

#21 Capacity Before Power — Always Build the Engine First

Build the Tank Before You Try to Use More of It

There are two phases to every training system: **capacity training** and **power training**. Capacity training *builds* the physiological system — it makes the tank bigger. Power training *fine-tunes* how much of that tank you can use in a race. **You must always do capacity work first. Trying to do power work without capacity is like installing a turbocharger in a 1-litre engine.**

Aerobic capacity training requires at least **8 weeks** to show full adaptation. Anaerobic power responds faster: 2–6 weeks. This is why a proper preparation starts with weeks of solid base work before speed work is introduced. **Racing without building the base first uses up the horse faster than it builds them.**

KEY POINTS

- **Capacity training** = grows the system. Minimum 8 weeks for full aerobic adaptation
- **Power training** = sharpens the system. Responds in 2–6 weeks
- Doing speed work before the base is built produces short-term sharpness and **long-term stagnation**
- A horse that peaked early in preparations almost always skipped the capacity phase
- The base never goes to waste — **every distance and every type of horse benefits from it**

THE SEQUENCE RULE

Always follow this order: **Aerobic Capacity (8+ weeks)** → **Anaerobic Capacity (3–5 weeks)** → **Anaerobic Power (2–4 weeks)** → **Taper**. Skipping or compressing phases means arriving at race day with an unfinished horse.

WHY SPRINTERS NEED BASE TOO

Even a 1000m sprinter needs 8 weeks of aerobic base. Not because they'll use it in the race — but because a large aerobic engine **clears lactate faster between training sessions**, allowing more speed work to be absorbed. The base enables the speed work.

STABLE QUESTION

"In your current preparation, how many weeks of genuine base work did this horse get before the gallops started — and was that enough to lay the foundation for everything that followed?"

TRAINER TAKEAWAY

The most common preparation mistake in racing is **rushing to speed work**. Early gallops feel good, the horse sharpens quickly, and owners are happy. But without the base underneath, the horse peaks early and fades mid-campaign. Build the engine first.

CONNECTS TO →

Week 1 #17: Aerobic capacity promotes trainability — the base is the foundation of everything. | **Friday #31:** Periodisation structures the capacity-then-power sequence across the full season.

#31 Periodisation — Training in Waves, Not Straight Lines*Structured Wave Patterns — The Framework of a Full Season*

The body adapts to a training stimulus for approximately **6 weeks**. After that, the same training produces less and less adaptation — diminishing returns. If you keep doing the same thing, the horse plateaus. **Periodisation is the structured solution to this biological reality.**

Instead of a straight line of increasing intensity, a periodised programme runs in **waves**: blocks of hard work alternate with blocks of lower-intensity regeneration. Each hard block drives a new adaptation before the window closes. Each recovery block allows supercompensation to complete. **Without periodisation, fitness plateaus and injury rates climb.**

KEY POINTS

- Any single training type only produces new adaptation for approximately **6 weeks**
- After 6 weeks without change, the horse plateaus — more work produces less result
- Periodisation deliberately **alternates hard blocks with recovery blocks** to reset the adaptation window
- A correctly periodised season produces **multiple fitness peaks** timed to key race targets
- Without periodisation, most horses peak once (usually early) and cannot be brought back

THE 3 CYCLE LEVELS

Microcycle = 1 week (daily schedule). **Mesocycle** = 2–7 weeks (one training block + recovery). **Macrocycle** = full season (3–6 months, two main peaks). Every session fits within all three levels.

PRACTICAL RACE PLANNING

If your target race is in 16 weeks: **weeks 1–8** aerobic base. **Weeks 9–12** anaerobic capacity and speed. **Weeks 13–14** peak intensity. **Weeks 15–16** taper. The horse arrives at peak fitness — not past it.

STABLE QUESTION

"Looking at the next 16 weeks of your programme — can you name what each phase is building, when each phase ends, and where the horse is meant to peak? Or is it still being made up week by week?"

TRAINER TAKEAWAY

Periodisation is just **planning training in blocks instead of a single continuous grind**. A horse trained in waves arrives at a target race fresh, peaked, and still improving. A horse trained in a straight line of grinding work arrives tired, flat, and past their peak. Waves win.

CONNECTS TO →

Mon #18: Supercompensation is why training works. | **Mon #19:** Rest IS training. | **Wed #29:** Four variables define every session. | **Wed #26:** Too much intensity paradoxically kills intensity. | **Fri #21:** Build capacity before power — always. | **Week 4 #31/#20:** Periodisation in practice — mesocycles and macrocycles.