**Week 30 – Recovery Strategies for Endurance Training: Nutrition, Hydration, Sleep, and Active Rest**

**Medical (Dr. Patel):**  
Dr. Patel highlighted the importance of hydration for recovery. Aarav’s hydration was monitored through weight checks and urine color tests, ensuring balance during endurance training. Training intensity was carefully adjusted to avoid fatigue while maintaining cardiovascular benefits.

**Physio (Rachel):**  
Rachel incorporated a structured active recovery phase. Aarav performed light cycling, swimming, yoga, stretching, and foam rolling to enhance circulation, reduce soreness, and restore mobility. This approach supported endurance gains while preventing overuse injuries.

**Nutrition (Carla):**  
Carla emphasized nutrient timing—especially glycogen replenishment post-exercise with balanced snacks (protein + carbs). Magnesium- and antioxidant-rich meals were added to aid muscle relaxation and reduce oxidative stress, while hydration strategies were reinforced with electrolyte balance.

**Mental Health (Dr. Isha, Neel & Rohan):**  
Dr. Isha introduced relaxation and breathing techniques to improve sleep depth and quality. Neel encouraged Aarav to maintain consistency in sleep schedules, while Rohan promoted reflection and community engagement for emotional balance.

**Engagement (Aarav):**  
Aarav tracked hydration, recovery, and sleep diligently, noticing fewer cravings and improved balance in energy levels. He actively engaged with the recovery framework, reinforcing discipline.

**Overall:**  
Week 30 was dedicated to reinforcing recovery pillars—nutrition, hydration, sleep, and mindful active rest—ensuring readiness for upcoming endurance challenges.

**Performance & Recovery Table**

| **Test / Measure** | **Value** | **Normal Range** | **Comments** |
| --- | --- | --- | --- |
| Resting Heart Rate | 61 bpm | 50–70 bpm | Stable, reflecting effective recovery focus. |
| VO₂ Max Estimate | 47.5 mL/kg/min | 40–50 mL/kg/min | Slight improvement, showing aerobic capacity is being maintained. |
| White Blood Cell Count | 6,200/µL | 4,000–10,000/µL | Normal, immune system remains stable. |
| CRP (Inflammation) | 1.6 mg/L | <3 mg/L | Controlled inflammation, reflecting good rest and nutrition. |
| Hemoglobin | 14.8 g/dL | 13.5–17.5 g/dL | Stable oxygen transport capacity. |
| Creatine Kinase (Muscle) | 220 U/L | <200–250 U/L | Within recovery range, no concerning spikes. |
| Recovery Index (Sleep/HRV) | Very Good | — | Improvement due to structured sleep and relaxation practices. |
| Weight | 69.2 kg | — | Stable, with recovery-focused nutrition balance. |
| Agility/Balance Score | 8.2/10 | 7–9 balanced | Slight gains, aided by yoga and mobility sessions. |
| Mood Stability Index | 8.3/10 | 7–9 balanced | Positive, supported by rest, breathing work, and peer encouragement. |
| Training Compliance | High | — | Aarav followed recovery guidelines with strong consistency. |