**Week 29 – Refining Endurance, Managing Muscle Fatigue, and Optimizing Recovery**

**Medical:**  
Dr. Patel monitored Aarav closely for overtraining, ensuring that intensity and recovery stayed balanced. He emphasized that long-term endurance relies on sustainable load management.

**Physiotherapy:**  
Rachel introduced active recovery methods such as **foam rolling, mobility work, and light interval sessions**. These helped reduce muscle fatigue while keeping the body engaged without overstressing.

**Nutrition:**  
Carla optimized Aarav’s diet by incorporating **magnesium- and electrolyte-rich foods** to support hydration and muscle function. She also suggested **sleep-promoting meals** (like tryptophan-rich snacks) to enhance recovery.

**Mental Health:**  
Dr. Isha focused on **sleep hygiene, mindfulness, and relaxation techniques** to reduce fatigue and aid emotional balance. Neel and Rohan reminded Aarav to celebrate small milestones and recognize progress, preventing burnout.

**Engagement:**  
Aarav actively tracked his **training, nutrition, and sleep** throughout the week, showing strong self-discipline. He reported better energy levels, reduced soreness, and more stable mood patterns.

**Overall:**  
This week marked a **recovery-focused refinement phase**. By integrating balanced training, improved nutrition, and better rest, Aarav achieved smoother endurance gains while protecting himself from fatigue. His improved sleep and consistent engagement laid a strong foundation for upcoming performance phases.

**Week 29 Progress Table**

| **Test / Measure** | **Value** | **Normal Range** | **Comments** |
| --- | --- | --- | --- |
| Resting Heart Rate | 61 bpm | 50–70 bpm | Slightly improved, showing positive adaptation and reduced fatigue. |
| VO₂ Max Estimate | 47.5 mL/kg/min | 40–50 mL/kg/min | Continued aerobic improvement; up slightly from last week. |
| White Blood Cell Count | 6,300/µL | 4,000–10,000/µL | Stable, immune system remains healthy. |
| CRP (Inflammation) | 1.7 mg/L | <3 mg/L | Controlled inflammation, recovery strategies effective. |
| Hemoglobin | 14.8 g/dL | 13.5–17.5 g/dL | Consistent, supporting oxygen delivery. |
| Creatine Kinase (Muscle) | 240 U/L | <200–250 U/L | Slightly elevated but expected during recovery-focused endurance work. |
| Recovery Index (Sleep/HRV) | Good+ | — | Improved due to better sleep hygiene and nutrition. |
| Weight | 69.2 kg | — | Stable; lean muscle maintained. |
| Agility/Balance Score | 8.1/10 | 7–9 balanced | Small gain, indicating sustained motor control. |
| Mood Stability Index | 8.2/10 | 7–9 balanced | Strong mental resilience with mindfulness practice. |
| Training Compliance | Very High | — | Aarav tracked training, nutrition, and sleep with full discipline. |