VITALS VAULT

FREE GUIDE

Blood Calcium Decoder

A sheet to read calcium on your lab report: total versus ionized, and how albumin changes the picture. Fill in the formula with your own numbers.

WHERE BLOOD CALCIUM TRAVELS

Form	Share of blood calcium
Free (ionized)	About 40%
Bound to protein, mostly albumin	About 50%
Bound to other molecules	About 10%

LOW-ALBUMIN CORRECTION: FILL IN YOUR VALUES

Measured Ca (mg/dL)	Albumin (g/dL)	0.8 x (4 – albumin)	Corrected Ca
8.2 (example)	3.0	0.8	9.0

WHAT CAN MOVE THE NUMBER

Ionized calcium can dip after meals, after moderate exercise and in the late afternoon. In 5,490 people with suspected calcium disorders, total and ionized calcium disagreed in 12.5%. Ionized testing is not needed for most people.

QUESTIONS TO ASK

- [ ] Is my calcium total or ionized, and is my albumin on the same report?
- [ ] Does my albumin change how I read my calcium?
- [ ] Do I need an ionized calcium test, or is total enough?
- [ ] Could time of day or recent exercise have shifted my result?

Sources: Ong 2012 (5,490 people); Kobylecki 2022. Observational; the formula applies to low albumin only.

Educational only. Not medical advice, and not a diagnosis. Take this to your own clinician. vitalsvault.com