

Zinc Zn

General:

Zinc from food is reabsorbed in the upper small intestine. Zinc is excreted via kidney and via sweat. The main zinc concentration is found in the erythrocyte, in plasma, zinc is bound to approx. 15% to α 2-macroglobulin and the remaining part to albumin. Zinc deficiency causes acrodermatitis enteropathica. Hereditary zinc deficiency due to a resorption defect presents early with: diarrhea, growth delay, anorexia, anemia, hypogonadism, delayed wound healing.

The following tests are available:

- **Zinc in serum**

Indication: Acrodermatitis enteropathica, wound healing abnormalities, parenteral diet, chronic diseases

Material: 1 ml serum

Stability: 2 weeks at 2 to 8°C

TAT: same day, FML

Method: PHO

Units: $\mu\text{g/dl}$

Ref.- range: see report

Note: 1% hemolysis results in a Zinc increase of 15%!

- **Zinc in RBC (erythrocytes)**

Material: 3 ml EDTA + 1 ml serum

TAT: 7-10 days*

Method: AAS

Units: $\mu\text{g/dl}$

Ref.- range: 1000 – 1800

- **Zinc in urine**

Material: 10 ml urine (24 hrs Urine)

TAT: 7-10 days*

Method: IPMS-RECH

Units: $\mu\text{g}/24\text{h}$

Ref.- range: 250 - 850

Note: Since urine zinc secretions show significant fluctuations the analysis in serum is recommended

- **Zinc in seminal fluid**

Material: 1 ml seminal fluid

TAT: 7-10 days*

Method: AAS

Units: $\mu\text{g}/\text{ml}$

Ref.- range: 70 – 250

- **Zinc in whole blood**

Material: 2 ml EDTA blood

TAT: 5-7 days*

Method: AAS

Units: $\mu\text{g}/\text{dl}$

Ref.- range: 400 - 750

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>