Medical-Grade Daily Supplement Protocol

Objective: Optimize nutrient status, support methylation, cellular energy, mitochondrial function, immune health, and longevity using pharmaceutical-grade, bioavailable nutrients.

⚠ **Pre-Protocol Testing** (Recommended Before Initiating)
Lab Markers:CBC, CMP, Vitamin D (25-OH), Ferritin, hs-CRP , Omega-3 Index (RBC EPA/DHA), Homocysteine, Serum Magnesium/Zinc
Optional: RBC Folate, B12 (active), MMA, SAMe/SAH ratio

Methylation Panel:
- MTHFR Genotype (C677T, A1298C variants)
- Serum Homocysteine
- RBC Folate
- Methylmalonic Acid (for B12 status)

Consider Genetic Methylation or Nutrigenomic Panel (e.g., DNA Life, Genova, Great Plains)
Tailoring Tip: If MTHFR mutation or elevated homocysteine is present, prioritize methylfolate, methylcobalamin, and avoid synthetic folic acid.

Morning Protocol (With Breakfast — Requires Fat)

Methylated Multivitamin
Form: 5-MTHF, methylcobalamin, P5P, chelated minerals, vitamins A, D3, E, K2
Dose: 2 capsules with breakfast
Examples: Pure Encapsulations Nutrient 950 w/ Metafolin, Thorne Basic Nutrients 2/Day

Omega-3 Fatty Acids (Triglyceride Form)
Form: Triglyceride-form (not ethyl ester) for enhanced bioavailability
Dose Breakdown:EPA: 1,000–1,200 mg DHA: 750–1,000 mg
Total Daily: 1,750–2,200 mg combined EPA + DHA
Timing: With breakfast or lunch containing ≥10g healthy fat
Purpose: Cardiovascular protection, anti-inflammatory signaling, cognitive resilience, membrane integrity
Examples: Nordic Naturals Ultimate Omega, Carlson Elite EPA Gems

Vitamin D3 + K2
Form: Cholecalciferol (D3) + MK-7
Dose: 2,000–5,000 IU D3 + 100–200 mcg MK-7
Timing: With a fat-containing meal

Magnesium (Split Dose: Part 1)
Form: Magnesium glycinate or malate
Dose: 200 mg elemental in AM
Purpose: Neuromuscular regulation, metabolic cofactor, stress buffer

Midday Protocol (With or Without Food)

Creatine HCl
Form: Creatine Hydrochloride (high solubility, no loading required)
Dose: 1.5–2 g daily
Timing: Midday or post-exercise; with or without food
Purpose: Supports muscular ATP regeneration, cognitive performance, lean mass preservation

CoQ10 (Ubiquinol Form)
Form: Ubiquinol (reduced, active form)
Dose: 100–200 mg
Timing: With lunch and fat for enhanced absorption
Purpose: Mitochondrial energy production, antioxidant defense, cardiovascular protection

Evening Protocol (With Dinner or Before Bed)

Magnesium (Split Dose: Part 2)
Form: Magnesium glycinate or threonate
Dose: 200–300 mg
Timing: 1–2 hours before bed
Purpose: Sleep enhancement, parasympathetic activation, recovery support

Zinc + Copper (Balanced Pair)
Form: Zinc picolinate or bisglycinate + copper glycinate
Dose: 15–25 mg zinc + 1–2 mg copper
Timing: With dinner (not on empty stomach)
Purpose: Hormonal balance, immune regulation, antioxidant enzyme support

L-Theanine (Optional – for Sleep Support)
Form: L-Theanine (pure)
Dose: 200 mg
Timing: 30–60 mins before sleep
Purpose: Promotes alpha wave calm, reduces cortisol, improves sleep latency and quality

Optional Longevity & Gut Support (Tailored Add-Ons)

NAD+/Mitochondrial Optimization
Nicotinamide Riboside (NR) or NMN: 250–500 mg in the morning on empty stomach
Resveratrol or Pterostilbene: 100–250 mg with NR + fat-containing meal

Gut Barrier & Microbiota Support
Probiotic: 10–30 billion CFU/day (Lactobacillus + Bifidobacterium or Spore-form)
Prebiotic Fiber (PHGG, Acacia, FOS): 5–10g/day with food
L-Glutamine: 5g AM + 5g PM on empty stomach for gut lining repair

Key Clinical Administration Notes

- Fat-soluble vitamins (A, D, E, K, EPA/DHA, CoQ10) require meals with fat for absorption
- Creatine HCl and methylated nutrients optimize daily energy and performance
- Magnesium split dosing supports both daytime metabolism and nighttime relaxation
- Probiotics are most effective on an empty stomach or before bed
- Methylation testing ensures precision supplementation for those with genetic or metabolic variants