

MEMORANDUM

To : All Laboratory Users

From : Department of Laboratory Medicine

Date : 18 April 2023

Re : Update in Thyroid Reference Ranges in Pregnancy

Dear Users of Laboratory Medicine

With effect from 6.00pm on 25 April 2023 the thyroid reference ranges in pregnancy will be updated to harmonise with Kandang Kerbau Women's & Children's Hospital established ranges.

	Current Reference Interval		Updated Reference Interval	
fT4 in pregnancy	First Trimester	10.9 – 17.7 pmol/L	09 to 14 wks gestation	11.4 – 19.5 pmol/L
	Second Trimester	9.3 – 15.2 pmol/L	18 to 22 wks gestation	10.1 – 15.4 pmol/L
	Third Trimester	7.9 – 14.1 pmol/L	28 to 32 wks gestation	9.5 – 14.9 pmol/L
			34 to 39 wks gestation	8.9 – 14.7 pmol/L
TSH in pregnancy	First Trimester	0.16 – 3.78 mIU/L	09 to 14 wks gestation	0.01 - 2.39 mIU/L
	Second Trimester	0.34 – 3.51 mIU/L	18 to 22 wks gestation	0.33 - 3.33 mIU/L
	Third Trimester	0.34 – 4.32 mIU/L	28 to 32 wks gestation	0.37 - 3.49 mIU/L
			34 to 39 wks gestation	0.38 - 3.28 mIU/L

* fT4 & TSH reference intervals for women with singleton pregnancies 15 – 50 years old (inclusive)

*Be cautious with use of low TSH concentrations for diagnosis of clinical/subclinical hyperthyroidism in 1st trimester.

Reference: CKM Ho *et al.* Gestational age-specific reference intervals for serum thyroid hormone levels in a multi-ethnic population. Clin Chem Lab Med 2017;55:1777- 88.

For enquiries please contact the laboratory staff at 67724346.

Yours sincerely

Dr Sharon Saw
 Principal Scientific Officer
 Department of Laboratory Medicine