Blush Skincare & Wellness
Optimizing your hormones

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http://www.blushdallas.com

Welcome to Blush Skincare & Wellness

We are excited to serve you in your search to a better you through bio-identical hormones, health, wellness, and skincare.

Our focus is helping you achieve balanced health through the use of bio-identical hormones along with cutting edge science within the framework of Functional Medicine.

Our experienced staff is here to evaluate your individual case needs and develop a customized and comprehensive program that is right for you. We provide you with the most effective treatment plan in addressing your health concerns.

In our clinical setting, we evaluate your specific hormone levels and once we obtain your history and associated symptoms, we are able to support a solution. Lives will be changed once we render the solution.

We are trained medical professionals providing an invaluable service that can drastically improve your quality of life.

Our program is configured to support: **Balanced Hormones, Detoxification and Optimal Health**

We understand your needs and look forward to working with you to help you achieve your health goals.

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Bio- Identical Hormone Program

Individualized plan to optimize and balance your hormones and achieve a healthier you.

Your Program includes:

- **Nurse Practitioner Consultation**
  Our practitioners will review your medical history and perform a physical exam, when indicated. They will then discuss which tests are indicated based on your age, symptoms, history and exam. Many of the common symptoms can be due to the sex steroids (estrogens, progesterone, testosterone), thyroid, and cortisol imbalance or vitamin/nutritional deficiency. The only way to know which one is the culprit for your particular symptoms is to test. Thyroid studies (free T3, free T4, TSH, anti-thyroglobulin antibodies, thyroid peroxidase antibodies, Reverse T3), iron levels. Vitamin D, Vitamin B12, insulin, lipid panel, hemoglobin A1C is all tests that are performed with blood tests. Results can take between 1-3 weeks, depending on which testing is determined to be best for your specific needs. Our practitioners will review your results at the follow-up visit to explain the results.

- **Customized Compounded Bio- Identical Hormones**
  According to patient lab results
- **Vitamin and Supplementation Recommendations**
  Critical nutrients are needed for hormone metabolism, energy production, and restorative sleep. Additionally, these products support the body's natural detoxification mechanism and overall health.

- **Email Correspondence**
  With staff throughout the program

- **Follow Up Evaluation and Progress Monitoring**

- **Comprehensive Laboratory Panel (sample)**

- Estrogen
- Progesterone
- Testosterone
- DHEA
- Cortisol
- PSA (men)
- Vitamin D
- Liver and Kidney function tests
- Glucose metabolism
- Lipid testing
- Complete Thyroid Panel including Reverse T3

ADDITIONAL TESTING

Adrenal Testing

Many symptoms today result from multiple imbalances in hormones and the chemical messengers of the nervous system. This urine test will guide us in developing a customized regimen that is designed to address the imbalances in your nervous system.

- Fatigue
- Depression/Anxiety

- Weight Issues
- Migraines
- Focus/Concentration
- Addictions/Compulsions

The Precision Analytical test will provide us with your cortisol levels so that we may help remedy those imbalances you are experiencing. Our healthcare practitioner will go over your results and customize a plan to have you feeling great.

Please follow the instructions provided in the Precision Analytical test kit.

Food Intolerance Test

ALCAT Test has provided healthcare practitioners and their patients with a tool for managing a wide variety of conditions linked to the activation of the immune system for over 20 years. A few conditions included are:

- Digestive Disorders
- Migraines
- Obesity
- Chronic Fatigue
- Autism

The ALCAT testing is at a cellular level. It is evaluating the body's cellular response to a wide array of substances through a blood test. These substances include chemicals, additives, colorings and foods. The advantage of this particular test is that it doesn't require the patient to have ingested any of these specific substances to know if the body is sensitive. After testing, our nurse practitioner will review your results and discuss your recommended 4 day Rotational Diet.

The ALCAT test is a blood draw. Fasting is not required.

MicroNutrient Test

Vitamin, mineral and antioxidant deficiencies have been shown to inhibit the function of the immune system. The MicroNutrient test measures the functions of 34 vitamins, minerals, amino acids and antioxidants are at an intracellular level. The test measures how micronutrients are actually functioning within the patients' white blood cells. These tests allow nutritional assessment of a broad variety of clinical conditions including arthritis, cancer, diabetes, metabolic disorders, cardiovascular risk and micronutrient deficiencies.

The test results will take approximately three weeks to arrive and our nurse practitioner will review the results with you.

The MicroNutrient Test requires a blood draw. Fasting is not required.

Gastrointestinal Profile

Gastrointestinal function is important for general health. The Comprehensive Digestive Stool Analysis offers a comprehensive look at the overall health of the gastrointestinal tract. The evaluation of gastrointestinal function includes analyses of digestion, absorption, bacterial balance, and yeast. This test looks at conditions:

- Irritable Bowel Syndrome
- Maldigestion/Malabsorption
- Inflammatory Bowel Disease

The test results take approximately three weeks to arrive and our nurse practitioner will review the results with

you.
The Comprehensive Digestive Stool Analysis requires a stool sample.

Frequently Asked Questions

What are bio-identical hormones?

Bio-identical hormones have the exact same molecular shape and structure as the hormones made in the human body. These hormones generate the same physiologic response in the body, as do hormones already produced by the body. Plant sources (sterols) provide the starting material, which can be converted in the laboratory to specific bio-identical hormones.

By contrast, synthetic hormones are intentionally different. Drug companies cannot patent a bio-identical structure, so they most often invent synthetic hormones that are patentable (Premarin, Prempro, and Provera being the most widely used examples) or provide 'bio-identical" hormones in a unique delivery so the delivery mechanism becomes patentable.

Hormones are very powerful things. When they are in balance, life is good. We feel energetic, happy, sexy, and alive. We sleep well and are energized in the morning. Our weight loss efforts from good nutrition and fitness programs actually work. We lose weight and keep it off. On the other hand, when hormones are out of balance, multiple symptoms can arise. If you have any of the following symptoms, you may be experiencing hormonal imbalance:

• Hot flushes/night sweats
• Food cravings
• Weight gain/inability to lose weight
• Foggy thinking
• Decreased libido
• Hair loss
• Vaginal dryness
• Breast tenderness
• Endometriosis
• Depression
• Arthritis/joint pains
• Migraines/headaches
• Insomnia/sleep disturbances
• Poor concentration
• Fatigue
• Inability to build/maintain muscle
• Irritability/mood swings
• PMS
• Fibrocystic breasts
• Anxiety
• Bloating
• Impaired immune system/frequent infections

Why should I use bio-identical hormones?

Many factors contribute to hormonal imbalance such as aging, genetics and increasing daily stress. The disturbances can cause a variety of different symptoms. Often the symptoms are confused with the signs of aging. This can have a negative effect on your life. You may feel fatigued, irritable or have trouble sleeping. You may experience hot flashes or night sweats, or your libido or even digestion may suffer.

There is really not much we can do to prevent hormonal imbalances. As we age, our hormone levels will fluctuate and decline. But you can restore hormone balance through natural bio-identical hormone replacement therapy. And once your hormones are in sync again, the negative symptoms usually disappear.

Bio-identical Hormone Replacement Therapy (BHRT) is an alternative to conventional hormone therapy such as conjugated estrogens and Medroxyprogesterone. BHRT uses both natural and synthesized hormones, which are identical to the molecules of hormones that the human body produces. It is customizable to your body's needs and requirements, unlike "one size fits all' conventional therapy.

When your hormones are properly balanced, you'll feel much better, younger, more energized and more emotionally settled. Hormonal balance affects other efforts to improve your health, so when your hormones are optimally balanced, you'll see much greater benefits to eating right and exercising.

Balancing your hormones is a crucial step to attaining optimal overall health. Hormones are the chemical messengers of your body, so when they're properly balanced and functioning, all of you body systems work more smoothly.

Men, who suffer from the symptoms of andropause or women suffering from menopause or Perimenopause, use bio-identical hormones to replace natural hormones that decline in their bodies with age.

Comprehensive research proves the bio-identical hormones estrogen, progesterone and testosterone are not only safe, but have a positive impact on diseases like osteoporosis and prostate cancer.

Are bio-identical hormones safer than the synthetic versions?

We long ago concluded that the answer to this question is yes. But that doesn't mean bio-identical hormones are perfect. The great appeal of bio-identical hormones is that they are natural, and our bodies can metabolize them as it was designed to do, minimizing side effects. Synthetic hormones are quite strong: often producing intolerable side effects. Moreover, the compounded bio-identical hormones can be matched individually to each individual's needs — something that's just impossible with mass-produced synthetic products.

The Women's Health Initiative Study looked at the synthetic hormones Premarin and Provera, and found some important risks associated with them. Those risks included:

- A small increase in blood clots.
- A small increase in risk for stroke in the women who started synthetic hormones in the first 10 years after menopause (50 to 60 years of age).
- An increased risk of breast cancer with synthetic hormones taken for more than 5 years.
- More heart attacks, strokes and dementia in women who started synthetic hormones at an older age.

Let us note here that the WHI studies on the effectiveness and health risks of HRT were based on synthetic/equine-based hormones, and the average age of the women at enrollment was 63. These details did make a difference in their risk.

European medical studies suggest that yes; bio-identical hormones are safer than synthetic versions. While this makes perfect sense, we must be cautious because they have not been well studied especially for long-term use. And in any case, we recommend that women and men never think of any drug as completely safe.

BHRT (Bio-identical Hormones):
• Chemical structure exact replica of human hormones
• Fits hormone receptor exactly

• Helps with all hormonal symptoms
• Individualized dosing
• Lab testing/monitoring available
• Must be obtained from compounding pharmacy
• Costs more
CHT(Conventional Hormone Therapy):
• Chemical structure different than human hormones
• Fits hormone receptor well
• Helps with hot flushes and vaginal dryness
• One-size-fits-all dosing
• No monitoring tests available
• Can be obtained at a regular pharmacy (e.g., CVS, Walgreens, Kroger)
• Costs less

I heard that estrogen might increase my risk for heart attack or breast cancer. Is this true?

No, that is not true. Not all estrogens are created equal. Fears of increased risks of heart disease and breast cancer with estrogen therapy have mainly come from the Women's Health Initiative study that was stopped prematurely in the summer of 1992 because of an increased risk of breast cancer and heart disease seen in women taking Prempro, a synthetic hormone. The study actually highlights the risks of estrogen therapy with non-bio-identical (synthetic) hormones, which is NOT the type used by **Blush Skincare & Wellness**.

Hormones that are non-bio-identical use a one-size-fits-all approach to hormone therapy with hormones that are foreign to a woman's body. Conversely, bio-identical hormones, which are the same as what is in your body naturally, have been proven to be safe. **Blush Skincare & Wellness** uses bio-identical hormones. The two main estrogens that they replace are E2 - Estradiol and E3 - Estriol.

Bio-identical hormone therapy has never been shown to increase the risk of heart disease. In fact, hormone replacement with bio-identical hormones has been shown to decrease the risk of heart disease.

We cannot use study results done on synthetic, non-bio-identical hormones to assess risks of bio-identical hormones. When an educated provider prescribes bio-identical hormones in the proper manner, there are no increased risks of the occurrence of breast cancer or heart disease.

Why is a prescription required for compounded bio-identical hormones?

Compounding or formulating a customized dosage form for an individual is a function pharmacist may legally perform if a practitioner requests it. The individual ingredients may or may not be restricted to prescription items. In short, anything that is a compounded medication must be prescribed.

What are the possible side effects of my medication?

Ideally, there should be no side effects if the hormones are given with the intention of restoring to normal human levels and using only those hormones that are deficient. Side effects may occur if one type of hormone becomes predominant and creates an imbalance of other hormones. The effects of some underlying medical conditions can also contribute to side effects.

Why do women need hormones before, during and after menopause?

No matter what your age, if your female hormones (estrogen, progesterone and testosterone) are unbalanced, you may suffer ill effects such as hot flashes, night sweats, trouble sleeping, mood swings depression, anxiety, memory loss, vaginal dryness, fatigue, loss of your sex drive and even weight gain. Women with balanced hormones integrated with proper nutrition and fitness can have a better quality of life as they age.

I already went through menopause, do I need bio-identical hormones?

You may be done with menopause, but you are never done with hormones. If you have any symptoms such as hot flushes, night sweats, decreased libido, fatigue, insomnia, inability to lose weight, or mood symptoms, you may benefit from BHRT.

Why do men need testosterone replacement?

Production of the hormone testosterone begins to decline as men age, just as in women and many begin to experience symptoms of low testosterone. Testosterone is the hormone responsible for maintaining mental focus, energy, metabolism, muscle mass, fat levels and sex drive. Men can restore their vitality and reduce symptoms of andropause by balancing hormones with bio-identical hormone therapy.

Is testosterone safe and effective?

There is very little research regarding testosterone use in menopausal women. Libido can be low for many reasons. Testosterone can be useful for some but definitely not all women with low libido. Concerns regarding testosterone include the risk of breast cancer and possible negative effects on the heart, blood vessels, and liver. In addition, increased facial hair and acne are common complaints. High amounts of testosterone can cause the hairline to recede, the voice to deepen and the clitoris to get significantly larger. A woman taking testosterone needs blood tests to be certain that the level is not too high.

What is the best age to consider bio-identical hormone therapy?

At Blush Skincare and Wellness, we believe most people should have their hormones checked by the age of 40 or earlier if they are experiencing symptoms of menopause or andropause. The way to prevent illness and to optimize one's health is to take an active role in addressing health care risks before they become a problem. Getting tested when you still feel good gives you a benchmark for later comparison as the inevitable hormone changes and decline begin.

How soon should I be able to tell a difference after I start taking BHRT?

On average, most people begin to feel a difference within the first month or two of BHRT therapy. We ask that you stay on the same prescription for about 90 days and then we can help you re-evaluate with a follow-up consultation or review if necessary. You should always feel free to ask the pharmacy staff any questions you may have regarding your prescription(s).

Are bio-identical hormones approved and regulated by the FDA?

The FDA approves the ingredients in bio-identical hormones such as estrogen, progesterone and testosterone. However, state and local pharmacy boards have jurisdiction over them, not the FDA. It is important to know you are using the highest quality compounding pharmacy and that they follow the most stringent guidelines and have excellent quality assurance.

Will this treatment interfere with my currently prescribed medications?

Typically no, but we need to know every prescribed and over the counter medication you take. Some medications may be reduced or no longer needed.

Will you take over as my doctor?

No, you will still need to see your primary care provider for annual exams. We will not treat acute care needs as well. Please see your primary care provider for those needs and concerns. We recommend bone density exams, Mammograms, and PAP smears prior and/or during our treatment program.

Will insurance cover the lab work and if not how much are lab tests?

We will provide you a lab sheet with CPT codes and diagnosis codes. You may personally submit your paperwork to your insurance company for reimbursement. You are not able to give your insurance card to the lab-testing site. You will be required to pay for labs prior to testing at our office. Initial comprehensive labs are $500 and follow- up labs range up to $250. These costs can vary depending on the hormone therapy prescribed.

Will you prescribe vitamins and supplements?

If we find your overall health and hormonal balance could be improved through vitamins and supplements, we will prescribe or suggest them to you. **Blush Skincare & Wellness** recommends only high-grade vitamins and supplements for their patients so they get the most benefit from each supplement.

What are the different types of delivery methods for BHRT?

Capsules – A standard form of delivery is the oral capsule.

Creams – Transdermal methods of delivery are widely used to allow absorption of medicine directly through the skin.

Triturates – Triturates are a popular form used to keep drugs in the mouth when local action is needed. They are generally placed under the tongue and allowed to dissolve for sublingual delivery, which allows the medication to enter the bloodstream quickly and easily.

Rapid Dissolve Tablets – Rapid dissolve tablets (RDT's) are the newest technology in dissolvable tablets. They are larger in size meaning they can hold a larger amount of active ingredient. They are designed to dissolve on the tongue and within a very short period of time (under 30 seconds).

Troches – Troches are larger than triturates and are typically dissolved between the gum and cheek.

Injections- Injections can either be subcutaneous or intramuscular.

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Hormones

Estrogens

- Estradiol (E1)-80% of a woman's estrogen
- Estriol (E2)
- Estrone (E3)

Estradiol is the estrogen of youth. It is most abundant when women are young and full of energy, no wrinkles, no weight gain, increased sex drive, and low to no incidence of heart disease or cancer. Women with high levels of estradiol often feel great, and it stays high during the teens and twenties and starts to decrease during the thirties and forties.

By the time women reach menopause, estradiol has all but disappeared. It is bio-identical Estradiol that is supplemented when levels have diminished to the point that a woman becomes symptomatic.

Estriol is the estrogen of pregnancy. Although it is an important estrogen, it is a weaker form and less important during this part of a woman's life.

Estrone is the estrogen found in postmenopausal women. It stores itself in body fat and has more known cancer-causing properties. The increased production of estrone coincides with the increased incidence of breast cancer and heart disease in women over 50. This change in total ratio of the different estrogens as a woman gets older explains why she experiences the many uncomfortable symptoms of menopause.

Benefits of Estrogen Replacement

- Alleviates perimenopausal and menopausal symptoms
- Protects against bone loss
- Protects the cardiovascular system, reduces blood pressure by relaxing blood vessels and prevents plaque formation.
- Provides maintenance of anti-aging mechanisms
- Reduces incidence of diabetes
- Protects nerve cells and brain function
- Helps memory and learning ability
- Improves sleep
- Provides antidepressant effect by increasing serotonin levels

Testosterone

Testosterone is important for women also, but they make one-seventh the amount per day that men make. Correcting female testosterone deficiencies are important. During a woman's reproductive years, her ovaries not only make estrogen, but also testosterone. In women, testosterone is produced half in the ovaries and half in the adrenal glands. After menopause, testosterone production decreased gradually by one third of premenopausal levels, unlike estrogen production, which decreased dramatically. In women who have had their ovaries removed, testosterone levels drop by half.

Other functions of testosterone include:

Increased bone mass
Increased strength
Improved quality of life
Helps stabilize blood sugar
Aids in prevention of headaches and migraines
Protects against cardiovascular disease

Protects against Alzheimer's and dementia
Increased muscle mass
Higher libido
Prevents aches, pains, and arthritis
Reduces breast cancer

Progesterone

Progesterone is made in the ovaries after ovulation. This hormone prepares the uterus for a fertilized egg. If there are no eggs to be implanted, then the progesterone levels drop to cause a shedding of the uterine lining. Progesterone is one of the two main hormones produced in the ovaries of menstruating women, and it is made in small amounts in the adrenal glands.

Other functions of progesterone include:

Serves as a natural antidepressant
Helps to restore the normal sleep pattern
Plays several roles in cardiovascular protection
Helps to normalize blood sugar levels
Strengthens bones and stimulates bone building
Uses fat for energy
Improves alertness and gives more energy
Restores Libido

Symptoms of a progesterone deficiency include:

Hot flashes or night sweats
Foggy thinking or memory loss
Insomnia
Water retention
Increased risk of breast or uterine cancer
Vaginal dryness
Depression
Bone loss, aches, or pains
Yeast infections
Hair loss, especially on top of the head

DHEA

Meet the Mother of all Hormones ~ Dehydroepiandrosterone (DHEA) may be a big word for a small hormone, but in appropriate levels this potent hormone has powerful anti-aging effects for the entire body. DHEA is often referred to as the 'mother of all hormones' because it fuels the hormone pathway, a term referring to the body's delicate interplay of hormones. DHEA increases a person's muscle mass, bone growth and promotes fat burning in the body. It also improves memory and boosts the immune system. The key is to maintain proper levels.

Women depend on adequate levels of DHEA to balance other key hormones throughout the body, such as estrogen, progesterone and testosterone. DHEA in women is produced by the adrenal glands, two small glands that sit atop the kidneys. As women age, the DHEA levels and most other hormones begin to decline. But age isn't the only culprit. DHEA, as well as cortisol and adrenaline, is produced in the adrenals. Although we rely on hormones like cortisol and adrenaline to assist in the body's 'fight or flight' response to stress and to prepare the body for stressful situations, chronic stress can cause the adrenal glands to work overtime. While the adrenals are preoccupied pumping out large quantities of cortisol and adrenaline, they can't produce enough DHEA for your body.

Low levels of DHEA in women can cause symptoms including:
- Fatigue
- Weight gain
- Depression
- Aching joints
- Low libido

On the other hand, adequate DHEA levels can help women:
- Boost libido
- Rebuild muscle mass
- Lose weight
- Improve memory
- Boost the immune system
- Promote flexibility
- Raise energy levels

Cortisol

Stress can make me sick? It turns out the "fight or flight" response that once helped protect our early ancestors in times of peril is now turning against us and running us ragged. Cortisol helps to prepare the body for potentially life-threatening situations. Unfortunately, many women live stressful lives and these daily stressors often trigger the release of cortisol. Are you sluggish during the day and restless at night? Are you depressed or anxious and don't know why? If so, a cortisol imbalance may be to blame.

Cortisol is a hormone produced by the adrenal glands, which sit atop the kidneys. The hormone has earned the nickname "the stress hormone," because it's released as the body's natural response to stress. Cortisol can be helpful in the short term, but chronic stress can cause the adrenal glands to become overworked and often leads to a medical condition known as adrenal fatigue.

While stress affects women and men alike, women are more susceptible to the effects of chronic stress and cortisol imbalance. Women have a lot of roles to perform. As caretakers, nurturers, wives, mothers, and many times business professionals, juggling it all can become overwhelming. When you factor in the hormonal changes women face as they age, the combination can really get the cortisol pumping.

Symptoms of cortisol imbalance in women are similar to those typified by other hormonal imbalances such as Perimenopause and menopause and often include the following:
- Fatigue
- Depression
- Weight gain
- Bone and muscle loss
- Foggy thinking
- Anxiety
- Irritability

Studies reveal that women who eat balanced meals and partake in physical activity 3-5 times a week, and who actively try to reduce stress levels, live longer, healthier lives. If the chronic stress persists, over time, the adrenal glands can become overworked, which can present a whole new set of problems. So it is important to find ways to control chronic stress and arrest elevated cortisol levels before adrenal fatigue has a chance to develop.
There may be times when this process cannot be addressed with diet and lifestyle changes alone. When a hormonal imbalance needs to be fully evaluated, **Blush Skincare & Wellness** can help.

Melatonin

Melatonin naturally regulates sleep-to-wake cycles occurring in our bodies, but as we age the natural production slows down.

Melatonin has also shown to help with age related issues like:

- Cardiovascular disorders
- Sleep problems
- Depression
- Immune disorders
- Cancer
- Seasonal affective disorder
- Sexual dysfunction.

There are also additional benefits of Melatonin like stronger immune system and reduction in free radicals in the body.

In certain countries Melatonin is available as a supplement without prescription, in other areas of the world it's not sold at all. Studies are under way to determine full range of benefits and possible side effects. In USA Melatonin is widely available and is treated as a dietary supplement.

Melatonin functions as a synchronizer of the biological clock and its release is dependent on light that passes through retina. Release of the hormone is regulated by pineal gland found in the brain. Dim light conditions trigger the onset of the hormone.

Melatonin is also a powerful antioxidant; one of its characteristics shows it can easily pass through cell membranes and cross the blood-brain barrier. Once used it cannot be regenerated by the body as many other antioxidants do. It passes through the liver and gets removed.

Many researches are still being conducted on the effects of this hormone, an especially on recognizing long term effects. Any prolonged exposure to externally administered hormones may carry a risk. Many of the studies focus on melatonin interaction with immune system, which still remains unclear.

Pregnant women, people with strong allergic reactions, people with autoimmune diseases and immune system cancers should avoid melatonin.

Thyroid

Thyroid is one of most important glands in human body and one of the biggest ones. It is responsible for metabolism, which can be directly related to weight issues. It also adjusts how the body responds to other hormones. In young people thyroid is responsible for growth and development.

There are many other functions regulated by thyroid, which reach their peaks depending on the phase of life.

Thyroid related complications are one of the most common diseases treated with hormone replacement therapy. Patients with surgically removed thyroid require daily supply of thyroid hormones for the rest of their lives. Other patients with affected thyroid hormones production may need some replacement hormones.

There are two main groups of complications related to thyroid hormone levels.

Hyperthyroidism

Hyperthyroidism causes the thyroid to overproduce hormones resulting in increased metabolic rate. There are a number of side effects like rapid weight loss, muscle weakness, excessive sweating, hart rate irregularities, diarrhea, blood pressure issues, sudden mood changes, problems with body temperature and many other symptoms. Hyperthyroidism treatment consists of limiting or stopping overproduction of hormones first by using beta-blockers and eventually by destroying the thyroid from the inside by using radioactive iodine. In severe cases surgery is necessary to remove defunct gland.
Usually after the treatment patients have insufficient amount of hormones, which need to be replaced during hormone therapy. Usually patients will take hormones for the rest of their lives.

Hypothyroidism

Hypothyroidism relates to decreased production of thyroid hormones caused by abnormalities or as a result of Hyperthyroidism treatment. The side effects of hormone deficiency may include rapid weight gain fatigue, hair loss, intolerance to cold conditions, and critically lowered heart rate.

Hypothyroidism can lead to increased risk of heart diseases and high cholesterol.
Statistics indicate that thyroid diseases affect 10 times more women than men. On average one of 50 people is affected by thyroid related complications.

Thyroid complications are commonly regarded. The problems can come from malnutrition, early childhood treatments, genetic conditions or external stimulants from working conditions.

Symptoms are often misdiagnosed as depression, chronic fatigue, and psychosomatic. One of the problems is that our laboratory reference ranges are way too low. By the time an abnormal TSH shows up on a blood test, the thyroid is already significantly damaged. Another problem is that the TSH is only one thyroid marker, and it isn't very reliable. The thyroid actually is complex and there are other lab tests that will more accurately measure how it's converting the hormones necessary for optimal function. Autoimmune disorders are rampant in this day and age and the thyroid is often a target of those antibodies.

Sadly, our most common treatment often causes a state of imbalance in the whole endocrine system. By giving thyroid medication and ignoring the rest of the hormone-producing organs and glands in the body, we are setting the body up for a lifetime of imbalance when the thyroid is treated to the exclusion of the adrenal glands and the rest of the endocrine loop.

Symptoms of hypothyroidism
• Weight: easy to gain, hard to lose, even with good diet and exercise.
• Cold temperature (take your basal body temperature every morning before getting up. If you are below 97.0 degrees F. you are likely hypothyroid).
• Sluggishness.
• Low energy.
• Depression.
• Dry skin and eczema.
• Puffy, baggy eyelids.
• Hair brittle or falling out (lateral eyebrows especially). Hair loss is different than balding. If you see a lot of hair in the shower and no balding, you are turning over your hair.
• Hoarseness or difficulty swallowing.
• No muscular benefit from exercise.
• Bradycardia; decreased cardiac function.

The thyroid hormone is under siege by stress and drugs. Poor nutrition reduces T3. So do sulfonamides, sulfonureas, and salicylates (some of our most prescribed drugs).

De-iodinization can happen through poor nutrition and environmental pollutants. Instead of absorbing the iodine the thyroid needs to function, we will instead absorb bromine or fluorine, or chlorine if they are more readily available, and nowadays they are. The countries with the most fluoride in their water have the highest levels of hypothyroidism: The U.S. and Australia. Bromine comes from carbonated water drinks and processed baked goods. Chlorine is in carpet fibers, pesticides, bleach, our swimming pools, and hot tubs.

If you are in adrenal fatigue, you will have TSH levels that are not high enough because the body is pumping out ACTH, which suppresses TSH.

Diagnosing Hypothyroidism
Many practitioners use only the TSH level to diagnose thyroid disease. That is like looking at the skid marks on a road without looking at the cars and drivers involved for the whole picture of a car accident. **Blush Skincare & Wellness** will take a good medical history of your symptoms and how they started, including stressors in your life and a good dietary picture. In addition, check your basal body temperature every morning for 5 days before you get out of bed with a digital thermometer. If it is below 97 degrees F, there is a very good chance your thyroid is not functioning at optimal levels.

Along with the TSH, we will be checking:

- Free T3 and T4 levels: Needed to diagnose conversion problems. Cellular uptake and conversion of T4 to T3 is dependent on STRESS AND NUTRITION.
- TPO: This is a measure of autoimmune disease. 12.6% of the population will have some detectible TPO antibody. It shows up in Hashimoto's Thyroiditis and in 80% of Grave's Hyperthyroidism and causes destruction of the thyroid tissue. It is likely you also have adrenal fatigue if it is positive.
- Reverse T3: RT3 is a metabolite of T4 (thyroxine). Typically, when T4 loses an atom of iodine -- a process known as mono-deiodination, or T4 to T3 conversion -- it becomes triiodothyronine (T3), the active thyroid hormone. But in some cases, the body conserves energy by converting the T4 instead into RT3, an inactive form of T3 that is incapable of delivering oxygen and energy to the cells, as T3 does.

Why does anyone produce RT3 (Reverse T3)?
Your body, especially the liver, can constantly be converting T4 to RT3 as a way to get rid of any unneeded T4. In any given day, it's stated that 40% of T4 goes to T3 and 20% of T4 goes to Reverse T3.

But in any situation where your body needs to conserve energy and focus on something else, it will change the above percentages, changing the conversion of RT3 to 50% or more, and the T3 goes down, down. Examples are emotional, physical, or biological stress, such as being chronically or acutely sick (the flu, pneumonia, etc), after surgery, after a car accident or any acute injury, chronic stress causing high cortisol, being exposed to an extremely cold environment, diabetes, aging, or even being on drugs like beta blockers and amiodarone.

Why would someone produce too much Reverse T3 (RT3)? Chronic stresses of your life. Three common physiological reasons-the first two related to your adrenals (low cortisol, high cortisol), and the third related to your iron levels. Even low B12 and other chronic inflammation and other health issues can cause it.

- When biological stress is excessive, such as being on the inadequate treatment of T4-only or being told your TSH lab test is normal, your adrenal glands produce high amounts of cortisol to help you cope with ongoing hypothyroidism and lingering symptoms and conditions. The excess cortisol inhibits the conversion of T4 to T3, and instead produces even larger amounts of RT3, creating an RT3 problem.

- When biological stress is ongoing, your adrenals will eventually produce less cortisol ("adrenal fatigue" or "adrenal insufficiency"), dropping from high cortisol to a mix of high and low, then to all low. And those low levels can cause chronic anxiety, poor coping skills, paranoia, easy nausea, sensitivity to light or sounds, psychological issues, etc. When you don't make enough cortisol, thyroid hormones can pool high in your blood. So your body responds by converting the T4 to excess RT3.
- When iron goes low, which is quite common in thyroid patients due to low stomach acid, your red blood cells become less plentiful (or you have enough, but they are weak and pale), and carrying thyroid hormones via your blood becomes inadequate, causing thyroid hormones to pool in your blood. The body responds by producing excessive amounts of RT3 to clear out the excess T4.

8 Tips for Keeping Your Thyroid Healthy

1. **Blush Skincare & Wellness** will get laboratory testing and review the results and devise a plan customized for your health
2. Nutrition:
    - Gluten has been shown to be one of the primary triggers for Hashimoto's Thyroiditis.
    - High sugar, caffeine, alcohol and fat diets create an environment of adrenal fatigue, polycystic ovarian function, and insulin resistance, which will stress the thyroid. Opt instead for a Palo Mediterranean diet of clean protein, fresh veggies, good fats, and minimal fruits in season.
    - Avoid the halogens: Chlorine, Fluoride, and Bromine compete with iodine transport.
    - No soy.
    - Limit caffeine, alcohol, and other stimulants.
3. Supplements- **Blush Skincare & Wellness** Nurse Practitioners will discuss the need for certain supplements for your personal care including, but not limited to:
    - Iodine: protective, but excessive amounts can reduce thyroid function.
    - Selenium
    - Calcium
    - Adrenal supplementation
    - Pharmaceutical grade Multi Vitamin and Mineral.
4. Moderate exercise 5-6 days a week.
5. Keep your weight at optimal levels.
6. Practice a method of stress control
7. Volunteer or do something daily to serve others. Research shows that the more you focus on others and take responsibility for your own emotions, the better your immune system will be.
8. Learn to accept and roll with the things you can't change and take action in the areas you can change in your life that aren't working for you.

Vitamin D3

Vitamin D is a fat-soluble vitamin (which must be consumed in the diet) and a hormone, which is made in your body. Your body produces vitamin D after sun exposure. However, we all know that sun exposure has adverse effects such as aging skin and cancer. Topical sunscreens, which we highly recommend, block vitamin D production by 97-100%. You can also get small amounts of vitamin D from food such as red meat, fish and dairy products.

What Does Vitamin D Do?
There are vitamin D receptors in your bones, brain, breasts, intestines, pancreas, immune system, kidneys, reproductive organs, adrenal glands, thyroid, pituitary gland, and spinal cord.

- Helps your body absorb calcium from the gut
- Helps your body absorb phosphorus from the GI tract
- Mineralizes bones
- Helps your pancreas release insulin

- Needed to help your blood clot
- Essential for optimal thyroid function

How Did I Become Vitamin D Deficient?

- Aging (your body makes less vitamin D from the sun)
- Sunscreen
- Decreased absorption due to gastrointestinal issues
- Medications (such as prednisone)

What are the Symptoms of Vitamin D Deficiency?

- Muscle spasms
- Bone disorders
- Low levels of calcium
- Decreased phosphate levels

What am I at Increased Risk for When I am Vitamin D Deficient?

Autoimmune diseases
Allergies
Cancer
Cardiovascular disease
Depression
Diabetes
High blood pressure
Epilepsy
Migraines
Multiple sclerosis
Musculoskeletal pain
Osteoarthritis
Osteoporosis
Inflammatory conditions
Polycystic ovarian syndrome
Poor wound healing

If you are taking a vitamin D supplement, adequate calcium and magnesium intake are also required.

It is very difficult to get too much vitamin D. People can take up to 10,000 units per day for six months and not have any adverse effects. However, people with carcoidosis, tuberculosis, Lyme disease, lymphoma, or kidney disease have to be supplemented carefully because of an increased risk of their blood calcium level becoming too high.

Andropause: Menopause for Men

Men with low testosterone often experience andropause. What is andropause? The medical term "andropause" refers to the male version of menopause and is characterized by the same or similar symptoms as the female version. Men may feel tired, bloated and irritable. A man who typically enjoys vigorous exercise every day may suddenly feel drained after just a few minutes or be unable to maintain his current physique. Even worse, men who experience andropause may find a significant decrease in sex drive, endurance and enjoyment of sexual activities.

If these symptoms aren't bad enough, over time men can develop serious conditions as a result of andropause and low testosterone including:

- Decrease Muscle
- Low Sex Drive
- Intense mood swings
- Loss of enjoyment of everyday life
- Disconnection with friends and family
- Anxiety and depression
- Sleep disturbance and chronic fatigue
- Decreased cardiac protection
- Negative impact on blood pressure

Does every man suffer from andropause? Some men may avoid the symptoms described above and only experience a few minor issues as they get older, but every man loses testosterone as he ages beginning at age 30. In the decade leading up to their 40s, most men lose approximately one to three percent of their testosterone levels annually. By age 55, men see a significant decrease in testosterone and most likely experience some form of andropause. Fortunately, more healthcare practitioners today are aware of this problem and have begun looking into alternative treatments for low testosterone and hormone imbalance.

Some may assume that if the body loses testosterone naturally, then testosterone may not be essential as men age. In fact, testosterone plays a vital role in the aging process and should be protected with treatments like male hormone replacement therapy. Why does testosterone matter?

Along with the obvious sexual performance and ability, testosterone aids in the regulation and support of:

- Muscle mass and strength development
- An effective lipid profile
- Energy, mood and motivation
- Metabolism and fat distribution
- Skin and bone health

Low testosterone or "low T" is also known medically as Hypogonadism and accounts for a wide range of problems as men age, but how would someone know he has this condition? It's estimated that 25 percent of men over the age of 30 have low testosterone. With such a high number, one would think that doctors diagnose this condition frequently.

Unfortunately, low testosterone can present in a variety of ways and may be difficult to detect with other health problems. It remains one of the most under-diagnosed conditions due to the wide range of symptoms.
Men who feel they have low testosterone should discuss the condition. Certain symptoms such as fatigue or sexual changes could stem from other health conditions, but they may indicate a treatable hormone imbalance. Keeping track of testosterone levels through regular testing may give men a better picture of their overall health.