

Chloride (Serum)

Description	Chloride is measured as part of the U&E profile
Indication	Investigation of acid-base disorders and fluid balance
Additional Info	Chloride is the major extracellular anion. Electrical neutrality is maintained by chloride acting as the rate limiting factor in the tubular reabsorption of sodium in the kidney and by the chloride shift in RBCs.
Concurrent Tests	Blood gas if acid-base query
Dietary Requirements	N/A
Interpretation	<p>Changes in serum chloride concentration often parallel changes in sodium concentration.</p> <p>Hyperchloraemia is a complication of IV 0.9% saline administration which if severe can lead to reduced renal blood flow and impaired renal function. Hyperchloraemia also occurs in dehydration and when plasma bicarbonate levels are reduced i.e. normal anion gap acidosis (e.g. due to gastrointestinal loss in severe diarrhoea and intestinal fistulae); in chronic respiratory alkalosis; in renal tubular acidosis; and in mineralocorticoid deficiency (e.g. Addison's disease).</p> <p>Hypochloraemia (low plasma chloride) may be seen after prolonged vomiting or nasogastric drainage (loss of gastric HCl); in diabetic ketoacidosis; in mineralocorticoid excess; in salt-losing renal disease (renal tubular damage) such as pyelonephritis; in chronic respiratory acidosis and iatrogenically through fluid administration such as dextrose.</p>
Collection Conditions	N/A
Frequency of testing	See ACB Minimum Re-testing Interval Project (2013)