Before you compare two results: units and methods · worked example

Use with two reports, or one report with two dates. Check every marker before reading any change between the dates. This sheet does not interpret results: it only checks that two numbers can be put side by side.

1. The two dates

	Date 1	**Date 2**
Lab	Fictional Wellness Laboratory	Fictional Wellness Laboratory
Date and time collected	04/02/2026 08:00	10/15/2026 08:20
Fasting	Yes (12 h)	Yes (12 h)
Specimen	Serum	Serum
Footnotes about method or unit changes	None	Four (vitamin D, B12, LDL, testosterone)

2. Marker by marker

Marker	**Date 1: value, unit, method**	**Date 2: value, unit, method**	**Same unit?**	**Same method?**	**Same interval?**	**Ready to put side by side? What first?**
Vitamin D, 25-Hydroxy	28 ng/mL, Immunoassay	33 ng/mL, LC-MS/MS	yes	no	yes	Not yet. Ask the lab whether the immunoassay and LC-MS/MS results can be compared.
Vitamin B12	410 pg/mL, Immunoassay	335 pmol/L, Immunoassay	no	yes	yes, once converted	After converting: 335 pmol/L ÷ 0.738 = 454 pg/mL. Then side by side.
LDL Cholesterol Calc	128 mg/dL, Calculated (Friedewald)	121 mg/dL, Direct measurement	yes	no	yes	Not yet. Calculated and directly measured LDL are different methods. Ask.
Ferritin	30 ng/mL, Immunoassay	34 ng/mL, Immunoassay	yes	yes	yes	Yes, side by side as printed.
TSH	2.40 uIU/mL, Immunoassay	2.20 uIU/mL, Immunoassay	yes	yes	yes	Yes, side by side as printed.
Testosterone, Total	512 ng/dL, Immunoassay	17.2 nmol/L, LC-MS/MS	no	no	yes, once converted	Not yet. Unit and method both changed. 17.2 nmol/L ÷ 0.0347 = 496 ng/dL, but ask about the method first.

3. Checklist

☒ Same specimen ☐ Same unit, or converted with the factor written down ☐ Same method (read the footnotes)
☐ Same lab interval ☒ Same time of day and fasting state

Worked example from the fictional two-date report (Fictional Wellness Laboratory). Factors: vitamin B12 1 pg/mL = 0.738 pmol/L; testosterone 1 ng/dL = 0.0347 nmol/L. Ferritin and TSH pass every check; the other four need a conversion, a question, or both.

4. Questions for the lab or your clinician

1. Vitamin D, LDL and testosterone changed method between my two tests. Can the two results be compared?
2. Should my next test use the same method as the last one?