

THYROID PROFILE,  
TOTAL, SERUM  
( CLIA)

T3, Total - ng/mL

T4, Total - ug/dL

TSH Ultrasensitive - uIU/mL

Interpretation

TEST	REFERENCE GROUP	REFERENCE RANGE
T3 Total in ng/mL	0-3 days	1.00-7.40
	4-30 days	Not Established
	1-11 months	1.05-2.45
	1-5 years	1.05 – 2.69
	6-10 years	0.94-2.41
	11-15 years	0.82-2.13
	16-20 years	0.80-2.10
	> 20 years	0.60-1.81
TSH in uIU/mL	1-4 days	1.000-39.000
	5 days – 5 months	1.700-9.100
	5 months – 20 years	0.700 – 6.400
	> 20 years	0.550 – 4.780

T4 Total in ug/mL	1-3 days	11.80-22.60
	4-7 days	Not Established
	1-2 weeks	9.80-16.60
	15-30 days	Not Established
	1-4 months	7.20-14.40
	4-12 months	7.80-16.50
	1-5 years	7.30-15.00
	5-10 years	6.40-13.30
	10-15 years	5.60-11.70
	> 15 years	5.01-12.45

PREGNANCY	REFERENCE RANGE FOR TSH IN uIU/mL ( As per American Thyroid Association)
1 <sup>st</sup> Trimester	
2 <sup>nd</sup> Trimester	0.100 – 2.500
3 <sup>rd</sup> Trimester	0.200 – 3.000
	0.300– 3.000

Note: 1. TSH levels are subject to circadian variation, reaching peak levels between 2 - 4.a.m. and at a minimum between 6-10 pm . The variation is of the order of 50% . hence time of the day has influence on the measured serum TSH concentrations.

2. Recommended test for T3 and T4 is unbound fraction or free levels as it is metabolically active.

3. Physiological rise in Total T3 / T4 levels is seen in pregnancy and in patients on steroid therapy.

Clinical Use

- Primary Hypothyroidism
- Hyperthyroidism
- Hypothalamic – Pituitary hypothyroidism
- Inappropriate TSH secretion
- Nonthyroidal illness
- Autoimmune thyroid disease
- Pregnancy associated thyroid disorders
- Thyroid dysfunction in infancy and early childhood

Dr Lal PathLabs