



BIOCHEMISTRY

BLOOD - SERUM

25 OH VITAMIN D

Result	Range	Units
60	50 - 250	nmol/L



Vitamin D Comment

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.

Recommended Target Range:	125 - 200	nmol/L
Deficient Level:	< 50	nmol/L
Insufficient Level:	50 - 74	nmol/L
Sufficient Level:	75 - 250	nmol/L
Excessive Level:	> 250	nmol/L

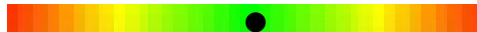
COMMENT:

25-hydroxy Vitamin represents the body's stores/reserves level. Where levels are deemed sub-optimal, consider assessing 1-25-dihydroxy Vitamin D3 (the active form of the molecule). This may be tested off the existing specimen at the laboratory within 7 days. If you wish to proceed with this test, please forward a new request form for this patient.

BLOOD - PLASMA

HOMOCYSTEINE

Result	Range	Units
8.2	5.0 - 12.0	umol/L



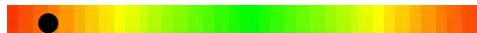
INTEGRATIVE MEDICINE

BLOOD - SERUM

Free Copper Index

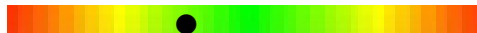
COPPER

Result	Range	Units
6.0 **L	11.0 - 22.0	umol/L



CAERULOPLASMIN

Result	Range	Units
0.24	0.18 - 0.40	g/L



% Free Copper

Result	Range	Units
0 *L	5 - 25	%



Integrative Medicine Comments

Plasma Copper Reference Ranges (Additional):

Female on Contraceptives: 20.8 - 34.8 umol/L

LOW Cu/Zn RATIO:

Aim for a copper: zinc ratio of 0.8-1.0

Consider following treatment recommendations for low copper and/or high zinc.

LOW FREE COPPER:

Supplement with Copper and Zinc.

Optimal free Copper of 5-25% is recommended by Dr B Walsh.

Retesting Zinc and Copper levels after 3 months of treatment is recommended.

BLOOD - Li HEPA

HISTAMINE

Result	Range	Units
22.0 *L	28.0 - 51.0	ug/L



(*) Result outside normal reference range

(**) Result is critically abnormal

(L) Result is below lower limit of reference range



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Histamine Comment

LOW WB HISTAMINE LEVELS:

Low Whole Blood Histamine is otherwise known as Histapenia.

In assessing Histamine levels, Diamine Oxidase (DAO) should also be tested concurrently.

Serum/plasma copper levels in histapenic patients are often abnormally high. As copper is a brain stimulant (and also destroys histamine), the elevated serum/plasma (and presumably brain) copper level probably accounts for many visible symptoms, including the low blood histamine level.



Behavioral symptoms in high-copper histapenia include paranoia and hallucinations in younger patients. In older patients, depression may predominate. Some studies of schizophrenics have revealed high blood copper, as seen in histadelia, with low urinary copper (showing that copper is being retained) as well as low blood zinc.

Treatment considerations:

Treatment protocol consists of the administration of Amino Acid Histidine, (converts to histamine), a diet high in protein, supplement with B6, Folic Acid & B12 injections as they increase histamine levels while lowering the degree of symptoms. Zinc and manganese with vitamin C remove copper from the tissues. Copper destroys histamine and therefore as copper levels decrease, histamine levels should return towards normal. With this treatment the high blood copper is slowly reduced and symptoms are slowly relieved in several months' time.

Treating histadelia is not a quick process. Early noticeable results/improvements may not be seen until close to 6-10 weeks. Treatment can take more than 12 months to complete.

To find out more about this see Mental Illness: The Nutrition Connection, a book by Carl Pfeiffer. The prognosis is seen to be good if the histadelic patient cooperates with treatment and works to give up detrimental addictions.

ZINC	10.1	9.0 - 19.0	umol/L	
Copper/Zinc Ratio	0.59 *L	0.80 - 1.00	RATIO	

Tests ordered: HIAM,ZN,HOMO,IMPEI,VITD,CFee,Cu/Zn,FCuInd,PfeifeeB

(*) Result outside normal reference range

(**) Result is critically abnormal

(L) Result is below lower limit of reference range