

Sleep tracker buying matrix.

Five options, ranked by what they're actually good at. Plus the 4 metrics that are scientifically validated vs the 6 that are mostly marketing. Buy the one that matches your goal — or skip the device entirely.

The honest framing: no consumer wearable matches a polysomnography (PSG) lab study for sleep stages. They're useful for *trends over weeks*, not for diagnosing anything. If you suspect apnea or another disorder, the answer is a sleep study — not a better wristband.

DEVICE	BEST FOR	COST	ACCURACY (VS PSG)
Oura Ring (Gen 4) Ring	Long-term trends, HRV, body temperature shifts (cycle/illness signal) <i>Weak: Sleep stage accuracy ~60-70% vs PSG. Ring slips off in some hand sizes.</i>	\$299-449 hardware \$5.99/mo (required for full data)	Total sleep: ★★★★★ Stages: ★★★ HRV: ★★★★★
Whoop 5.0 Strap (no display)	Athletic recovery, training-load adjustment, stress quantification <i>Weak: Subscription-locked. No display = phone dependency. Strap discomfort for some.</i>	Hardware free \$30/mo (mandatory)	Total sleep: ★★★★★ Stages: ★★★ HRV: ★★★★★
Apple Watch (S10/Ultra) Smartwatch	All-purpose. Atrial fibrillation detection. Sleep apnea screening (S10+). <i>Weak: Battery requires charging twice daily for full sleep tracking. Bulky overnight.</i>	\$399-799 None for sleep (Fitness+ optional)	Total sleep: ★★★ Stages: ★★★ Apnea screen: ★★★★★
Fitbit Charge 6 / Sense Wristband / smartwatch	Budget entry point. SpO2 trending. Multi-day battery. <i>Weak: Google data integration concerns. Sleep score gamification can mislead.</i>	\$159-299 Premium \$9.99/mo for SpO2 + insights	Total sleep: ★★★ Stages: ★★ SpO2: ★★★
No tracker / paper diary Pen + notebook	CBT-I sleep restriction, anxiety-driven over-tracking, cost-conscious users <i>Weak: Subjective. Can't catch silent issues (apnea, restless legs).</i>	\$0 None	Subjective only — but that's often what matters clinically.

WHICH SIGNALS TO TRUST VS WHICH ARE MOSTLY MARKETING

TRUST THESE (VALIDATED)

Total sleep duration — accurate within 15-30 min in healthy adults.

Sleep latency — time to fall asleep, useful for CBT-I.

Resting heart rate trend — overnight RHR is a strong recovery signal.

HRV trend — week-over-week change tells you about autonomic stress.

TAKE WITH SKEPTICISM

REM/Deep/Light split — wearable algorithms guess; PSG measures.

"Sleep score" out of 100 — proprietary, not a clinical metric.

Body temperature in absolute °F — trends okay; numbers vague.

SpO2 single readings — oximetry on the wrist is noisy. Patterns over weeks matter.

"Stress score" — composite. Read the inputs, not the score.

DECISION TREE

Goal: train harder / recover smarter

→ **Whoop** if you accept the subscription model. → **Oura** if you want passive insight without phone-dependency. Apple Watch if you already own one.

Goal: catch a possible health issue

→ **Apple Watch S10+** for AFib + apnea screening, or talk to your doctor about an at-home sleep study (more definitive than any wearable).

Goal: do CBT-I / sleep restriction

→ **Paper diary or basic Fitbit.** Anything more granular often increases bedtime anxiety ("orthosomnia") and undermines the protocol.

Goal: track menstrual cycles via temp

→ **Oura.** Continuous skin-temp on the finger is the most accurate consumer-grade option, validated for cycle phase prediction.

Orthosomnia warning: a published phenomenon — people develop insomnia *because* their tracker keeps telling them they slept poorly. If a low score makes you anxious, hide the score and keep only the HRV trend. Or take a 2-week tracker break.