

The Inositol Fact Sheet

Inositol is sold on sleep and calm. The randomised trials behind it were run somewhere else entirely: in women with polycystic ovary syndrome and in pregnancy, at four grams a day, measuring insulin and hormones. This sheet is the short version of what those trials actually did.

What inositol is

A simple carbohydrate your body makes, recycles and also gets from food such as beans, grains and citrus. It sits inside the signalling pathway cells use to respond to insulin, which is the reason researchers became interested in it. Nobody is deficient in it the way people are deficient in vitamin D or iron.

Where the evidence actually sits

- Polycystic ovary syndrome, where insulin often works poorly. This is the main research setting.
- Pregnancy, where myo-inositol has been trialled to see whether it prevents gestational diabetes.
- Sleep is not an established evidence base for inositol at the doses sold for it.

The dose the studies used

Four grams a day, typically split as two grams twice daily, taken continuously for three to six months. Products marketed for calm or sleep usually carry a small fraction of that per serving, and some ask you to cycle on and off across the week. A bottle used that way is not running the experiment those studies ran.

What it moved, and what it did not

- A prospective clinical study in women with polycystic ovary syndrome reported statistically significant reductions in luteinizing hormone and fasting serum insulin.
- A six month randomised trial comparing four grams of myo-inositol daily with metformin found HOMA-IR, the standard index of insulin resistance, unchanged on inositol.
- A pilot randomised trial of myo-inositol to prevent gestational diabetes found no significant difference in incidence versus placebo.

The honest read: small, sometimes inconsistent movements in hormone and insulin measures, in people who already have a metabolic problem.

Four questions worth asking before you spend anything

- Am I buying this for sleep or for a metabolic reason? Only one of those has a trial base.
- What do my fasting insulin and glucose actually look like?
- Does this product state the dose per serving plainly, and does that dose relate to the four grams the trials used?
- Should this conversation be happening with my clinician rather than with a label?

The part that matters most

Insulin resistance and polycystic ovary syndrome are diagnoses. They are identified with blood work and they have treatments with far more evidence behind them than any supplement. If the metabolic angle is what drew you to inositol, that is precisely the reason to bring it to a professional.

Sources: NICHD, MedlinePlus, the published trial record via PubMed and PMC, and the NIH Office of Dietary Supplements. Every claim in the article this sheet accompanies links to its source. Ageless Coach. Age Strong. Live Long. This is education, not medical advice.