

<b>TSH (plasma)</b>	
<b>Description</b>	Thyrotrophin (TSH) is released from the thyrotroph cells in the anterior pituitary under the stimulation of TRH from the hypothalamus. It stimulates the synthesis and secretion of the thyroid hormones T4 and T3 from the thyroid gland and is controlled itself by negative feedback from these hormones.
<b>Indication</b>	TSH measurement is the single most sensitive, specific and reliable test of thyroid status in both overt and subclinical thyroid disorders. It is usually measured with FT4 to form a TFT profile that allows detection of almost all causes of thyroid dysfunction, including those arising from hypothalamic-pituitary dysfunction. Routine testing of thyroid function in patients admitted acutely to hospital is not warranted unless specific clinical indications exist.
<b>Additional Info</b>	TSH results may also be misleading for a number of reasons and should be interpreted with other thyroid hormones and the patient's clinical presentation. Situations when TSH results should be interpreted carefully include: increased or decreased result due to assay interference (by heterophilic antibodies), in pregnancy, in TSH-secreting adenomas, in thyroid hormone resistance and during non-thyroidal illnesses (TSH may be slightly low during illness and increase during recovery). Treatment with certain drugs may also interfere with TSH secretion, such as glucocorticoids.
<b>Concurrent Tests</b>	FT4
<b>Dietary Requirements</b>	N/A.
<b>Interpretation</b>	Abnormal thyroid results in acutely ill patients should only be repeated when the patient is well. TSH interpretation In the early months following treatment for a thyroid disorder should be interpreted with knowledge of the delayed recovery of suppressed thyrotrophs in hyperthyroidism and the response time of a raised TSH following thyroxine therapy for treatment of hypothyroidism. See <a href="#">UK Guidelines for the Use of Thyroid Function Tests</a> for more detailed interpretation. As TSH varies during pregnancy, trimester related reference ranges should be applied to results.
<b>Collection Conditions</b>	N/A
<b>Frequency of testing</b>	TSH concentration should be measured 2 – 3 months following a change in thyroxine dose.