stress response patterns now appear lower overall, which may reflect reduced system output compared to the previous test.
- Blood sugar regulation shows early signs of change, indicating a possible shift toward increased metabolic demand.
- Nutrient status appears to remain an ongoing area of support and may continue to influence overall system balance.

Disclaimer

- All content provided by LabSmarts, including reports, insights, text, images, and other materials, is for informational and educational purposes only and is not intended to diagnose, treat, cure, or prevent any medical condition. It does not replace professional medical advice.
- Always consult your physician or qualified healthcare provider with any questions regarding a medical condition.
- Any insights, possible root causes, or testing considerations are not exhaustive and should not be interpreted as definitive conclusions. Reliance on this information is at your own risk.