HORMONAL & LONGEVITY SUPPORT

Targeted Nutrients
for Mood, Energy, Sleep,
and Healthy Aging

INDEPENDENT™
MEDICAL ALLIANCE

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DHEA (DEHYDROEPIANDROSTERONE)

DHEA is the most abundant steroid hormone in the human body and serves as the master precursor to both testosterone and estrogen. Produced primarily by the adrenal glands, DHEA peaks in the mid-20s and then declines steadily and dramatically with age—by age 70 most people have only 10–20% of their peak DHEA levels remaining. This age-related decline has made DHEA one of the most studied compounds in longevity and anti-aging research, with implications for energy, mood, immune function, body composition, bone density, and sexual health.

How it helps:

- Master precursor to testosterone and estrogen
- Supports healthy energy levels and vitality
- Supports healthy mood and emotional resilience
- Supports immune function—declines in DHEA strongly correlate with immune aging
- Supports healthy body composition—promotes lean muscle and reduces fat
- Supports bone density
- Supports healthy libido and sexual function in both men and women
- Supports cognitive function and memory
- Supports adrenal health and stress resilience
- Anti-aging effects—one of the most researched longevity hormones

Signs of Deficiency:

- Fatigue and low vitality
- Depression and poor mood
- Low libido
- Poor immune function and frequent illness
- Loss of muscle mass and increased body fat
- Poor bone density
- Brain fog and cognitive decline
- Poor stress resilience
- Dry skin
- Hormonal imbalances

DHEA-Rich Foods:

DHEA cannot be obtained meaningfully from food sources. Foods that support healthy adrenal DHEA production:

- Wild caught fatty fish
- Olive oil
- Whole eggs
- Yams and sweet potato
- Cruciferous vegetables
- Nuts and seeds
- Colourful fruits and vegetables broadly

Optimal Dosages:

- General anti-aging and vitality support: 25–50 mg daily
- Women typically respond well to lower doses: 10–25 mg daily
- Men may benefit from higher doses: 25–100 mg daily
- Always test DHEA-S levels before supplementing—a simple blood test establishes your baseline and guides appropriate dosing
- Take in the morning—DHEA follows a natural morning peak, and taking it at night may disrupt sleep
- Take with a fat-containing meal—DHEA is fat soluble
- 7-Keto DHEA is a metabolite that does not convert to sex hormones—useful for those who want metabolic and immune benefits without hormonal effects
- Those with hormone-sensitive conditions (breast cancer, prostate cancer) must consult a practitioner before supplementing
- Long-term use should be monitored with periodic hormone testing

MELATONIN

Melatonin is a hormone produced by the pineal gland in response to darkness, serving as the body's primary circadian rhythm regulator. While it is widely known as a sleep hormone, melatonin's role extends far beyond sleep—it is one of the most powerful and versatile antioxidants in the body, with significant implications for immune function, cancer protection, cardiovascular health, and healthy aging. Melatonin production declines significantly with age and is severely disrupted by artificial light exposure, particularly blue light from screens, making it one of the most commonly deficient hormones in modern populations.

How it helps:

- Regulates circadian rhythm and sleep-wake cycle
- Supports healthy sleep onset, duration, and quality
- Powerful antioxidant—particularly protective in mitochondria and the brain
- Supports healthy immune function and immune surveillance
- Significant anti-cancer properties—emerging and established research
- Supports cardiovascular health and healthy blood pressure
- Supports healthy eye health—protects retinal cells
- Supports healthy gut function via gut melatonin receptors
- Anti-inflammatory effects throughout the body
- Supports healthy aging and longevity

Signs of Deficiency:

- Difficulty falling asleep
- Poor sleep quality and frequent night waking
- Jet lag and disrupted circadian rhythm
- Fatigue and daytime sleepiness
- Seasonal mood changes
- Poor immune function
- Elevated oxidative stress
- Increased susceptibility to hormone-sensitive conditions
- Anxiety and hyperarousal at night

Melatonin- Rich Foods:

- Tart cherries and tart cherry juice (richest food source)
- Walnuts
- Eggs
- Fatty fish (salmon, sardines)
- Mushrooms
- Tomatoes
- Peppers
- Grapes
- Strawberries
- Milk (particularly warm milk—traditional wisdom supported by research)

Optimal Dosages:

- Sleep onset support: 0.5–3 mg taken 30–60 minutes before bed
- Circadian rhythm reset and jet lag: 0.5–5 mg at target bedtime
- Antioxidant and longevity support: higher doses of 10–60 mg have been used in research—consult a practitioner
- Less is often more—most people dramatically overdose on melatonin; 0.5–1 mg is frequently as effective as 5–10 mg for sleep onset with fewer next-day grogginess effects
- Always start with the lowest effective dose
- Use immediate release for sleep onset difficulties and extended release for maintaining sleep through the night
- Prioritize light management alongside supplementation—blue light blocking glasses after dark and morning sunlight exposure are foundational
- Not recommended for long-term nightly use without practitioner guidance in children
- Those on blood thinners, immunosuppressants, or diabetes medications should consult a practitioner

SAME (S-ADENOSYL METHIONINE)

SAMe is a naturally occurring compound found in virtually every cell in the body and is the primary methyl donor in over 100 biochemical reactions—a process called methylation that underpins DNA repair, neurotransmitter synthesis, gene expression, detoxification, and cellular repair. SAMe is synthesized from the amino acid methionine and ATP, and its production is dependent on adequate levels of folate, B6, and B12. It has one of the strongest evidence bases of any natural compound for depression, joint health, and liver protection—with clinical trials comparing its antidepressant effects favorably to pharmaceutical antidepressants in multiple studies.

How it helps:

- Primary methyl donor—supports methylation throughout the body
- Clinically validated antidepressant effects—well researched as both standalone and adjunct to antidepressants
- Supports joint health and reduces osteoarthritis pain—comparable to NSAIDs in some studies
- Supports liver health and detoxification—used clinically in liver disease
- Supports healthy neurotransmitter production—serotonin, dopamine, norepinephrine
- Supports DNA methylation and healthy gene expression
- Supports healthy myelin sheath integrity—relevant in neurological conditions
- Supports healthy estrogen metabolism via liver methylation
- Anti-inflammatory effects throughout the body
- Supports healthy cognitive function and memory

Signs of Deficiency:

- Depression and persistently low mood
- Joint pain and stiffness
- Poor liver function and detoxification
- Brain fog and cognitive decline
- Fatigue and low energy
- Impaired methylation—particularly relevant in those with MTHFR gene variants
- Poor stress resilience
- Hormonal imbalances driven by poor estrogen clearance
- Neurological symptoms

SAMe-Rich Foods:

- SAMe cannot be obtained from food directly
- Foods that support endogenous SAMe production:
- Methionine-rich foods—beef, lamb, eggs, fish, dairy, Brazil nuts
- Folate-rich foods—leafy greens, legumes, avocado
- B12-rich foods—organ meats, shellfish, sardines, eggs
- B6-rich foods—chickpeas, salmon, chicken, potatoes

Optimal Dosages:

- General methylation and mood support: 400–800 mg daily
- Depression: 800–1,600 mg daily in divided doses—take in the morning, as SAMe can be energising
- Joint and osteoarthritis support: 600–1,200 mg daily in divided doses
- Liver support: 800–1,600 mg daily
- Always take on an empty stomach—food significantly reduces absorption
- Take it in the morning or early afternoon—SAMe has an energizing effect that can disrupt sleep if taken late in the day
- Always ensure adequate B12, folate, and B6 alongside SAMe—these are essential cofactors for the methylation cycle; without them, SAMe supplementation can paradoxically raise homocysteine
- Do not combine with antidepressants without practitioner supervision—risk of serotonin syndrome, particularly with SSRIs and MAOIs
- Those with bipolar disorder should use it with caution—SAMe may trigger manic episodes
- Choose butanedisulfonate form for best stability and bioavailability

ST. JOHN'S WORT (HYPERICUM PERFORATUM)

St. John's Wort is a flowering plant with one of the longest histories of medicinal use in Western herbal medicine, used for centuries to treat low mood, nerve pain, and wound healing. It is now one of the most extensively researched herbal medicines in the world—with a substantial body of clinical evidence supporting its efficacy for mild to moderate depression, anxiety, and seasonal affective disorder. Its primary active compounds—hypericin and hyperforin—work through multiple mechanisms, including serotonin, dopamine, and norepinephrine reuptake inhibition, giving it a broad-spectrum antidepressant mechanism that closely parallels pharmaceutical antidepressants. It is also one of the most important supplements in terms of drug interactions—a fact that must be clearly understood before use.

How it helps:

- Clinically validated for mild to moderate depression—comparable to antidepressants in multiple trials
- Supports healthy mood and emotional resilience
- Reduces anxiety and promotes calm
- Supports healthy sleep quality
- May reduce symptoms of seasonal affective disorder (SAD)
- Supports nerve health and reduces nerve pain
- Anti-inflammatory effects
- Supports healthy menopausal mood symptoms
- Supports healthy OCD symptom management
- Promotes wound healing when applied topically

Signs of Deficiency:

St. John's Wort is not an essential nutrient, but low mood presentations it addresses include:

- Persistent low mood and depression
- Anxiety and excessive worry
- Seasonal mood changes and SAD
- Poor sleep quality
- Nerve pain and sensitivity
- Menopausal mood disturbances
- Low motivation and emotional flatness

St. John's Wort-Rich Foods:

- St. John's Wort is not found in conventional food sources
- Available as standardized capsules, tablets, liquid tincture, and topical oil
- Tea made from dried St. John's Wort flowers provides mild benefit but does not deliver therapeutic doses of active compounds

Optimal Dosages:

- General mood and anxiety support: 300 mg three times daily of standardized extract
- Depression and SAD: 900 mg daily in divided doses—the most researched therapeutic dose
- Always choose extracts standardized to 0.3% hypericin and ideally 3–5% hyperforin content
- Allow 4–6 weeks for full antidepressant effects—do not judge efficacy before this point
- Take with food to reduce digestive sensitivity
- CRITICAL DRUG INTERACTIONS—St. John's Wort is one of the most significant herbal drug interactors known:
- Never combine with SSRIs, SNRIs, MAOIs, or 5-HTP—serious risk of serotonin syndrome
- Significantly reduces effectiveness of oral contraceptives—use additional contraception
- Reduces effectiveness of warfarin, cyclosporine, HIV medications, and chemotherapy agents
- Reduces effectiveness of digoxin—serious cardiac implications
- Causes photosensitivity—avoid prolonged sun exposure and tanning beds during use
- Not recommended during pregnancy or breastfeeding
- Always inform your doctor and pharmacist that you are taking St. John's Wort

SAFFRON (CROCUS SATIVUS)

Saffron is the world's most expensive spice by weight. It is harvested from the stigmas of the Crocus sativus flower and has been used in Persian, Indian, and Mediterranean traditional medicine for thousands of years. Modern research has revealed a remarkable breadth of clinical applications, with saffron emerging as one of the most promising natural compounds for depression, anxiety, appetite regulation, and eye health. Its primary active compounds—crocin, crocetin, and safranal—work through multiple pathways, including serotonin reuptake inhibition, antioxidant activity, and anti-inflammatory mechanisms. Clinical trials have repeatedly demonstrated antidepressant effects comparable to fluoxetine (Prozac) and sertraline at standard supplemental doses.

How it helps:

- Clinically validated antidepressant effects—comparable to pharmaceutical antidepressants in multiple trials
- Supports healthy mood and reduces symptoms of depression and anxiety
- Supports healthy appetite regulation—reduces snacking and hedonic eating
- Supports eye health—protects retinal cells and may slow macular degeneration
- Powerful antioxidant—crocin and crocetin are exceptionally potent
- Supports healthy cognitive function and memory
- Supports healthy libido and sexual function—particularly antidepressant-induced sexual dysfunction
- Anti-inflammatory effects throughout the body
- Supports healthy sleep quality
- May support PMS symptom reduction

Signs of Deficiency:

- Saffron is not an essential nutrient, but conditions it addresses include:
- Depression and persistent low mood
- Anxiety and emotional dysregulation
- Compulsive snacking and emotional eating
- Poor eye health and age-related macular changes
- Poor cognitive function and memory
- Low libido
- PMS and mood-related menstrual symptoms
- Poor sleep quality

Saffron-Rich Foods:

- Saffron threads (culinary use in paella, risotto, Persian rice dishes, golden milk)
- Note: Therapeutic doses require standardized supplemental extracts—culinary amounts provide antioxidant benefit but not clinical mood effects

Optimal Dosages:

- General mood and antioxidant support: 15–30 mg daily
- Depression and anxiety: 30 mg daily — the dose used in the majority of clinical trials; typically split as 15 mg twice daily
- Appetite regulation and weight management: 176–180 mg daily of saffron extract
- Eye health support: 20–30 mg daily
- Always choose standardized extracts—look for products standardized to safranal and crocin content
- Satiereal is the most clinically researched branded saffron extract for appetite regulation
- Affron is a high-quality standardized extract with strong mood and sleep research
- Culinary saffron (in cooking) provides some benefit, but therapeutic doses require supplemental extracts
- Very well tolerated at recommended doses—high doses (5 g+) can be toxic but are never used supplementally
- Not recommended during pregnancy at supplemental doses—may stimulate uterine contractions
- Pairs well with omega-3, magnesium, and vitamin D for comprehensive mood support

PHOSPHATIDYLSERINE

Phosphatidylserine (PS) is a phospholipid—a fat-like molecule—that forms a critical component of cell membranes throughout the body, with the highest concentrations found in the brain. It plays an essential role in cell signaling, neurotransmitter release, and maintaining the fluidity and integrity of neuronal membranes. Phosphatidylserine is one of the few supplements to have received a qualified health claim from the FDA for cognitive decline reduction, and it is among the most extensively researched natural compounds for brain health, memory, and cortisol regulation.

How it helps:

- Supports healthy cell membrane integrity—particularly in the brain
- Supports memory, learning, and cognitive function
- Supports healthy neurotransmitter release—dopamine, acetylcholine, serotonin
- Reduces cortisol response to physical and psychological stress
- Supports healthy mood and emotional resilience
- Supports athletic performance—blunts exercise-induced cortisol spike
- May slow age-related cognitive decline
- Supports healthy ADHD symptom management—particularly in children
- Supports healthy sleep via cortisol regulation
- Supports brain recovery from traumatic brain injury.

Signs of Deficiency:

- Poor memory and forgetfulness
- Brain fog and difficulty concentrating
- Cognitive decline and age-related memory loss
- Poor stress resilience and elevated cortisol
- Depression and poor mood
- ADHD symptoms and poor attention
- Poor sleep driven by elevated evening cortisol
- Difficulty learning and retaining new information
- Mental fatigue

Phosphatidylserine-Rich Foods:

- White beans (richest plant source)
- Soy lecithin and soy products
- Egg yolks
- Beef liver and organ meats
- Chicken liver
- Herring and mackerel
- Tuna
- Chicken and turkey
- Veal
- Dairy products

Optimal Dosages:

- General brain health and memory support: 100–200 mg daily
- Cognitive decline and therapeutic support: 300–400 mg daily in divided doses
- Cortisol and stress management: 400–800 mg daily—most studied dose for cortisol blunting
- Athletic performance and recovery: 400–800 mg daily
- Always choose soy-derived or sunflower-derived phosphatidylserine—bovine-derived PS is no longer widely available
- Sunflower-derived PS is preferred for those avoiding soy
- Take with a fat-containing meal for best absorption
- Can be taken in the morning for cognitive support or in the evening for cortisol and sleep support
- Effects are cumulative—allow 4–8 weeks for full cognitive benefits
- Very well tolerated—occasional mild digestive upset at higher doses

PREGNENOLONE

Pregnenolone is a steroid hormone synthesized from cholesterol in the mitochondria and is the precursor to virtually all other steroid hormones in the body, including DHEA, progesterone, cortisol, testosterone, and estrogen. Often called the "mother hormone" or "grandmother hormone," pregnenolone sits at the very top of the hormonal cascade. Like DHEA, pregnenolone levels peak in the mid-20s and decline steeply with age. Beyond its role as a hormone precursor, pregnenolone has significant direct neurological effects—it is one of the most abundant neurosteroids in the brain, supporting memory, mood, and neuroprotection.

How it helps:

- Precursor to all major steroid hormones—DHEA, progesterone, cortisol, testosterone, and estrogen
- Supports memory and cognitive function—one of the most potent memory-enhancing neurosteroids known
- Supports healthy mood and emotional wellbeing
- Supports healthy energy levels and vitality
- Supports stress resilience via cortisol pathway modulation
- Promotes healthy sleep quality
- Supports neuroprotection and brain health
- Supports healthy immune function
- May support myelin sheath integrity—relevant to neurological conditions
- Supports healthy inflammatory balance

Signs of Deficiency:

- Fatigue and low vitality
- Poor memory and cognitive decline
- Depression and low mood
- Poor stress resilience
- Hormonal imbalances across the board
- Poor sleep quality
- Brain fog
- Low libido
- Joint pain and stiffness
- Accelerated aging

Optimal Dosages:

- General health and hormone support: 10–30 mg daily
- Cognitive and memory support: 50–100 mg daily
- Anti-aging and hormonal support: 30–100 mg daily
- Always test hormone levels before supplementing—pregnenolone sits at the top of the hormonal cascade and influences all downstream hormones; unsupervised high-dose use can have unintended hormonal effects
- Take in the morning—supports daytime energy and cognition
- Take with a fat-containing meal—pregnenolone is fat soluble
- Start low (10 mg) and increase gradually while monitoring symptoms and hormone levels
- Cycle use—5 days on, 2 days off—is a common approach to prevent desensitization
- Those with hormone-sensitive conditions or on hormonal medications must work with a practitioner
- Periodic hormone panel testing is strongly recommended during supplementation

SPERMIDINE

Spermidine is a naturally occurring polyamine compound found in virtually all living cells, where it plays a fundamental role in cell growth, DNA stability, and protein synthesis. It has emerged as one of the most exciting longevity compounds in modern nutritional science due to its remarkable ability to trigger autophagy—the cellular self-cleaning process by which the body identifies, breaks down, and recycles damaged cells, proteins, and organelles. Autophagy is one of the most important mechanisms of healthy aging and disease prevention, and spermidine is one of the few dietary compounds that can meaningfully activate it. Like many critical compounds, spermidine levels decline significantly with age.

How it helps:

- Triggers autophagy — the body's cellular self-cleaning and renewal process
- Supports healthy aging and longevity at the cellular level
- Supports cardiovascular health — clinically shown to reduce cardiovascular mortality risk
- Supports brain health and may reduce risk of neurodegeneration including Alzheimer's
- Supports healthy immune function and immune aging
- Promotes healthy hair growth and hair follicle cycling
- Supports healthy liver function
- Supports DNA stability and repair
- May support healthy fertility in both men and women
- Anti-inflammatory effects throughout the body

Signs of Deficiency:

- Accelerated cellular aging
- Poor autophagy and cellular waste accumulation
- Increased risk of neurodegenerative conditions
- Poor cardiovascular health markers
- Impaired immune function
- Hair thinning and poor hair follicle health
- Elevated systemic inflammation
- Poor liver health
- Reduced stress resilience at the cellular level

Spermidine-Rich Foods:

- Wheat germ (richest known food source —approximately 2,434 nmol/g)
- Aged cheese (cheddar, parmesan, brie)
- Mushrooms (shiitake particularly)
- Soybeans and soy products (natto especially)
- Peas and legumes
- Corn
- Broccoli and cruciferous vegetables
- Whole grains
- Chicken liver
- Green peppers

Optimal Dosages:

- General health and longevity support: 1–5 mg daily
- Therapeutic anti-aging support: 5–10 mg daily
- Spermidine supplementation is a rapidly evolving field—most current supplements provide 1–2 mg per dose derived from wheat germ extract, which is the richest known food source
- Spermine is a related polyamine that works synergistically with spermidine
- Autophagy benefits are enhanced when spermidine is taken during periods of fasting or alongside intermittent fasting protocols
- Very well tolerated—no significant adverse effects reported at supplemental doses
- Pairs synergistically with other autophagy-supporting practices: intermittent fasting, exercise, and rapamycin (under medical supervision)
- An emerging area of research—stay current with evolving dosing guidance as the science develops

A NOTE ON CONTRAINDICATIONS

The information contained in this guide is intended for educational purposes only and should never replace the personalized guidance of a qualified healthcare practitioner. While every nutrient and compound featured in these pages has a well-established safety profile at the doses outlined, there are important considerations to be aware of before beginning any new supplement protocol.

Medications and supplement interactions to be aware of:

Antidepressants and psychiatric medication: 5-HTP, L-tryptophan, St. John's Wort, and SAMe should never be combined with SSRIs, SNRIs, or MAOIs without practitioner supervision due to risk of serotonin syndrome.

Special populations requiring extra caution:

Children and adolescents: Doses throughout this guide are intended for adults. Always seek professional guidance for supplementing children.

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