

## Blood Panel and Bio-Markers

Biomarkers for Chronic Disease Evaluation	Physiological Targets
Chemistry	
CBC	
Cholesterol (total)	Less than 200 mg/dL and greater than 110 mg/dL
LDL (not calcd)	Less than 100 mg/dL
HDL	Males greater than 50 mg/dL Females greater than 60 mg/dL
Triglycerides	Less than 130 mg/dL and greater than 50 mg/dL
Apo A1 and Apo B	Less than 0.6
Fasting glucose and insulin	Insulin less than 7 mIU/mL Glucose less than 95 mg/dL and greater than 60 mg/dL
HgB A1c (Glycohemoglobin)	Glycosylated hemoglobin (Hb A1c less than 5.5%)
ALT and AST (LFTs)	ALT and AST within normal range
GGTP	GGTP less than top 20% of normal range (xenobiotic toxicity)
hsCRP	Less than 0.6 mg/L
Homocysteine	Greater than 4ng/mL and less than 8.5 ng/mL
Uric acid	Less than 5.0 mg/dL
Thyroid stimulating hormone (TSH)	Less than 2.5 mIU/L but greater than 1.5 mIU/L
Thyroxine (T4)	5.0 mcg/dL to 10.0 mcg/dL
Triiodothyronine (T3)	70 ng/dL to 150 ng/dL
Anti-nuclear antibody (ANA)	Less than 1:40
Anti – CCP antibody	Negative titre
Anti-thyroidal and anti-gliadin antibodies	Negative titre
Prostate specific antigen (PSA)	Less than 4 ng/mL
Lp – PLA2	Less than 300 ng/mL
Lp(a)	Less than 7.0 mg/dL
Urinary Microalbumin Sensitive for HBP Beginning of Insulin Resistance	Less than 30 mg/g creatinine
25 Hydroxyvitamin D3	Serum level 35-100 ng/mL
Body Composition (BIA)	Less than 24% body fat Within normal range for muscle mass relative to body height and weight (BMI in the range of 18.5 – 22)
Blood Pressure	Systolic less than or equal to 110 mm Diastolic equal to or less than 70 mm