

Osmolality

General:

Plasma osmolality is the most important test in the evaluation of the internal water balance. In euglycemic patients, changes of plasma osmolality usually follow sodium concentrations as sodium ions form 50% of the complete plasmatic osmolality. However, other osmotically active substances might influence the osmolality (e.g. ethanol.)

The following tests are available:

- **Osmolality in serum**

Indication: Suspicion of diabetes insipidus, polydipsia, exsiccosis, polytransfusion

Material: 1 ml serum

TAT: 5-7 days*

Method: GPE, decrease of freezing point

Units: mosm/kg H₂O

Ref.- range: 280 – 310

- **Osmolality in urine**

Indication: The regulation of urine osmolality is used in the evaluation of the concentration ability of the kidneys in the concentration test.

Material: 10 ml urine

TAT: 5-7 days*

Method: GPE, decrease of freezing point

Units: mosm/kg H₂O

Ref.- range: 50 - 1600

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