

Natural Hormone Health

A Functional Medicine Guide to PCOS, Weight Gain,
Hair Loss, Diabetes, Infertility & Beyond

Elemental Natural Medicine

Dr. Lane & Team | St. George, Utah
elementalnaturalmedicine.com | (435) 246-7642

Important Disclaimer

This ebook is intended for educational purposes only and does not constitute medical advice, diagnosis, or treatment. The information provided is designed to help patients understand natural and functional medicine approaches to hormonal health and is not a substitute for professional medical consultation.

Always consult with a qualified healthcare provider before starting any new supplement, herbal remedy, dietary program, or treatment plan. Individual needs vary significantly, and what works for one person may not be appropriate for another.

The practitioners at **Elemental Natural Medicine** are trained in functional and naturopathic medicine and are available to create a personalized plan tailored to your unique biochemistry, genetics, and lifestyle.

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"Your hormones are the body's chemical messengers — when they're in balance, everything works beautifully. When they're not, almost nothing does."

Introduction: The Hormone-Health Connection

Hormones govern virtually every aspect of your health — from your energy and mood to your weight, fertility, skin, and hair. Yet hormonal imbalances are among the most underdiagnosed and misunderstood health challenges people face today. Millions of individuals are told their lab results are "normal" while they continue to struggle with debilitating symptoms that profoundly affect their quality of life.

At **Elemental Natural Medicine** in St. George, Utah, we take a fundamentally different approach. Rather than simply managing symptoms with medications, we use the principles of **Functional Medicine** to uncover the root causes of hormonal disruption — and then address them through targeted nutrition, herbal medicine, lifestyle modification, and evidence-based supplementation.

This ebook is your comprehensive guide to understanding how natural medicine can support the most common hormone-related conditions: PCOS, weight gain, hair loss, insulin resistance, diabetes, and infertility. Each chapter combines cutting-edge research with practical, actionable strategies you can begin implementing today — and discusses when working with a functional medicine practitioner is the wisest path forward.

The Functional Medicine Difference

Conventional medicine excels at treating acute illness and managing disease with pharmaceuticals. Functional medicine adds a critical layer: it asks why the disease developed in the first place. By investigating your genetics, gut health, nutrient status, stress response, toxin exposure, and lifestyle — functional medicine builds a complete picture of your unique biology and designs treatment accordingly.

This personalized, root-cause approach is why so many patients at Elemental Natural Medicine find relief from hormonal conditions that have eluded diagnosis and treatment for years.

Understanding Hormones & the Functional Medicine Approach

What Are Hormones?

Hormones are chemical messengers produced by glands throughout the body — including the thyroid, adrenal glands, ovaries, testes, pancreas, and pituitary. They travel through the bloodstream to target organs, regulating processes such as metabolism, growth, reproduction, mood, sleep, and immune function.

The major hormonal systems involved in the conditions covered in this ebook include:

- **Sex hormones:** Estrogen, progesterone, and testosterone — regulate reproduction, mood, bone density, and body composition.
- **Thyroid hormones (T3, T4):** Control metabolic rate, energy, temperature regulation, and cognition.
- **Cortisol & DHEA (adrenal hormones):** Govern the stress response, inflammation, blood sugar, and immune function.
- **Insulin:** Regulates blood glucose and plays a central role in weight management and PCOS.
- **Leptin & ghrelin:** The appetite-regulating hormones that influence hunger and satiety.

The Functional Medicine Framework for Hormonal Health

Functional medicine views the body as an interconnected system — not a collection of isolated organs. Hormonal imbalances rarely occur in a vacuum. They are typically driven by one or more of the following root causes:

- Chronic inflammation and immune dysregulation
- Nutritional deficiencies (magnesium, zinc, vitamin D, B vitamins, iodine)
- Gut microbiome imbalances affecting hormone metabolism and detoxification
- Chronic psychological or physiological stress disrupting the HPA axis
- Environmental toxin exposure (xenoestrogens, heavy metals, pesticides)
- Poor sleep quality disrupting circadian hormone rhythms
- Insulin resistance and metabolic dysfunction
- Genetic polymorphisms affecting hormone synthesis and clearance

■ Functional Medicine Tip

At Elemental Natural Medicine, we use comprehensive laboratory testing — including bloodwork, salivary hormone panels, stool analysis, and immunological testing — to identify the specific drivers of your hormonal imbalance. This allows us to create a truly personalized treatment plan rather than guessing.

Polycystic Ovary Syndrome (PCOS)

PCOS is one of the most common endocrine disorders affecting women of reproductive age, estimated to affect **8–13% of women globally** (World Health Organization, 2023). Despite its prevalence, it remains significantly underdiagnosed and undertreated in conventional medicine.

What Is PCOS?

PCOS is characterized by a cluster of symptoms resulting from hormonal imbalance. The three hallmark features, known as the Rotterdam Criteria, include:

- Irregular or absent menstrual periods (oligo- or anovulation)
- Elevated androgens (male hormones such as testosterone) — either clinically or on lab testing
- Polycystic ovaries on ultrasound (multiple small follicles)

However, PCOS is not a single disease — it is a syndrome with multiple subtypes and root causes. Common associated symptoms include acne, hirsutism (unwanted hair growth), hair thinning, weight gain, mood disorders, infertility, and insulin resistance.

The Root Causes of PCOS

Functional medicine recognizes at least four distinct subtypes of PCOS, each with different drivers:

PCOS Subtype	Key Driver	Natural Medicine Focus
Insulin-Resistant	High insulin → elevated androgens	Blood sugar regulation, inositol, berberine
Post-Pill	Suppressed ovulation rebounds	Liver detox support, zinc, vitex
Inflammatory	Chronic inflammation drives androgens	Anti-inflammatory diet, omega-3, turmeric
Adrenal (Non-Classic)	Elevated DHEA-S, adrenal stress	Adrenal adaptogens, stress management

Natural Medicine Approaches for PCOS

Nutritional Therapy

A low-glycemic, anti-inflammatory diet is foundational for most PCOS subtypes. Research published in the Journal of the Academy of Nutrition and Dietetics (2019) found that a low-glycemic index diet significantly reduced fasting insulin, total testosterone, and improved menstrual regularity in women with PCOS.

- **Prioritize:** colorful vegetables, legumes, whole grains, lean protein, healthy fats (olive oil, avocado, nuts)
- **Reduce:** refined carbohydrates, sugar, processed foods, dairy (for some subtypes)
- **Consider:** seed cycling to support natural hormone rhythms throughout the menstrual cycle

Key Supplements & Herbal Medicine

- **Inositol (Myo-Inositol + D-Chiro-Inositol 40:1 ratio):** Extensively studied, shown to improve insulin sensitivity, restore ovulation, and reduce testosterone. A 2020 meta-analysis in Gynecological Endocrinology found inositol comparable to metformin with fewer side effects.
- **Berberine:** A plant alkaloid that activates AMPK (the same pathway as metformin), improving insulin sensitivity. Studies show it reduces fasting glucose, LH/FSH ratio, and androgen levels in PCOS.
- **Vitex (Chaste Tree Berry):** Supports progesterone production and LH regulation, helping to normalize cycles. Best suited for non-insulin-resistant PCOS subtypes.
- **Spearmint tea:** Two cups daily shown in clinical trials to reduce free testosterone in women with PCOS (Phytotherapy Research, 2010).
- **N-Acetyl Cysteine (NAC):** A powerful antioxidant that improves insulin sensitivity and has been shown to rival metformin in supporting ovulation.
- **Magnesium glycinate:** Deficiency is common in PCOS and insulin resistance. Supplementation improves insulin sensitivity and reduces inflammation.
- **Zinc:** Important for androgen metabolism and skin health. Helps reduce acne and hirsutism associated with elevated androgens.

■ Functional Medicine Tip

PCOS management is highly individualized. At Elemental Natural Medicine, we test your specific hormone levels, insulin markers, inflammation markers, and nutrient status before recommending a protocol — because the wrong approach can actually worsen your symptoms.

Hormonal Weight Gain

One of the most frustrating experiences for patients is gaining weight — or being unable to lose it — despite "doing everything right." When this happens, hormonal imbalance is almost always a factor. Understanding the underlying drivers is essential to achieving lasting results.

Hormones That Drive Weight Gain

- **Insulin resistance:** When cells become resistant to insulin, the body produces more of it. High insulin is a powerful fat-storage signal, particularly driving abdominal fat accumulation. This is the most common hormonal driver of weight gain.
- **Hypothyroidism:** Low thyroid function slows metabolism significantly. Even subclinical hypothyroidism — where labs are "normal" by conventional standards — can make weight loss nearly impossible.
- **Elevated cortisol:** Chronic stress elevates cortisol, which promotes fat storage around the abdomen, increases appetite (especially for carbohydrates and sugar), and breaks down muscle tissue.
- **Estrogen dominance:** Excess estrogen relative to progesterone promotes fat storage, water retention, and can impair thyroid function.
- **Low progesterone:** Often accompanies estrogen dominance. Progesterone has thermogenic properties; its deficiency reduces calorie burning.
- **Leptin resistance:** The brain stops receiving the "I am full" signal from leptin, driving persistent hunger and reduced metabolism.

The Functional Medicine Approach to Weight Loss

At Elemental Natural Medicine, weight management programs are completely customized. Rather than prescribing a generic calorie-restricted diet, we identify which hormonal systems are driving your weight gain and target those specifically.

Dietary Strategies

- Shift focus from calories to food quality and nutrient density
- Reduce processed carbohydrates and sugar to lower insulin levels
- Emphasize protein at every meal to preserve muscle mass and reduce appetite
- Include adequate healthy fats (avocado, olive oil, nuts, fatty fish) to support hormone production
- Avoid endocrine-disrupting pesticides by choosing organic produce where possible
- Time-restricted eating (intermittent fasting) can improve insulin sensitivity in some individuals

Key Natural Interventions

- **Berberine (500mg 2-3x daily):** Activates AMPK, the body's metabolic "master switch," improving insulin sensitivity and fat metabolism.

- **Ashwagandha:** An adaptogenic herb that reduces cortisol levels. A 2019 randomized controlled trial in Medicine showed significant reductions in body weight and food cravings with ashwagandha supplementation.
- **Alpha-lipoic acid:** Improves insulin sensitivity and mitochondrial function, supporting weight management in insulin-resistant individuals.
- **Chromium picolinate:** Reduces carbohydrate cravings and improves insulin receptor sensitivity.
- **Green tea extract (EGCG):** Modest but clinically meaningful support for fat metabolism and thermogenesis.
- **Fiber supplementation (psyllium, inulin):** Feeds beneficial gut bacteria, slows glucose absorption, and promotes satiety.

Weight Loss Is About Biochemistry, Not Willpower

The outdated "calories in, calories out" model has been largely disproven as a complete picture of weight management. Hormones, gut bacteria, sleep quality, stress levels, and nutrient status all profoundly influence body composition. A person with undiagnosed hypothyroidism, severe insulin resistance, or high cortisol will struggle to lose weight regardless of how little they eat — and aggressive calorie restriction may actually worsen hormonal dysfunction.

This is why comprehensive lab testing is a cornerstone of the Elemental Natural Medicine weight management approach.

Hormone-Related Hair Loss

Hair loss (alopecia) affects millions of people and causes significant emotional distress. While genetics play a role, hormonal imbalances are a major — and often reversible — driver of hair thinning and loss in both women and men.

Hormonal Causes of Hair Loss

- **Androgenic alopecia (DHT-driven):** Dihydrotestosterone (DHT), a potent androgen derived from testosterone, miniaturizes hair follicles over time. Elevated androgens in PCOS are a common cause in women.
- **Thyroid dysfunction:** Both hypothyroidism and hyperthyroidism can cause diffuse hair loss. Thyroid hormones are essential for the hair growth cycle. Even subclinical thyroid dysfunction causes noticeable thinning.
- **Adrenal fatigue and elevated cortisol:** Chronic stress diverts resources away from "non-essential" functions like hair growth. Cortisol also shortens the anagen (growth) phase of the hair cycle.
- **Estrogen deficiency:** During perimenopause and after delivery, falling estrogen is a major trigger for hair loss.
- **Insulin resistance:** High insulin promotes androgen production, contributing to androgenic alopecia.
- **Nutritional deficiencies:** Iron, ferritin, zinc, biotin, vitamin D, and amino acids are all critical for hair growth. Deficiencies are among the most correctable causes of hair loss.

Natural Medicine Strategies for Hair Loss

Laboratory Testing First

Before supplementing for hair loss, comprehensive testing is essential. At Elemental Natural Medicine, we assess: full thyroid panel (TSH, Free T3, Free T4, reverse T3, thyroid antibodies), iron and ferritin levels, sex hormones (testosterone, DHEA-S, estrogen, progesterone), DUTCH comprehensive hormone panel, and nutritional markers (zinc, vitamin D, B12, folate).

Evidence-Based Natural Interventions

- **Iron and ferritin optimization:** Many women with hair loss have ferritin below 70 ng/mL. Bringing ferritin above 70-80 ng/mL is often dramatically effective for hair regrowth.
- **Saw palmetto:** A natural 5-alpha-reductase inhibitor that blocks the conversion of testosterone to DHT. Studies suggest efficacy comparable to finasteride for androgenic alopecia with far fewer side effects.
- **Zinc (30mg daily):** Essential co-factor in hair follicle function. A 2013 study in the Annals of Dermatology found significantly lower zinc levels in patients with alopecia areata.
- **Biotin (2.5-5mg daily):** Required for keratin production. Most effective in those who are actually deficient.

- **Vitamin D (2000-5000 IU daily):** Vitamin D receptors are found in hair follicles; deficiency is strongly associated with alopecia areata.
- **Collagen peptides:** Provide key amino acids (glycine, proline) for hair shaft structure and support scalp health.
- **Ashwagandha and rhodiola:** Address cortisol-driven hair loss by supporting the adrenal stress response.

■ Functional Medicine Tip

Hair loss is one of the conditions most commonly overlooked in conventional medicine — "your labs are normal" is a frequent and frustrating response. Functional medicine uses optimal ranges rather than conventional reference ranges, catching deficiencies and imbalances before they become severe.

Blood Sugar, Insulin Resistance & Type 2 Diabetes

Insulin resistance and type 2 diabetes represent a spectrum of metabolic dysfunction that is deeply intertwined with hormonal health. In functional medicine, diabetes is understood not as a failure requiring lifelong medication management, but as a condition with identifiable, addressable root causes.

Understanding the Insulin Resistance Spectrum

Insulin resistance precedes type 2 diabetes by 10–15 years. During this time, the body is producing progressively more insulin to achieve normal blood sugar control — driving weight gain, inflammation, hormonal imbalances, and eventually beta-cell exhaustion and overt diabetes. Functional medicine aims to identify and reverse insulin resistance long before diabetes develops.

Key markers we assess include: fasting insulin (not just glucose), HbA1c, fasting glucose, triglycerides, HOMA-IR score, and a full lipid panel including particle size.

Natural Medicine for Insulin Resistance & Diabetes

Dietary Interventions — the most powerful tools available:

- A low-glycemic, whole-food diet is the cornerstone. A landmark 2019 study in *Cell* found that low-carbohydrate diets reduce fasting insulin by 30–50% within weeks.
- Mediterranean and DASH dietary patterns are well-supported by evidence for improving glycemic control.
- Increasing dietary fiber (beans, lentils, vegetables) slows glucose absorption and feeds insulin-sensitizing gut bacteria.
- Reducing refined oils (soybean, corn, canola) and increasing omega-3 fats improves cell membrane insulin receptor sensitivity.
- Vinegar (1-2 tbsp before meals) has demonstrated modest but consistent glucose-lowering effects in multiple clinical trials.

Exercise as Medicine

Exercise is arguably the most powerful insulin-sensitizing intervention available. Both aerobic exercise and resistance training improve insulin sensitivity through distinct mechanisms. Even a 10-minute walk after meals has been shown to significantly blunt post-meal glucose spikes (Sports Medicine, 2022).

Evidence-Based Supplements & Herbs

- **Berberine (500mg 3x daily):** Multiple meta-analyses confirm berberine reduces fasting glucose, HbA1c, and postprandial glucose comparably to metformin. Also improves lipids and gut microbiome composition.

- **Magnesium (300-400mg daily):** Magnesium is required for over 300 enzymatic reactions including insulin signaling. Deficiency is extremely common in diabetics and insulin-resistant individuals.
- **Chromium picolinate (200-400mcg daily):** Enhances insulin receptor sensitivity. Research supports modest improvements in glycemic control.
- **Alpha-lipoic acid (600mg daily):** Potent antioxidant that improves insulin sensitivity and reduces oxidative stress-related nerve damage.
- **Cinnamon extract (Ceylon, 1-2g daily):** Activates insulin receptors and reduces post-meal glucose spikes.
- **Gymnema sylvestre:** An Ayurvedic herb that reduces sugar cravings and improves glucose uptake. Studies show reduced fasting glucose and HbA1c.
- **Bitter melon:** Contains compounds that mimic insulin activity; used traditionally and supported by emerging research.

Can Type 2 Diabetes Be Reversed?

Yes — type 2 diabetes can be reversed in many cases, particularly when addressed early and comprehensively. The DiRECT trial (Lancet, 2018) demonstrated that an intensive dietary intervention achieved remission in nearly half of participants at two years without medication.

At Elemental Natural Medicine, we support patients in making the lifestyle and dietary changes necessary for true metabolic restoration — not just symptom management.

Infertility & Reproductive Hormones

Infertility — defined as the inability to conceive after 12 months of regular unprotected intercourse (6 months for women over 35) — affects approximately 1 in 6 couples worldwide. While structural issues and genetics play a role, a significant proportion of infertility cases are driven by correctable hormonal imbalances and nutritional deficiencies.

Hormonal Drivers of Female Infertility

- **PCOS & anovulation:** The most common hormonal cause of female infertility. Elevated androgens and irregular ovulation prevent conception.
- **Low progesterone / luteal phase defect:** Insufficient progesterone after ovulation prevents the endometrium from adequately preparing for implantation.
- **Thyroid dysfunction:** Even mild hypothyroidism disrupts ovulation, implantation, and early pregnancy maintenance. TSH should ideally be below 2.5 mIU/L for those trying to conceive.
- **Elevated prolactin (hyperprolactinemia):** Suppresses FSH and LH, disrupting ovulation.
- **Diminished ovarian reserve:** Reflected in low AMH and elevated FSH. Nutritional support can help preserve remaining follicular health.
- **HPA axis dysregulation:** Chronic stress elevates cortisol and suppresses GnRH, disrupting the entire reproductive hormone cascade.

Hormonal Drivers of Male Infertility

Male factor infertility contributes to approximately 40-50% of infertility cases. Key factors include low testosterone, elevated estrogen, oxidative stress in sperm, and nutritional deficiencies affecting sperm production and motility.

Natural Medicine for Fertility Support

For Women:

- **Myo-inositol (2-4g daily):** Improves egg quality, ovulation rate, and IVF outcomes in women with PCOS and insulin resistance.
- **Folate (as 5-MTHF, 400-800mcg daily):** Essential for DNA methylation and neural tube development. Methylfolate is preferred over folic acid, particularly for those with MTHFR polymorphisms.
- **CoQ10 (Ubiquinol, 200-600mg daily):** Mitochondrial support for egg quality. Evidence is particularly strong for women over 35 or with diminished ovarian reserve.
- **Vitex agnus-castus (Chaste Tree):** Supports progesterone levels and regularity of ovulation by modulating LH secretion.
- **Vitamin D (to optimal levels 50-70 ng/mL):** Vitamin D receptors are found in ovarian tissue; deficiency is associated with reduced fertility and IVF outcomes.

- **N-Acetyl Cysteine (NAC):** Reduces inflammation, improves insulin sensitivity, and may enhance ovulation in PCOS.

For Men:

- **CoQ10 (200-300mg daily):** Improves sperm motility and morphology. A 2013 Cochrane review noted positive effects on sperm parameters.
- **Zinc and selenium:** Critical for testosterone production, sperm morphology, and protection against oxidative DNA damage.
- **Vitamin C and E:** Powerful antioxidants that protect sperm from free radical damage — a leading cause of male infertility.
- **Ashwagandha (KSM-66 extract):** Shown in clinical trials to significantly improve sperm count, motility, and testosterone levels.
- **L-Carnitine:** Essential for sperm energy metabolism and motility.

■ **Functional Medicine Tip**

Fertility is a whole-body health issue — not just a reproductive one. Optimizing thyroid function, blood sugar balance, nutrient status, and stress physiology creates the hormonal environment necessary for conception and a healthy pregnancy. We recommend at least 3-6 months of focused preparation before conception attempts.

Thyroid & Adrenal Health

The thyroid and adrenal glands are the two most impactful hormone-producing organs in the body. Their dysfunction underlies a remarkable range of conditions — from fatigue and weight gain to hair loss, depression, anxiety, and immune dysregulation. At Elemental Natural Medicine, evaluating and supporting these systems is central to our functional medicine approach.

Thyroid Function & Hypothyroidism

The thyroid gland produces T4 (thyroxine) and T3 (triiodothyronine), which regulate metabolic rate throughout every cell in the body. Hypothyroidism (underactive thyroid) is one of the most underdiagnosed conditions in medicine, primarily because conventional labs use overly broad reference ranges.

Symptoms of hypothyroidism include: fatigue and sluggishness, weight gain despite dieting, cold intolerance, hair loss and dry skin, constipation, depression and brain fog, elevated cholesterol, and irregular periods.

Hashimoto's Thyroiditis is the most common cause of hypothyroidism — an autoimmune condition in which the immune system attacks the thyroid gland. Functional medicine takes a unique approach to Hashimoto's by addressing immune dysregulation, gut permeability, and dietary triggers (particularly gluten) in addition to supporting thyroid hormone levels.

Natural Support for Thyroid Health:

- **Selenium (200mcg daily):** Required for the conversion of T4 to active T3. Also reduces thyroid antibodies in Hashimoto's. Selenium-rich foods include Brazil nuts (just 2 per day meets requirements).
- **Iodine:** Essential for thyroid hormone synthesis. However, in Hashimoto's, excess iodine can worsen autoimmunity — testing and appropriate dosing is critical.
- **Zinc (15-30mg daily):** Supports thyroid hormone synthesis and T3 receptor binding.
- **Ashwagandha:** An adaptogen shown in clinical research to increase T4 levels and support thyroid function.
- **A gluten-free diet:** Molecular mimicry between gliadin (gluten protein) and thyroid tissue is well-documented. Many Hashimoto's patients experience reduced antibodies on a strict gluten-free diet.
- **Gut healing:** Leaky gut is strongly linked to autoimmune thyroid disease. Healing the gut with probiotics, L-glutamine, and zinc carnosine can reduce autoimmune flares.

Adrenal Health & the HPA Axis

The adrenal glands sit atop the kidneys and produce cortisol, DHEA, adrenaline, and aldosterone. Cortisol is the primary stress hormone, and its rhythm — high in the morning, declining through the day — is essential for energy, immune function, metabolism, and mood.

Chronic psychological, emotional, or physiological stress disrupts the hypothalamic-pituitary-adrenal (HPA) axis, leading to dysregulated cortisol patterns. This is often called "adrenal fatigue" colloquially, though the more precise functional medicine term is HPA axis dysregulation.

Symptoms include: *crushing fatigue, especially in the morning*, difficulty staying asleep, afternoon energy crashes, salt and sugar cravings, anxiety and irritability, brain fog, low immune resilience, weight gain around the abdomen, and poor exercise recovery.

Natural Adrenal Support:

- **Adaptogenic herbs:** Ashwagandha, rhodiola rosea, holy basil (tulsi), and eleuthero have decades of research supporting their ability to normalize cortisol patterns, reduce perceived stress, and improve energy.
- **Phosphatidylserine (300-400mg daily):** Clinically shown to blunt excessive cortisol responses to stress.
- **Vitamin C (1-2g daily):** The adrenal glands have the highest concentration of vitamin C in the body. Deficiency impairs cortisol synthesis and immune function.
- **Magnesium glycinate (300-400mg before bed):** Calms the nervous system, improves sleep quality, and supports adrenal recovery.
- **B-vitamin complex:** B5 (pantothenic acid) is particularly important for adrenal hormone synthesis.
- **Sleep optimization:** Non-negotiable for adrenal recovery. Growth hormone and tissue repair occur primarily during deep sleep; cortisol rhythm resets overnight.
- **Stress management practices:** Meditation, yoga, breath work (e.g., 4-7-8 breathing), and nature exposure all measurably reduce cortisol and support HPA axis normalization.

Menopause & Perimenopause

Menopause is a natural biological transition, not a disease — but the hormonal shifts involved can be profoundly disruptive without proper support. Perimenopause (the years leading up to menopause, often beginning in the late 30s to mid-40s) is frequently overlooked as a cause of hormone-related symptoms.

What Happens During the Menopause Transition

As ovarian function declines, estrogen and progesterone levels drop — but not uniformly. Progesterone often falls first, creating a relative estrogen dominance in perimenopause. Then, as the ovaries exhaust their follicular reserve, estrogen drops precipitously. This hormonal volatility underlies the wide range of menopausal symptoms:

- Hot flashes and night sweats (vasomotor symptoms)
- Sleep disturbances and insomnia
- Mood changes: anxiety, depression, irritability
- Brain fog and memory difficulties
- Weight gain (particularly abdominal)
- Vaginal dryness and changes in libido
- Bone density loss (accelerating significantly in the first 5 years post-menopause)
- Hair thinning and skin changes

Natural Medicine for Menopause

Phytoestrogens are plant compounds that weakly bind to estrogen receptors, providing gentle estrogenic activity that can moderate menopausal symptoms without the risks associated with synthetic HRT.

- **Isoflavones (soy, red clover):** Multiple meta-analyses confirm modest but significant reductions in hot flash frequency and severity.
- **Black cohosh (*Actaea racemosa*):** One of the most studied herbs for menopausal symptoms. Research supports reductions in hot flashes, night sweats, and mood changes. Not a phytoestrogen — acts via serotonin and dopamine pathways.
- **Sage (*Salvia officinalis*):** Clinical trials demonstrate that sage extract significantly reduces hot flash frequency. Also supports cognitive function.
- **Ashwagandha:** Supports adrenal DHEA production, which is a precursor to sex hormones in menopause; improves sexual function and mood.
- **Maca root:** Adaptogenic root from Peru with evidence for improving energy, libido, and hot flash symptoms in menopausal women.

Bone Health Foundations:

- Calcium (from food sources primarily: sardines, leafy greens, sesame seeds)
- Vitamin D3 + K2 (K2 directs calcium into bones rather than arteries)
- Magnesium (competes with calcium for absorption — balance matters)
- Weight-bearing and resistance exercise — the most powerful bone-building stimulus
- Reduce alcohol, smoking, and excess caffeine (all accelerate bone loss)

The Gut-Hormone Axis

One of the most profound advances in functional medicine over the past decade is the recognition that gut health is inseparable from hormonal health. The gut microbiome — the trillions of microorganisms living in your digestive tract — plays a direct and powerful role in hormone production, metabolism, and clearance.

How the Gut Influences Hormones

The **estrobolome** is the collection of gut bacteria responsible for metabolizing estrogen. When the microbiome is disrupted (dysbiosis), excess estrogen can be reactivated and reabsorbed rather than excreted — contributing to estrogen dominance, PCOS, fibroids, and endometriosis.

- The gut produces approximately 90-95% of the body's serotonin, directly influencing mood, anxiety, and the hormonal stress response.
- Leaky gut (intestinal permeability) allows bacterial toxins (LPS) to enter the bloodstream, triggering systemic inflammation that disrupts every hormonal system.
- Gut bacteria produce short-chain fatty acids (SCFAs) that improve insulin sensitivity and reduce inflammation.
- The gut-brain axis (via the vagus nerve) creates bidirectional communication between gut microbiome composition and the HPA stress axis.

Supporting Gut Health for Hormonal Balance

- **Probiotics:** Lactobacillus and Bifidobacterium species support estrogen metabolism and reduce inflammation. Look for multi-strain, high-potency formulations (50+ billion CFU).
- **Prebiotics and fiber:** Feed beneficial bacteria. Aim for 25-35g of fiber daily from a variety of plant sources.
- **Fermented foods:** Kefir, kimchi, sauerkraut, kombucha, and yogurt introduce beneficial bacteria and improve gut diversity.
- **Healing the gut lining:** L-glutamine (5g daily), zinc carnosine, deglycyrrhizinated licorice (DGL), and aloe vera support repair of intestinal permeability.
- **Reduce gut disruptors:** Unnecessary antibiotics, NSAIDs, alcohol, and highly processed foods all damage the gut microbiome.
- **Comprehensive stool testing:** At Elemental Natural Medicine, we use advanced stool analysis to identify dysbiosis, pathogens, inflammatory markers, and digestive enzyme function — providing a complete picture of gut health.

Your Personalized Hormone Wellness Plan

Throughout this ebook, you have learned that hormonal health is multidimensional — influenced by nutrition, gut health, stress physiology, sleep, environmental exposures, and genetics. Sustainable hormonal balance requires a personalized, comprehensive approach rather than a one-size-fits-all protocol.

Universal Foundations for Hormonal Health

Regardless of your specific hormonal concerns, these lifestyle foundations benefit virtually everyone:

Foundation	Why It Matters	Action Step
Anti-inflammatory diet	Reduces cortisol, insulin, and inflammatory cytokines that disrupt hormones	Increase vegetables, reduce sugar and processed foods
Quality sleep (7-9 hrs)	Growth hormone, cortisol, leptin, and sex hormones all reset during sleep	Consistent sleep/wake time; limit screens 1 hr before bed
Regular exercise	Improves insulin sensitivity, reduces cortisol, supports sex hormone balance	150 min moderate aerobic + 2x resistance training per week
Stress management	Chronic stress is the #1 driver of HPA axis dysregulation	Daily mindfulness, breath work, nature time, or yoga
Reduce toxin exposure	Xenoestrogens and endocrine disruptors in plastics, pesticides, and personal care products disrupt all hormonal systems	Choose organic, filter drinking water, switch to glass/stainless, read ingredient labels
Optimize gut health	The gut microbiome directly regulates hormone metabolism and clearance	Daily probiotic foods, 30+ plant foods per week, limit gut disruptors

Working With Elemental Natural Medicine

While the information in this ebook provides a strong educational foundation, optimal hormonal health requires individualized assessment. At **Elemental Natural Medicine**, Dr. Lane and his team offer a

comprehensive functional medicine program that includes:

- In-depth initial consultation reviewing your complete health history
- Comprehensive laboratory testing including hormones, thyroid, nutrients, gut markers, and metabolic panels
- Personalized nutritional therapy tailored to your specific biochemistry and health goals
- Customized herbal medicine and supplement protocols — based on evidence and your individual labs
- Acupuncture for hormone regulation, stress, and associated symptoms
- Lifestyle coaching including sleep optimization, stress management, and detoxification support
- Ongoing monitoring and protocol adjustments based on lab results and symptom progress

Ready to Begin Your Hormone Health Journey?

Contact Elemental Natural Medicine today to schedule your initial consultation with Dr. Lane.

■ 285 W Tabernacle St Suite 202, St. George, UT 84770

■ (435) 246-7642

■ elementalnaturalmedicine.com

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