



CCFM Comprehensive Labs and Functional Ranges

Blood Chemistry Report – MEN			
Marker	Functional Range	Lab Range	
Glucose	75 – 90 mg/dL	65	- 99
Hemoglobin A1c	4.6 – 5.3 %	4.8	- 5.6
Uric Acid	3.7 – 6.0 mg/dL	3.7	- 8.6
BUN	13 – 18 mg/dL	6	- 24
Creatinine	0.85 – 1.1 mg/dL	0.76	- 1.27
BUN/Creatinine Ratio	8 – 19	8	- 19
eGFR if Non-African American		>	59 mL/min/ 1.73m ²
eGFR if African American		>	59 mL/min/ 1.73m ²
Sodium	135 – 140 mEq/L	134	- 144
Potassium	4.0 – 4.5 mmol/L	3.5	- 5.2
Chloride	100 – 106 mEq/L	96	- 106
CO ₂	25 – 30 mEq/L	20	- 29
Calcium	9.2 – 10.1 mg/dL	8.7	- 10.2
Parathyroid Hormone, Intact	15 – 60 pg/mL	15	- 65
Phosphorus	3.0 – 4.0 mg/dL	2.5	- 4.5
Magnesium	2.0 – 2.6 mg/dL	1.6	- 2.3
Protein, total	6.9 – 7.4 g/dL	6.0	- 8.5
Albumin	4.0 – 5.0 g/dL	3.5	- 5.5
Globulin	2.4 – 2.8 g/dL	1.5	- 4.5
A/G ratio	1.5 – 2.0	1.2	- 2.2
Bilirubin, total	0.1 – 1.2 mg/dL	0.0	- 1.2
Alkaline Phosphatase	42 – 107 IU/L	39	- 117



Marker	Functional Range	Lab Range	
LDH	140 – 180 U/L	121	- 224
AST	0 – 25 U/L	0	- 40
ALT	0 – 26 U/L	0	- 44
GGT	0 – 29 U/L	0	- 65
TIBC	275 – 425 mcg/dL	250	- 450
UIBC	175 – 350 mcg/dL	150	- 375
Iron	40 – 135 mcg/dL	40	- 155
Iron saturation	17 – 45 %	15	- 55
Ferritin	30 – 200 mcg/dL	30	- 400
Vitamin B-12	450 – 2000 pg/mL	232	- 1245
Folate, Serum	> 8.0 ng/mL		> 3.0
Calcitriol (1,25 di-OH Vitamin D)	19.9 – 79.3 ng/mL	19.9	- 79.3
Vitamin D, 25-hydroxy	35 – 60 ng/mL	30.0	- 100.0
Cholesterol, total	150 – 220 mg/dL	100	- 199
Triglycerides	50 – 100 mg/dL	0	- 149
HDL	55 – 85 mg/dL		> 39
LDL	0 – 140 mg/dL	0	- 99
T. Chol / HDL Ratio	< 3	0	- 5.0
Triglycerides / HDL Ratio	< 2		< 3.8
LDL-P Low			< 1000
LDL-P Moderate		1000	- 1299
LDL-P Borderline High		1300	- 1599
LDL-P High		1600	- 2000
LDL-P Very High			> 2000
LDL-P Bredesen Protocol	< 1100		
APO-B	40 – 125 mg/dL	0	< 130
CRP-hs	< 1.0 mg/L	0.00	- 3.00
Homocysteine	< 7.0 mcmol/L	0.0	- 15.0
TSH	0.5 – 2.0 mU/L	0.45	- 4.500



Marker	Functional Range	Lab Range		
T4, total	6.0 – 12 mcg/dL	4.5	-	12.0
T3 Uptake	30 – 38 ng/dL	24	-	39
T3, Total	100 – 180 ng/dL	71	-	180
T3, Free	2.5 – 4.0 pg/mL	2	-	4.4
T4, Free	1 – 1.5 ng/dL	0.82	-	1.77
Reverse T3	9 – 21 ng/dL	9.2	-	24.1
Thyroid – TPO Ab		0	-	34 IU/mL
Thyroid – TG Ab		0	-	0.9 IU/mL
Insulin	3 – 7 mIU/mL	2.6	-	24.9
Copper	83 – 157 mcg/dL	72	-	166
Zinc	90 – 120 mcg/dL	56	-	134
Zinc / Copper Ratio	> 0.85			
Serum Methylmalonic Acid (MMA)	< 300 nmol/L	0	-	378
WBC	5.0 – 8.0 x10 ⁹ /L	3.4	-	10.8
RBC	4.4 – 4.9 x10 ¹² /L	3.77	-	5.28
Hemoglobin	14 – 15 g/dL	13.0	-	17.7
Hematocrit	40 – 48 %	37.5	-	51.0
MCV	85 – 92 fL	79	-	97
MCH	27.7 – 32.0 pg	26.6	-	33.0
MCHC	32 – 35 g/dL	31.5	-	35.7
RDW	11.5 – 15.0 %	12.3	-	15.4
Platelets	150 – 379 x10 ⁹ /L	150	-	379
Neutrophils	40 – 60 %			
Lymphocytes	25 – 40 %			
Monocytes	4.0 – 7.0 %			
Eosinophils	0.0 – 3.0 %			
Basophils	0.0 – 3.0 % of lymphocytes			



Blood Chemistry Report – WOMEN				
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Glucose	75 – 90 mg/dL	65	-	99
Hemoglobin A1c	4.4 – 5.4 %	4.8	-	5.6
Uric Acid	3.2 – 5.5 mg/dL	2.5	-	7.1
BUN	13 – 18 mg/dL	8	-	27
Creatinine	0.7 – 1.0 mg/dL	0.57	-	1.00
BUN/Creatinine Ratio	9 – 23	9	-	23
eGFR if Non-African American			>	59 mL/min/ 1.73m ²
eGFR if African American			>	59 mL/min/ 1.73m ²
Sodium	135 – 140 mEq/L	134	-	144
Potassium	4.0 – 4.5 mmol/L	3.5	-	5.2
Chloride	100 – 106 mEq/L	97	-	108
CO ₂	25 – 30 mEq/L	18	-	29
Calcium	9.2 – 10.1 mg/dL	8.7	-	10.2
Parathyroid Hormone, Intact	15 – 60 pg/mL	15	-	65
Phosphorus	3.0 – 4.0 mg/dL	2.5	-	4.5
Magnesium	2.0 – 2.6 mg/dL	1.6	-	2.6
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Albumin	4.0 – 5.0 g/dL	3.6	-	4.8
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A/G ratio	1.5 – 2.0	1.1	-	2.5
Bilirubin, total	0.1 – 1.2 mg/dL	0.0	-	1.2
Alkaline Phosphatase	42 – 107 IU/L	39	-	117
LDH	140 – 180 U/L	119	-	226
AST	0 – 23 U/L	0	-	40
ALT	0 – 20 U/L	0	-	32



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TIBC	275 – 425 mcg/dL	250	- 450
UIBC	175 – 350 mcg/dL	150	- 375
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Iron saturation	17 – 45 %	15	- 55
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Triglycerides	50 – 100 mg/dL	0	- 149
HDL	55 – 85 mg/dL		> 39
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MCV	85 – 92 fL	79	-	97
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