

Stool Electrolytes and Osmolality

Effective Date: December 05, 2017

The individual tests for stool electrolytes (sodium, potassium and chloride) (SOFT: LYTST) and osmolality (SOFT: OSMOS) will be discontinued. Instead a new panel, **Electrolyte and Osmolality Profile, Fecal** (SOFT: FECPA) has been created. Specimen requirements, preparation, storage, rejection and transport will follow the criteria set forth for Stool Osmolality. Interpretive guidelines are as follows:

Electrolytes (mmol/L): Reference ranges not established; see comment

Comment: Fecal chloride may be elevated (> 35 mmol/L) in phenolphthalein (or phenolphthalein plus magnesium hydroxide) induced diarrhea. Fecal chloride may be low (< 20 mmol/L) in sodium sulfate induced diarrhea. Fecal chloride concentration is markedly elevated > 60 mmol/L in infants and > 100 mmol/L in adults associated with congenital and secondary chloridorrhea.

Osmolality (mOsmol/kg): Reference range not established; see comment

Comment: Stool osmolality should be similar to serum osmolality. Marked increases (> 330 mOsmol/kg) in the absence of increased serum osmolality indicate improper storage. Marked decreases (< 220 mOsmol/kg) may indicate dilution with hypotonic fluid, e.g., factitious diarrhea. The test should be integrated into the clinical context for interpretation.

Osmotic Gap (mOsmol/kg, calculated), Fecal: Reference range not established; see comment

Comment : An Osmotic gap > 125 mOsmol/kg and fecal sodium < 60 mmol/L suggests an osmotic cause of diarrhea. An Osmotic gap <= 50 mOsmol/kg and fecal sodium > 90 mmol/L suggests a secretory cause of diarrhea. The test result should be integrated into the clinical context for interpretation.

Additional Information:

Osmotic Gap = Measured Osmolality (mOsmol/kg) - Calculated Osmolality (mOsmol/kg)
Calculated Osmolality = 2 x (fecal Na + fecal K)

If you have questions, please contact Client Services (1-800-551-0488, option 5).

Laboratory Test Directory: <http://beaumontlaboratory.com/test-lab-directory>.

Date submitted: November 14, 2017
Submitted by: Kenneth W. Simkowski, Sr., Ph.D., Technical Director, Chemistry, Royal Oak
Elizabeth Sykes, M.D., Medical Director, Automated Chemistry and Special Testing, Royal Oak
Yvonne Posey, M.D., Associate Medical Director, Automated Chemistry and Special Testing, Royal Oak

Beaumont Laboratory

Customer Service

1-800-551-0488

28050 Grand River Ave.
Farmington Hills, MI 48336

468 Cadieux Road
Grosse Pointe, MI 48230

3601 West 13 Mile Road
Royal Oak, MI 48073

44201 Dequindre Road
Troy, MI 48085