Neurotransmitter Testing & Amino

The science of urinary neurotransmitter testing examines the correlation between peripheral levels of neurotransmitters and the brain. The neurotransmitters that are produced in the brain require the same amino acid precursors and enzymes for synthesis as they do in the body. Based on this connection, urinary neurotransmitter metabolics give us a reflection of neurotransmitter imbalances that can result in conditions including depression, anxiety, ADD/ADHD, headaches, migraines, fatigue, weight gain/ loss, insomnia, memory problems, chronic pain, and much more.

NEUROTRANSMITTERS are the brain chemicals that communicate information throughout our brain and body. They relay signals between nerve cells, called "neurons." The brain uses neurotransmitters to communicate primary bodily functions. Telling your heart to beat, your lungs to breathe, and your stomach to digest are such examples. Neurotransmitters can also affect your mood, sleep, concentration, weight, and can cause adverse symptoms when they are not in balance. Neurotransmitter levels can be depleted in many ways. It is estimated that 86% of Americans have sub optimal neurotransmitter levels. Stress—the primary culprit, poor diet, neurotoxins, genetic predisposition, drug (prescription and recreational), alcohol, caffeine and sugar usage can cause these levels to be abnormal.

There are two kinds of neurotransmitters – **INHIBITORY** (Serotonin, GABA, and Dopamine) and **EXCITATORY** (Dopamine, Epinephrine and NorEpinephrine). Excitatory neurotransmitters are not necessarily exciting – they are what stimulate the brain. Those that calm the brain and help create balance are called inhibitory. Inhibitory neurotransmitters balance mood and are easily depleted when the excitatory neurotransmitters are overactive.

Amino Acids—The Brain Chemistry Connection

Amino acid supplementation is a term describing the use of supplemental amino acids to help balance brain chemicals (neurotransmitters) and other aspects of the physiology. For this to be most effective, it should include a specialized urinalysis test that provides a reliable means of measuring excretory values of neurotransmitters. From those findings an individualized protocol including transdermal amino acid supplementation is devised to improve the quantity and ratios of neurotransmitters in the brain.

The first step is to identify baseline neurotransmitter levels. The Sabre Sciences Neurotransmitter Urinalysis Panel can be utilized to establish baseline, therapeutic, and maintenance protocols. Follow up testing is imperative to check supplementation. Adrenal levels (Sabre Sciences, Inc. Circadian Panels) are also of utmost importance. The interaction of amino acid supplementation, adrenal and sex hormone balance all play a <u>very</u> active role in overall well-being, energy levels and implementing a successful regimen.

Sabre Sciences, Inc.

Neurotransmitters Tested:

Serotonin, Dopamine, Epinephrine, NorEpinephrine, Histamine, GABA, and Glutamate

Neurotransmitter Panel 1

Serotonin, Dopamine, Epinephrine, NorEpinephrine and Histamine

Neurotransmitter Panel 2

Serotonin, Dopamine, Epinephrine, NorEpinephrine Histamine, GABA and Glutamate

Adrenal Neurotransmitter Combination Panel

Serotonin, Dopamine, Epinephrine, NorEpinephrine Histamine, GABA, Glutamate, Cortisol, DHEA

> *Urinary and Salivary Collection

Adult Neurotransmitter

Combination Panel Serotonin, Dopamine, Epinephrine, NorEpinephrine Histamine, GABA, Glutamate, Cortisol, DHEA, Testosterone, Progesterone, Estradiol, Sodium, Potassium, Chloride

> *Urinary and Salivary Collection

THE SABRE SYSTEM FOR ACHIEVING

Accumulated stress and hormonal dysfunction cause many physical and emotional problems. Measuring your hormones for baseline levels and bringing these levels into balance could be the answer to physical and emotional well-being.

It is very important to understand that there must be adrenal balance, electrolyte balance, amino acid balance, and blood sugar balance to achieve sex hormone balance.

Baseline Salivary

A simple, non-invasive saliva test known as the Circadian Male or the Circadian Female Panel (Sabre Sciences, Inc.) can determine whether an imbalance in adrenal glands and/or the sex hormones exists.

These panels evaluate:

- How well the adrenal glands function by tracking the full 24 hr circadian rhythm.
- The bio-availability of the hormones since the free (unbound) fractions of the hormones are found in saliva.
- Hormones tested include Cortisol, DHEA-s, Progesterone, Estradiol and Testosterone.
- Electrolytes tested include: Sodium, Potassium, and Chloride. We can also test for calcium, magnesium and phosphorous.

Six saliva samples, taken at 8am, noon, 4pm, 8pm, midnight, and 4am, are used to reconstruct the adrenal rhythm in the laboratory and determine whether the main stress hormones (cortisol and DHEA-S) are being secreted in proper proportion to each other and at the right times; and whether there is a state of electrolyte imbalance.

Protocols

Sabre Sciences uses a combination of natural hormones, electrolytes, amino acids and nutritional co-factors to balance the sex hormones, normalize the H/P/A Axis and enhance metabolic activity. We custom formulate transdermal crèmes and determine application times and dosages based on the 24hr circadian panel. These crèmes combine several bio-identical hormones with the nutritional co-factors necessary for proper hormonal utilization.

It normally takes 120-180 days to restore adrenal balance. Once this is accomplished, focus can then shift to restoring healthy ratios of the steroid sex hormones. It is necessary to affect the hormones in this manner. When the body is on the stress mode (hyper-vigilance), for an extended period of time, steroid sex hormones are converted to the adrenal hormones, DHEA and Cortisol. This misappropriation due to stress is the primary cause of abnormal sex hormone levels and ratios. If the adrenal dysfunction is not corrected first, any sex hormone, including progesterone, estrogen, or testosterone precursors that are supplemented will be converted to stress hormones.

Expected Results

By using the Sabre Sciences system of hormonal balance you can, within a few months, achieve optimum hormonal function. The system has been developed taking into account the associated problems that usually help perpetuate the hormonal imbalance. This approach systematically re-establishes optimal function to all the contributing systems as well. This has a powerful impact on the entire body and allows for the stress handling system.

Once hormonal balance is achieved, Sabre Sciences maintenance crèmes and metabolic balancing protocols can be used to maintain a younger, healthier body.

Sabre Sciences, Inc.

All Test Panels Include Estradiol/Progesterone/Testosterone Cortisol/DHEA/Na, K, Cl

Female Comprehensive Panel **24 Day Panel** Days 2, 10, 12, 14, 16, 18, 24

The key to successful supplementation is assessing the individual by performing baseline and follow-up evaluation of their hormonal status. Only by pre and post replacement evaluation can one accurately bring the body into "hormonal balance".

Test Includes: 6 Cortisol samples **3 DHEA-s** samples, Sodium, Potassium, Chloride, Testosterone, 7-Estradiol 7-Progesterone,

27 Total Test Results

Female Circadian Panel 24-Hour (**6 Collections**)

The Female Circadian Panel is designed for the menopausal Female. This Test Offers 6 collection times in a 24-hour period—

<u>Test Includes</u>: 6 Cortisol samples 3 DHEA-s samples, Sodium, Potassium, Chloride, Estradiol, Progesterone,

Testosterone Collection Times: 8AM, Noon, 4PM, 8PM, Mid., 4AM

15 Total Test Results

Male Circadian Panel 24-Hour (6 Collections)

The key to natural hormonal balance is determining the proper priority of treatment. To accomplish this, the patient has to be approached as an individual. Our research has shown that to cause a positive hormonal change you must normalize adrenal activity first.

Test Includes: 6 Cortisol samples

3 DHEA-s samples, Sodium, Potassium, Chloride, Estradiol, Progesterone, 4 Testosterone Samples Collection Times: 8AM, Noon, 4PM, 8PM, Mid., 4AM 18 Total Test Results



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Transdermal Crème

In addition to individual needs, an important factor regarding the correct levels of any kind of supplement is how quickly it is metabolized and eliminated from the body. This is called metabolic clearance. A supplement, especially a hormone, should not accumulate or remain in the body too long, or it will interfere with the changes that must occur for supplementation to be effective.

A transdermal cream supplement works best. It is easily applied and delivered, bypassing the obstacle of breakdown in the digestive system or liver. Most of the available supplemental creames claim to be transdermal, but are actually topical. A big problem with topical creames is that most of them use an inexpensive oil cosmetic base. They are absorbed into fat cells, and months after discontinuance they can still be found in body tissues. A true transdermal does not rely on the size of the molecule; instead it has a vehicle to carry it to the target. This is called a liposomal delivery system, which employs a molecular coating to control absorption.



A "stealth" liposome has 100 bilayer lipid shells, identical to cell membrane lipids, allowing it to pass through the skin tissue. The shells slowly dissolve, releasing hormones and co-factors gradually into the bloodstream.

Transdermal supplementation not only allows for a much higher absorption rate (up to 20x higher when compared to oral ingestion), it relieves the patient from the burden of taking multiple products. Our transdermal supplementation provides a wide variety of ingredients which are formulated to specifically target the individual imbalances— as generally we target excitatory Neurotransmitters in the day (energy) and inhibitory (sleep) at night, determined by laboratory testing offered by Sabre Sciences.

SABRE SCIENCES, INC

Effective Products Available

All the products are available now by calling Sabre Sciences, Inc.

Female Progesterone Support

Bio Femme ICTM — Designed for Women

Progesterone crème with estrogen blockers (natural tomoxafin). The foundation of our *BioFemme System*TM, BioFemme IC is designed to re-balance your system, providing both stress support and hormonal support.

Adrenal / Metabolic Support

ENDOSIS IC[™] — For Men & Women

Adrenal formula designed to affect Cortisol/DHEA equilibrium. Normalizes Cortisol and allows for adrenal recovery. **ENDOSIS IC™** offers specific adrenal support to help you deal with stress.

7 Keto DHEA — For Men & Women

A double blind study demonstrates that 7 Ketogenic DHEA promotes weight loss, increases levels of free T3, increases metabolic activity, immune modulation, memory enhancement, and thermogenesis and does not increase estrogen and/or testosterone.

Statlyte — For Men & Women

ELECTROLYTES are vital to nerve, muscle, adrenal and proper metabolic function. Adrenal hormone imbalances can lead to dehydration and volume depletion, thus adding to electrolyte imbalances. Proper hydration and electrolyte intake and/or supplementation are critical for normal water metabolism. Just drinking water will not balance electrolytes.

TriPlex IC[™] — For Men & Women

The thyroid <u>requires</u> specific nutrients to produce hormones, which control our metabolic rate. Without these, the thyroid may produce improper amounts of hormones, leading to a number of health problems, including weight gain, hair loss, cardiovascular disease and neurological dysfunction. **TriPlex ICTM** is a proprietary formula, rich in the thyroxine precursor amino acids: glutamine, ornithine, taurine, tyrosine; and uniquely supplying neurotransmitter-like cofactors that aid metabolism (7-Ketogenic DHEA).

Bio Femme ICTM can help with...

- PMS/Hot Flashes
- Menopausal & Stress Relief
- Influences Hormonal Balance
- Improves Metabolism
- Endocrine Support
- Natural Support that Helps Promote a Woman's Cycle

ENDOSIS IC™ may help with...

- Loss of Libido
- Impotence
- Bloating & Fluid Retention
- Mood Swings / PMS
- Menopause
- Poor Memory
- Sleep Disturbances

7 Keto DHEA may help with...

- Promotes Weight Loss
- Promotes Thyroid Activity
- Increases Metabolic Activity
- Increases Immune Modulation
- Memory Enhancement

Statlyte may help to ...

- Increase metabolic Activity
- Increases Energy
- Supports Electrolyte Balance

TriPlex IC[™] may help to...

- Promote proper thyroid function
- Increase Energy & Vitality
- Helps the burning of fat
- Increase Metabolism

SABRE SCIENCES, INC

The Sabre System for Achieving Balance

WHY SHOULD YOU BE CONCERNED WITH HORMONE TESTING?

Those concerned about decreasing hormone levels—this includes men, women, and children. **Indicators of Hormonal Imbalances**

- Chronic stress and related health problems.
- Lack of vitality and **energy**.
- Muscle and joint **pain**.
- Osteoporosis
- Sleep disturbances
- Poor **memory**.
- Alcohol intolerance.
- Stress maladaption.
- Low sex drive.
- Low body **temperature**.

Based on your laboratory test results SABRE SCIENCES can formulate an allnatural custom crème to help support your endocrine function.

Transdermal supplementation not only allows for a much higher absorption rate (up to 20x higher when compared to oral ingestion), it relieves the patient from the burden of taking multiple products. Our transdermal supplementation provides a wide variety of ingredients which are formulated to specifically target the individual imbalances— as generally we target excitatory Neurotransmitters in the day (energy) and inhibitory (sleep) at night, determined by laboratory testing offered by Sabre Sciences.

WHO SHOULD BE TESTED FOR HORMONE LEVELS?

Adequate levels and an appropriate balance of the steroid hormones (estradiol, progesterone, testosterone and DHEA) are necessary for maintaining optimal health and well being in both females and males. This family of steroid hormones supports a wide range of essential physiological functions including blood lipid balance, bone mineral density, fertility, sexuality, normal thyroid function, a general sense of well-being and certain aspects of normal brain function.

A primary marker of <u>the aging process</u> in both men and women is a reduction in normal hormone levels which is responsible in large part for infertility, decreased energy and muscle strength, loss of libido and an increase in the symptoms of menopause.

Hormone levels can also be related to the symptoms of PMS, sleep disorders, menopause, andropause, osteoporosis, sex hormone imbalance and heart health.

Salivary testing is useful for:

- Monitoring the effectiveness of supplementation
- Measuring the effect of phytoestrogens consumed in foods and herbs.
- Determining whether the body compensates and maintains its balance taking adrenal/hormonal supplementation.