Humans 7.0 — The First Systems-Biology Nutrition Platform

Collapsing 3×10^{32} deficiency states into a *single* optimised human

1. The Hidden Liability

> Over 99 % of people lack at least one essential nutrient, destabilising ~500 pathways and undermining every drug trial, supplement plan, or lifestyle hack.

2. Unlocks *your* full biological potential — wake energised, think sharper, and recover faster because every cell finally has what it needs.

3. The Nutritional Baseline™ Breakthrough

- **Supply** all 68 classical essentials (vitamins, minerals, amino acids, omega-3s).
- **Layer** long-retention **Neo-Vitamins™** (CoQ10, PQQ, spermidine, lutein…) to erase chronic bottlenecks.
- **Pulse** short-acting **BioSwitches™** (citrulline-malate, D-ribose, sulforaphane…) to flip ATP, detox, and repair pathways exactly when they respond best.

4. Kinetics-Matched 3-Day Pulse Protocol
Morning Vital Brew → Afternoon Hormetic Brew → Evening Optimisation Pack. Off-days let pathways reset, preventing tolerance and mimicking intermittent-fasting biology without calorie stress.

5. Zero Remaining Rate-Limits — Verified

System / Pathway	Historic bottleneck	Typical shortfall driver	H7 solution	Key signalling / regulatory impact
Energy (ATP)	Rapid phosphocreatine drain	Low dietary creatine	Creatine + carnitines restore PCr buffer	AMPK balance, mTOR readiness

B-Complex (B1-B7)	Co-enzyme shortages stall glycolysis & neurotransmission	Refined-grain diets, alcohol	High-potency, co-enzyme forms at Lunch & Dinner	PDH flux, neurotransmitter & catecholamine synthesis
Magnesium-dependent enzymes	ATP cannot function without Mg-ATP complex	> 50 % of adults sub-optimal Mg	Bis-glycinate split Lunch / Dinner	Regulates kinase cascades, NMDA & calcium channels
Vitamin C & Iron synergy	Collagen synthesis, immunity, oxygen transport	Low fruit/veg + anti-nutrients	1 g liposomal C timed with nighttime iron	HIF-1α oxygen-sensing, collagen gene transcription
Collagen / Bone matrix	Silicon & glycine scarcity	Processed diet; low connective tissue intake	Orthosilicic acid + glycine pulses	Activates osteoblast TGF-β signalling, boosts GSH
Calcium handling	Poor absorption / mis-placement	Dairy avoidance; low K2	Split calcium citrate + D3 + K-complex	Calmodulin signalling, calcitriol endocrine axis
Vitamin D / K axis	Vessel calcification, weak bone	Indoor lifestyle; low K2 foods	5 000 IU D3 + K1/K2 trio	VDR-mediated gene transcription; MGP carboxylation
Vitamin A signalling	BCMO1 variants impede β-carotene → retinol	Plant-only diets	Pre-formed retinol + β-carotene with krill oil	Retinoic-acid receptor transcription control

Zinc / Copper balance	DNA repair & immunity stall	Soil depletion; high-phytate grains	15 mg Zn + 1.5 mg Cu balanced at Dinner	Zinc-finger transcription factors, Cu-SOD antioxidant defence
Thyroid hormone synthesis	Iodine & selenium insufficiency	Low seafood; halide pollutants	2.5 mg iodine + 50 µg Se in Vital Brew	T3/T4 receptor-driven metabolic rate
Methylation loop	Folate/B_{12} polymorphisms	Genetic MTHFR; low leafy greens	Active B-complex + 500 mg betaine	DNA & histone methylation, epigenetic programming
Electrolyte / nerve	Potassium deficit, Na/K imbalance	Processed-food sodium bias	1.53 g potassium citrate per Vital Brew	Resting membrane potential, action potentials
Nitric-oxide flow	Arginase loss of dietary Arg	Hepatic first-pass	5 g citrulline-malate (kidney → Arg)	NO–cGMP vasodilation & signalling
Eicosanoids	Δ6-desaturase bottleneck	Genetic & age decline	γ-Linolenic acid blended with krill oil	Prostaglandin & resolvin anti-inflammatory cascades
Membrane ROS	Lipid oxidation & PUFA damage	Low vitamin E & carotenoids	Tocotrienols, ergothioneine, carotenoid shield	Nrf2 antioxidant gene induction
Trace detox enzymes	Sulfite/aldehyde build-up	Low molybdenum	50 µg molybdenum lunch	Sulfite oxidase & ALDH cofactor function
Hormone–bone nexus	Steroid & Ca/Mg imbalance	Low boron	1 mg boron lunch	Modulates sex-hormone bioactivity, osteocalcin regulation

Mitochondrial biogenesis	Low NAD^+ recycling & PQQ scarcity	Aging, high stress, low fruit/veg	PQQ 20 mg + Resveratrol 500 mg + R-ALA 600 mg pulses	SIRT1 → PGC-1α → NRF-1/TFAM mitochondrial genesis
Autophagy / cellular cleanup	Declining spermidine & Nrf2 activation	Age-related drop, low fermented foods	Spermidine 10 mg + Sulforaphane 20 mg + fasting-mimic pulses	AMPK-ULK1 induction, Nrf2-p62 cross-talk, lysosomal renewal

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Why this matters now

AI-enhanced systems biology finally lets us map every nutrient–pathway dependency and deliver the first practical protocol that:

1. **Eliminates the 99 % deficiency problem** at population scale.
2. **Creates a reproducible human baseline** for every trial, therapy, and AI model.
3. **Transforms healthcare economics** from symptom patching to foundational optimisation.

Humans 7.0 — Your Health, Optimised.