

ANTI-AGING PROTOCOL

CELLULAR OPTIMISATION SYSTEM

Supplement Stack · Training Windows · Circadian Nutrition · Derma Roller Protocol

THE PRINCIPLE

Aging is information loss at the cellular level.
This protocol restores the signal.

DNA
REPAIR

MITO
GENESIS

HORMETIC
STRESS

DAILY PROTOCOL TIMELINE

Every window is engineered. Every action is compound.

FASTED MORNING

Pre-Workout

AUTOPHAGY + AMPK WINDOW

+ TRAIN FASTED

Heavy lifting in fasted state maximises AMPK activation, fat oxidation, and autophagy continuation. The hormetic stress of fasting + lifting creates a compounded PGC-1alpha signal driving mitochondrial biogenesis.

+ HYDRATION ONLY

Water + electrolytes. Do NOT break the fast. Do NOT take supplements yet — insulin spike would collapse the autophagy window prematurely.

POST-WORKOUT

Break the Fast — Anabolic Window

NAD+ REPLENISHMENT + mTOR

+ HIGH-GI CARBS + PROTEIN

Peak circadian insulin sensitivity. Post-exercise GLUT4 translocation amplifies glucose uptake. This is the most anabolic window of your day.

+ NMN

Exercise depletes NAD+ in muscle tissue. NMN post-workout replenishes substrate exactly when sirtuins need it for repair of exercise stress.

+ PQQ (with food + fat)

PGC-1alpha already elevated from exercise. PQQ amplifies mitochondrial biogenesis at the exact moment the signal is strongest.

+ ERGOTHIONEINE

Accumulates in tissues under oxidative stress. OCTN1 transporter shuttles it to stressed mitochondria and nuclei — exactly where it is needed.

IMPORTANT HOLD RESVERATROL — The ROS spike from heavy training is the hormetic signal driving adaptation. Taking antioxidants now blunts training adaptations.

2–3 HRS LATER

Afternoon

SIRT1 ACTIVATION WINDOW

+ RESVERATROL COMPLEX + FAT

Take with avocado, olive oil, or nuts — up to 5x bioavailability increase. NMN has already replenished NAD+, so resveratrol now acts on a substrate-rich system. This is when the NMN + Resveratrol synergy actually fires.

EVENING

Peak Performance Wellness | Anti-Aging Protocol
Regeneration Setup

GH PULSE + DNA REPAIR WINDOW

DERMA ROLLER & SUPPLEMENT STACK

Depth protocol, timing, and compound synergy maps

DERMA ROLLER — THE EVENING GH SYNERGY WINDOW

WHY EVENINGS ARE THE POWER WINDOW

1. GH peaks during sleep → micro-injury → skin releases TGF-beta, PDGF, EGF → GH surge amplifies col
2. NMN (taken earlier) = NAD+ available for PARP/SIRT1 repair of the micro-damage you are creating
3. Overnight fasting = autophagy clears senescent cells in skin in the same window as repair
4. Low cortisol (Ashwagandha-assisted) = clean healing environment, no inflammatory suppression

0.5mm

WEEKLY

Surface collagen stimulation. Suitable for beginners and sensitive skin. Minimal downtime. Ideal for maintenance and texture.

1.0mm

BIWEEKLY

Deeper dermal remodelling. Targets fine lines, pore size, and early structural changes. Allow 10-14 days between sessions.

1.5mm

MONTHLY

Structural changes and deep collagen induction. Maximum GH synergy. Full recovery needed. Reserved for experienced users only.

POST-ROLL APPLICATION

Vitamin C serum applied immediately. Do NOT use Niacinamide same night — it competes. Allow 20 min before sleeping.

SUPPLEMENT SYNERGY MAP

NMN

Post-workout

NAD+ precursor. Restores substrate for SIRT1-7 and PARP (DNA repair enzymes).

SYNERGY: Resveratrol (SIRT1 activator on NAD+ you provide)

RESVERATROL

2-3 hrs post-workout + fat

SIRT1 activator. Drives histone deacetylation, chromatin maintenance, DNA repair signalling.

SYNERGY: NMN (provides the NAD+ substrate it needs)

PQQ

Post-workout with food

Mitochondrial biogenesis activator via PGC-1alpha. Also acts as redox cofactor.

SYNERGY: Exercise-elevated PGC-1alpha signal

ERGOTHIONEINE

Post-workout

Mitochondria-targeted antioxidant. OCTN1 transporter concentrates it in high-stress tissues.

SYNERGY: PQQ (protects new mitochondria being built)

ASHWAGANDHA

Peak Performance Wellness | Anti-Aging Protocol

Evening (split dose optional)

Cortisol suppression, NRF2 activation, sleep architecture. Withanolides show telomerase support

Overnight

(Fasted sleep)

Quality 7–9hr sleep

Track HRV / sleep score

GH peak secretion

Circadian DNA repair

Autophagy in skin + muscle

THE MASTER METRIC: TRACK YOUR SLEEP

Every regenerative mechanism in this protocol depends on sleep architecture. If sleep is suboptimal, your GH pulse, DNA repair window, and derma roller response all underperform — regardless of supplement precision.

Your body is not just a vehicle.

It is a self-repairing, information-processing biological system.

This protocol gives it the conditions to do exactly that.

PEAK PERFORMANCE WELLNESS | ppwellness.co

This document is for educational purposes only. It is not medical advice. Consult a qualified health professional before beginning any new health protocol.