

NORIP

Suggested reference limits for TIBC in serum

Reference limits suggested by NORIP

All: 46,3 – 77,9 umol/L (N=761)

Female: 45,6 – 76,0 umol/L

Male: 46,3 – 80,4 umolL

Distribution of results in the main group and in subgroups

	Percentiles				
	2.5	25	50	75	97.5
All	46,3	54,7	59,6	65,1	78,0
Female	46,3	54,7	60,9	66,3	80,4
Male	45,6	54,6	59,0	63,6	76,0

Comments to the distributions (N=761, all results)

Skewness: 0,473 (SE Skewness: 0,089) → Positively skewed with extended right tail

Kurtosis: 0,588 (SE Kurtosis: 0,177) → Positively, too peaked

Logarithmic transformation:

Skewness: 0,038 (SE Skewness: 0,089) → Symmetric

Kurtosis: 0,233 (SE Kurtosis: 0,177) → Gaussian kurtosis

The 5 lowest values: 39,61-39,90-40,92-40,98-41,53

The 5 highest values: 91,67-89,09-88,91-83,68-83,63

Other comments

NORIP exclusions: 148 female with oestrogen are excluded, and 28 values with large dispersion.
No further exclusions of reference values are made in addition to the NORIP exclusions.

Suggested reference limits

All results (both gender): 46 – 78 umol/L (N=761)

90% confidence interval: (45,4-47,0), (76,1-79,8)

Comments to the suggested reference limits

Number of reference individuals: 761 (419 male, 342 female).

Age 18-29years: 166, 30-39years: 101, 40-49years: 146, 50-59years: 148,
60-69years: 61, 70-79years: 118, >80years: 21.

Norway (457/60%), Sweden (202/27%), Iceland (72/9%), Denmark (30/4%), Finland (0).

Roche Hitachi (518), Beckman Coulter (96), Dade Behring (43), Ortho (23),

Roche Cobas (69), Bayer Technicon (12).

IFCC (as Transferrin) (443), Fotometri (219), IFCC Behring NIA (as Transferrin) (43),

Roche (33), Vitros (23),

66% from fasting individuals (\geq 10 hours since last meal). 86% of the specimen are collected between 6.am-10.am.

Female values lie at a higher level than male. In female the level is decreasing with age.

Subpopulations: Male: Low 2,6% (N), High 1,4% (M). Female: Low 2,0% (N), High 3,2% (N).