

Strength Training Checklist

EVIDENCE-BASED SESSION PROTOCOL · SPORT

PRE-SESSION

- Sleep: ≥7 hours last night**
< 6 hours → reduce load 10–15%. Sleep deprivation impairs force production and injury risk.
- Fuel: meal or snack 1–2 hours prior**
20–40g protein + carbohydrate. Morton et al., BJSM 2018.
- Hydration: urine pale yellow before training**
Dehydration of 2% body mass reduces strength output (Judelson, 2007).
- Review session plan: sets, loads, movements**
Mental rehearsal improves execution accuracy.
- Warm-up: 5–8 min progressive activation**
Dynamic mobility + movement-specific ramp-up sets (60%, 80% of working weight).

DURING SESSION

- Apply progressive overload principle**
Increase load, reps, or sets week-over-week. Schoenfeld, JSCR 2010.
- Rest intervals: 2–3 min for compound lifts**
< 1 min rest reduces subsequent set performance by 8–12%.
- Track each set: load × reps completed**
Log in app or paper. What gets measured gets managed.
- RPE 7–9 on working sets (not to failure each set)**
Leave 1–2 reps in reserve on most sets. Failure on every set impairs volume.
- Brace core before each compound movement**
Intra-abdominal pressure via 360° brace, not just sucking in.
- Control the eccentric: 2–3 sec lowering phase**
Eccentric loading drives hypertrophy disproportionately (Roig et al., 2009).

POST-SESSION

- Protein within 2 hours: 0.4g/kg body weight**
Post-workout anabolic window: wider than believed, but still real. Aragon & Schoenfeld, 2013.
- Note what was hard or missed**
Debrief in < 3 sentences. Adjusts next session.
- Rate recovery: 1–5 (fatigue, soreness, mood)**
Three consecutive low scores → deload week.
- Hydrate: replace lost fluid (weigh in/out if precise)**
~500ml per 0.5kg bodyweight lost.

WEEKLY STRUCTURE

- Frequency: each muscle group ≥2x per week**
Schoenfeld et al. meta-analysis (2016): twice weekly > once weekly for hypertrophy.
- Deload every 4–6 weeks: reduce volume 40–50%**
Not optional. Accumulated fatigue masks fitness. Planned deload prevents forced one.
- Prioritise sleep nights before heavy sessions**
Schedule your hardest training after best-sleep nights.

Key references: Schoenfeld BJ (2010, 2016) JSCR; Morton RW et al. (2018) BJSM; Judelson DA (2007) Med Sci Sports Exerc; Roig M et al. (2009) Br J Sports Med