

Vitamin C	
Description	Plasma Vitamin C is assayed at Glasgow Royal Infirmary.
Indication	Scurvy, anaemia
Additional Info	L-Ascorbate is a strong reducing agent aiding protection against oxidative damage, regenerated by enzymes and glutathione. Combinations of antioxidants seem to improve wound healing but this cannot be achieved by vitamin C alone. Vitamin C is a co-factor for several biochemical reactions, including those involving collagen, carnitine and dopamine. Vitamin C is also involved in the synthesis and catabolism of tyrosine.
Concurrent Tests	N/A
Dietary Requirements	N/A
Interpretation	<p>SCURVY: avitaminosis from lack of Vitamin C, synthesised collagen is too unstable to perform normally leading to liver spots on skin, spongy gums and bleeding from all mucous membranes. Advanced scurvy can cause suppurating wounds, loss of teeth and eventually even death. LUNG</p> <p>BORNE DISEASES: smokers with poor dietary Vitamin C intake are at a higher risk of lung-borne disease than smokers with higher concentrations of Vitamin C in the blood.</p> <p>ATHLEROSCLEROSIS: it has been proposed that chronically low blood levels of vitamin C contribute to athlerosclerosis.</p> <p>OXIDATIVE STRESS: oxidative stress induced diseases encompass cardiovascular disease, hypertension, chronic inflammatory disease and diabetes causing lowered plasma ascorbate levels.</p> <p>TOXICITY: because the body cannot store large levels of this vitamin, it is remarkably non-toxic although in high dose supplementation nausea and vomiting, diarrhoea, flushing and skin rashes have been observed.</p>
Collection Conditions	Please contact the laboratory when send a sample
Frequency of testing	As required