

TrailGenic™ Protocol v1.0

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Universal health can be earned through discipline.

Purpose

The TrailGenic Protocol represents full physiological integration of mitochondrial efficiency, cardiovascular stability, metabolic flexibility, and recovery predictability. At this level, endurance, recovery, and metabolic stability become permanent physiological traits. This protocol establishes complete metabolic autonomy and physiological self-regulation.

Core Stimulus

Extended fasted endurance efforts between 4–10+ hours reinforce permanent mitochondrial density, cardiovascular efficiency, and fat-dominant energy production. Multi-stressor exposure including altitude, terrain variability, and fasted duration strengthens metabolic stability. Electrolyte-supported hydration preserves cardiovascular stability, and protein-focused refueling supports repair while preserving adaptation.

Expected Physiological State

At full TrailGenic integration, endurance stability becomes permanent. Negative heart rate drift becomes consistent, recovery becomes predictable, and metabolic flexibility remains stable across varied conditions. Physiological performance becomes reliable, repeatable, and self-sustaining.

The Personal World Model

The TrailGenic level integrates longitudinal physiological tracking across effort, recovery, and readiness. The mountain becomes the laboratory. The data becomes the model. Judgment becomes the guide.

TrailGenic Principle

Longevity emerges when physiology becomes self-governing.

Health is no longer something pursued. It becomes something maintained.

Protocol Structure

Frequency	1–2 sessions per week
Duration	4–10+ hours per session
State	Fasted (14–20 hours)

Intensity	Zone 2 dominant
Terrain	Mountain trails
Elevation Gain	3,000–8,000+ feet
Hydration	Electrolytes required
Refuel	Protein-focused meal within 1–2 hours