Total Protein (serum)	
Description	Total Protein is measured as part of the liver function and calcium/bone profiles.
Indication	Nutritional status, liver function, calcium homeostasis, malignancy.
Additional Info	Plasma proteins are synthesised predominantly in the liver, plasma cells, lymph nodes, spleen and bone marrow. In the course of disease the total protein concentration and also the percentage represented by individual fractions can significantly deviate from normal values.  Hypoproteinaemia can be caused by blood loss, nephrotic syndrome, severe burns and salt retention syndromes.  Hyperproteinaemia is associated with dehydration and multiple myeloma.  The globulin fraction may be calculated by subtracting the albumin concentration from the total protein value. Albumin to globulin ration changes occur in cirrhosis, renal disease, and inflammation
Concurrent Tests	N/A
Dietary Requirements	N/A
Interpretation	Total Protein levels may be misleading and may be normal despite quite marked abnormalities in the constituent proteins. It is therefore important to interpret the total protein result in conjunction with the albumin and, where appropriate, other individual proteins.
Collection Conditions	No restrictions, although avoid risk of drip arm contamination.
Frequency of testing	For monitoring chronic conditions, protein measurement more frequently than every 2 weeks is inappropriate. Concentrations may change more rapidly, reflecting changes in hydration rather than nutritional status.

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