



BIOCHEMISTRY

BLOOD - SERUM

25 OH VITAMIN D

Vitamin D Comment

Result	Range	Units
67	50 - 250	nmol/L



The Working Group of the Australian and New Zealand Bone and Mineral Society, Endocrine Society of Australia and Osteoporosis Australia have recommended that the Vitamin D level should be greater than 50 nmol/L.

BLOOD - PLASMA

HOMOCYSTEINE

Result	Range	Units
8.0	6.0 - 15.0	umol/L



INTEGRATIVE MEDICINE

BLOOD - SERUM

Free Copper Index

COPPER

Copper ug/dl

CAERULOPLASMIN

CPLS-bound Cu

% Free Copper

Result	Range	Units
20.6	11.0 - 22.0	umol/L
131.2		ug/dL
0.33	0.18 - 0.40	g/L
100		
24	5 - 25	%



Integrative Medicine Comments

Plasma Copper Reference Ranges (Additional):

Female on Contraceptives: 20.8 - 34.8 umol/L

ELEVATED Cu/Zn RATIO:

The ratio of copper to zinc is clinically more important than the individual levels of each analyte.

Elevated copper/zinc ratios can be particularly serious for persons with low blood histamine (over methylation). This combination of imbalances has been associated with anxiety, panic disorders, paranoia and hallucinations.

LOW CAERULOPLASMIN LEVEL:

Low Caeruloplasmin levels are associated with conditions such as Autism, Alzheimer's disease, Parkinson's disease

Treatment Considerations:

Assess copper status and treat accordingly. Investigate and treat oxidative stress (e.g. CoQ10, acai berry, glutathione)

BLOOD - Li HEPA

HISTAMINE

Histamine Comment

Result	Range	Units
45.0	28.0 - 51.0	ug/L



Histamine level is within range.

BLOOD - NA HEP

ZINC

Copper/Zinc Ratio

Result	Range	Units
18.2	9.0 - 19.0	umol/L
1.13 *H	0.80 - 1.00	RATIO

