

Study Overview - Competitive Athlete Fueling Study

An observational study of energy availability, training load, and sports nutrition knowledge in competitive athletes

MALE & FEMALE COMPETITIVE ATHLETES, AGES 18–30 — CHOOSE TIER 1, 2, OR 3

VISIT 1 · ALL TIERS · OVERNIGHT FAST & NO EXERCISE 24 HOURS PRIOR

- Consent & screening
- Height & weight
- Resting BP / HR
- Sport nutrition knowledge (A-SNKQ)
- Urine specific gravity

- Body composition (DEXA)
- Body water (BIA)
- Resting metabolic rate
- Isometric mid-thigh pull
- Countermovement jump

✓ **TIER 1 COMPLETE**

1 visit · no monitoring

TIERS 2 & 3 — 5 DAYS: WEAR MONITOR + LOG TRAINING & DIETARY INTAKE

VISIT 2 · TIERS 2 & 3 · 5 DAYS LATER

- Weight
- Resting BP / HR
- Return training & activity log

- Remove HR/activity monitor
- Review dietary tracking

TIER 3 ONLY: Overnight fast required • Maximal oxygen consumption (VO₂max) treadmill test

✓ **TIER 2 COMPLETE**

2 visits · 5-day monitoring period

✓ **TIER 3 COMPLETE**

2 visits · 5-day monitoring + VO₂max