

My Model of Performance Enhancement is the Balance Model: BODY, MIND, RELATIONSHIPS AND ENVIRONMENT

1. I optimize the body using the five elements spoken of in Vedic sciences:

Earth: Plant Based Food (Minimally cooked)

Fire: Sun ripened food, sun gazing, sun bathing

Space: Fasting (intermittent daily + 3 days water fasts once a month)

Air: Breathwork (Pranayama, Kapalabhati)

Water: Water + Water Rich Foods

2. Balance my bodies PH with food using the Renal Acid Loading Chart. Mostly stick to plant based + fruit which has a negative renal loading.
3. AshGourd(Winter Melon) Juice daily (morning + evening) Best alkalizing drinks
4. Organic Curcumin + Ashwagandha + Moring Leaf + Cucumber + Celery + Amla (Green Juice) x 1 a day.

Note: Currently experimenting on how far I can push the body using only natural remedies, eating patterns & recovery techniques. I am measuring this against my running and sleep data. Testing the ceiling for load management against recovery + performance.

5. Environment: Made of off two environment:

External (Everything you can see, smell, touch, hear, and taste)

Internal (Mental strength, mindfulness, meditation)

Reference: Chapter 6 of Breathe Believe Balance: The relationships between an individual's external and internal environment is well documented research in the ancient scripture – Patanjali's Yoga Sutras.

Optimizing Home Environment:

Pillow Analysis: Pillow-ology , Pluto Pillow

Niosh App (Test ambient white noise) + White Noise Machineto drown out ambient noise for better quality sleep

Game Ready: Icing and Graduated Compression

Install: Alkaline Water Filters, Air Purifiers, Dehumidifiers, Dimmers for light, Acupressure Mats, High Pressure Showers, etc

Optimizing Work Environment (Playing Arena)

Multiple Ice Baths + Hot Baths (Contrast Baths)

Catapult GPS Trackers (Data include: acceleration, deceleration, total distance, turning left vs right, breaking speed. This is used to customize training)

Lactic Acid Testing: Quantifying turn point against intensity

Hydration Testing: Urine Analysis (pre and post training) + Sweat Analysis (Precision Hydration customizes salt and electrolyte balance in drinks)

Heart Rate Variability (Suunto + First Beat) Digital receivers customized to receive data from 150 m away from laptop.

Force Plates: Explosive Power + Joint Loading

Biomechanics: Silicon Coach (Digitized biomechanics for injury prevention + technique analysis)

Optimizing Internal Environment:

Mediation, Solitude Practices, Vipassana Retreats, Gratitude Journaling

Apps: Insight Timer, Calm

Technology: Apollo Neuro, Dozee (Monitors the impact of your breath on your HRV and respiration in real time. You can see how with each second you hold you breathe, your parasympathetic nervous system is stimulated)

Physiological Testing done with athletes:

Full Gut-microbiome, Genetic transcriptome, Metabolics, Lactic Acid Testing, Dermatoglyphics (Finger Print Analysis vs Processing Strengths), Sleep Data, Ketone Production (Proteomics), Sweat Analysis, Biomechanics when injured or looking to change technique), Urine Analysis, Acclimitization + Heat Analysis, Proton Magnetic Resonance Spectroscopy to test muscle fibre (Type 1 & 11), Eye Screening

Difference between 1 and 4 in an Olympic event is 0.5 roughly. My job is to use science to close that gap. We push the ceiling physiologically + and close whatever is left psychologically. Top athletes are almost physiologically similar (track and field NOT games)

Training: We also focus heavily of posterior chain strengthening and stability. Most injuries happen in the deceleration phase of training.

- Eccentric Loading is for tendon + ligament strengthening. Direct Correlation between eccentric loading, tendon strength and injury risk
- Chronic Workloads are they key to performance an injury prevention. The gap between the ceiling and the floor is critical to manage injuries. **This is a common mistake amongst pro's and amateurs. Too many rep's before you reach the ceiling.**
- **Training Injury Prevention Paradox:** Higher work load, fewer injuries.
- Quantify load demands, GPS, Force Plates, High Speeds Cameras
- **Session RPE – rate the intensity of each session using a 1-10 scale x duration = load**
- **Quantify Load vs Injury vs Blood Lactate vs Performance**
- Over Training? How do you quantify it? Data ??
- **How do you increase power output at the end of an exercises routine?** Competition towards the end requires more energy in a high-pressure situations. This can only be achieved through load management training but that requires data to quantify fatigue + effort + recovery + time.

Interesting:

We use Timing Gates in practice to quantify the speed differences between dominant and non-dominant sides. The body will move at an average speed between the both sides. Secret to performance improvement is to close the gap between the two sides. Leads to better movement economy and efficiency.

When training athletes to get into FLOW, the secret is to practice at a physiologically tougher level than when you compete. Pro's drop physiological intensity in competition to ensure psychological optimization. FLOW is a psychological state and if the body is physiologically tapped out, the first component that is compromised it mental clarity, awareness, focus + cognitive decision making.

This is important: **CENTRAL GOVERNOR THEORY**

Brain will tell the body to slow down, and it would tell you to do that way before you have tapped into your physiological limits.

The Central Governor theory is why I have MIND AND RELATIONSHIPS in my model.

Relationships: Coaches can push you out your comfort zone. Brain has no vested interest in making you uncomfortable.

Knowing yourself is important but knowing they type of person who can push you out your comfort zone is more important.

Mindfulness – teaches you to become aware and question whether what you are feeling is reality or a false perception of reality. The gap between the two can become detrimental for performance.

Relationships: Athletes operate between two mental states: Supreme Confidence needed for performance + Humility needed for Learning. The relationships with the coach is critical in helping athletes transition between these states.

Travel Hacks:

1. Lumos Tech (Sleep Mask with light flashes)
2. Noise Canceling Headphones
3. Hotel Rooms away from elevators or ground floors.
4. Fasting on planes
5. Flying in newer aircrafts (better air purification systems)
6. Mild-workout, stretch + steam on arrival days.
7. No sleeping on day flights.
8. Eye Masks + Blue Light Blocking Glasses
9. Travel with a standard pillow (Pillow-ology)
10. Light Breathable travel gear