



SOS

STRESS RECOVERY PROGRAM

IN-PRACTICE GUIDE



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Introduction to Stress

Physiological Resilience and Metabolic Reserve



VIDEO:
INTRO TO SOS STRESS
RECOVERY PROGRAM

Stress is an everyday occurrence that we all experience at varying levels. Individually, we experience and tolerate stress in a different manner than others in similar situations. The concept of stress has permeated our social and biological reality of being human. Most often, we equate “stress” with stressful events (loss of family member, divorce, major life changes). Yet, from a physiological perspective, the definition of stress and its effects are much more difficult to grasp.

What is clear is that stress takes a toll on the body in ways we are only beginning to understand. In fact, researchers claim that nearly 75 to 90% of the diseases prevalent in Western society today are somehow related to the stress mechanisms of the body.

Our body’s response to stress is a phenomenon we call physiologic resilience. If stress continues into the long term, our body does not respond as quickly. Over time, if large amounts of stress continue, we deplete our reserve of supporting nutrients. We call this our metabolic reserve, and its exhaustion leads us to experience chronic disease conditions. This resiliency and reserve is based on our chosen lifestyle, our individual experiences and perception of stress, our exposure to toxins/ infections and our genetic make-up.

For many patients, stress is a major underlying cause of several mental and physical health problems (Figure 1). It is the daunting task of the clinician to determine which patients are becoming overwhelmed by the effects of stress as well as develop individualized support protocols to help patients regain their wellbeing. The SOS Stress Recovery Program is designed to help you and your patients easily identify, assess and manage the effects of stress and dysfunction within the body’s stress-response system.

Figure 1:
10 Patient Symptoms Indicating Possible HPA Axis Dysfunction

1. Fatigue
 - The most common presenting complaint
2. Pain
 - Chronic pain in the joints
 - Headaches
 - No response to pain therapies
3. Mood regulation
 - Depressed mood
 - Anxious thoughts
 - Restless mind
4. Female hormone disorders
 - PMS
 - Infertility
 - Perimenopause
 - PCOS
5. Insomnia
 - Difficulty getting to sleep
 - Trouble staying asleep
6. Allergies
 - Runaway immune dysfunction without adequate cortisol
7. Asthma
 - Chronic inflammatory condition
8. Thyroid disorders
 - Often mimic HPA axis dysfunction
9. Hypoglycemia
 - Lightheadedness
 - Brain fog
 - Headaches
 - Sleepiness
10. GI disturbances
 - Constipation
 - Diarrhea
 - Heartburn
 - Reflux
 - Bloating/Gas

The clinical case studies included in this in-practice guide are intended to provide clinicians with guidelines for natural solutions to help reverse the negative effects of stress. This includes a testing/decision tree, protocols for each of the three stages of HPA (Hypothalamus-Pituitary-Adrenal) axis dysfunction, as well as protocols and lifestyle recommendations addressing each of the four key stressors that exacerbate HPA axis dysfunction (Figure 2).

Each clinical case study in this in-practice guide includes sample test results, plus principles and treatment protocols for consideration when initiating salivary hormone assessments and therapeutic lifestyle applications for the treatment of HPA axis-related dysfunction in chronically ill patients.

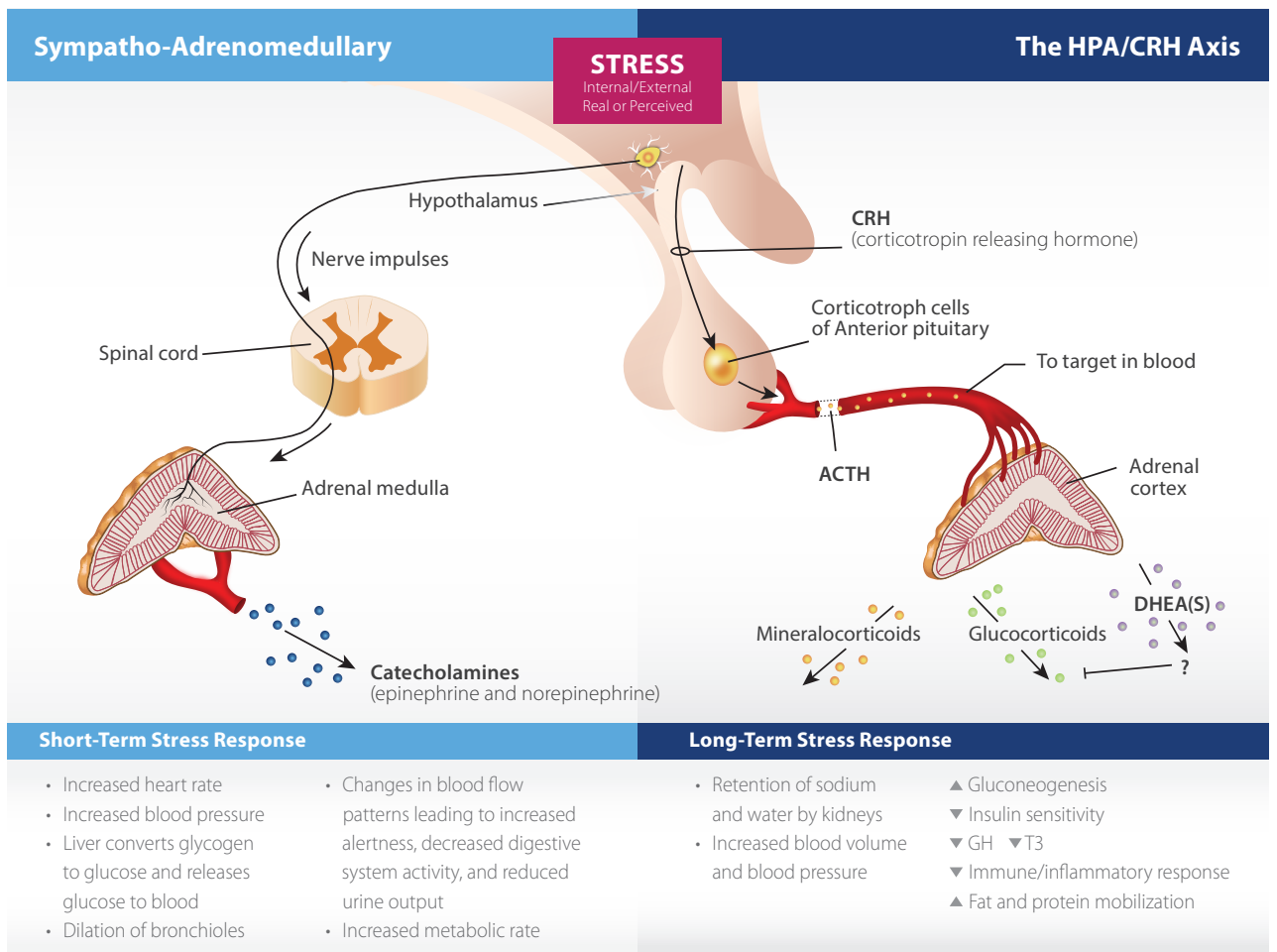
Additionally, the SOS in Practice section (page 35) offers guidelines for utilizing the resources provided in the SOS Clinical Implementation Resource Kit. These easy-to-use tools will help you create a streamlined and comprehensive stress recovery program in your practice. Please refer to The SOS In-Practice Revenue Generation Model (page 113), for a basic outline of annual revenue generation using the SOS Stress Recovery Program in your practice.

Figure 2:
Modifiable Categories of HPA Axis Stress



Endocrine functions within the pituitary gland are altered as a person ages. These changes in nearly every aspect of endocrine function are accelerated by stress (allostasis). It is not uncommon to see a patient with stress-related HPA axis dysfunction to also exhibit related thyroid dysfunction, reproductive cycle dysfunction and even skin pigmentation issues. If corrections are made within the HPA axis and incoming stressors reduced, the other systems will improve without direct intervention. We know dysfunction within the stress response system may cause many different diseases, because the metabolic resources are mobilized during stress to manage the "crisis." With little time to rebuild between each stressful event, the tissues are placed under such burden that chronic disease diagnosis is imminent. By understanding these mechanisms, practitioners may create a treatment and lifestyle protocol to help reduce the allostatic load and build a strong resilience against both stress and chronic disease.

Figure 8:
The Stress and Response System(s)



ACTH adrenocorticotrophic hormone
AVP arginine vasopressin

CRH corticotropin-releasing hormone
DHEA dehydroepiandrosterone

GH growth hormone
HPA hypothalamus-pituitary-adrenal

T3 triiodothyronine

Stress Assessment/Intake Questionnaire


Chronic disease progression, aging and mortality are the result of depletion of metabolic reserve in a wide range of tissues due to the overall allostatic load placed on our system. It has been extensively researched that the stress response system leads to physiological dysregulation. Researchers have tirelessly attempted to find ways to measure markers to determine progression of aging, cognition, mental illness and chronic disease risk.

Each patient arrives in your office with their own unique and diverse history and lifestyle challenges. It is important to be mindful that we are assessing and treating the patient, not just their markers. The SOS Recovery Program is designed to be comprehensive and flexible based on your patients need for assessment and therapeutic strategies. A detailed history, physical examination and targeted laboratory testing with help you carefully and thoughtfully create a treatment protocol for each individual.


The following 4 Key Stressors Questionnaire, will assist the practitioner to assess the patient’s perspective of their stressors and overall root-cause contributors to their current state of health. Use this as a guideline to prioritize testing for your patients and continue to the Testing/Treatment Decision Tree.

Testing/Treatment Decision Tree

Following a basic decision tree may be helpful when gathering necessary objective data to determine next steps with patients. It is understood that every patient is unique and may not follow the same path based on their history and current health status and progression of condition.



4 Key Stressors Questionnaire



Patient Name: _____ Date: _____

Please circle **yes** or **no** for each of the following questions. Please fill in the Other sections for any unlisted issues related to each category.

After identifying and reviewing your primary stressor(s) with your health care provider, please refer to the corresponding chapter (Chapter 1: Blood Sugar Control, Chapter 2: Mental and Emotional Stress, Chapter 3: Overcoming Insomnia, Chapter 4: Reducing Inflammation) in the SOS Stress Recovery Program Patient Handbook for lifestyle, dietary and nutrient therapy recommendations.

Blood Sugar Imbalance

- Do you experience symptoms of hypoglycemia such as dizziness, shakiness or brain fog between or following meals? Y N
- Do you frequently miss or delay meals? Y N
- Do you frequently crave sugar or carbohydrates? Y N
- Do you consume excessive sugar or refined carbohydrates? Y N
- Are you diabetic or pre-diabetic? Y N
- Do you regularly consume alcohol or caffeine? How much per day? _____ Y N
- Do you consume food within two hours before bedtime? Y N
- Other _____ Y N

Mental and Emotional Stress

- Do you frequently experience anxiety? Y N
- Do you suffer from depression? Y N
- Do you suffer from mood swings? Y N
- Do you have difficulty getting motivated? Y N
- Do you frequently experience feelings of agitation, anger, fear or worry? Y N
- Do you consider your job, relationships or finances stressors in your daily life? Y N
- Are you a caregiver for a parent or disabled child? Y N
- Other _____ Y N

Sleep Cycle Disturbances

- Are you experiencing problems falling asleep? Y N
- Are you experiencing difficulty staying asleep? Y N
- Are you sleeping for 7-9 hours each night? Y N
- Do you feel well-rested when you wake up in the morning? Y N
- Do you work 2nd or 3rd shift or keep late night hours? Y N
- Do you block blue light from your eyes at least two hours before bed? Y N
- Do you eat within two hours of bedtime? Y N
- Do you frequently feel drowsy throughout the day? Y N
- Do you snore? Y N
- Other _____ Y N

Inflammatory Imbalance or Chronic Pain

- Musculoskeletal: Do you suffer from headaches, muscle, back or joint pain? Y N
- Gastrointestinal: Do you suffer from IBS, Crohn's disease or diverticulitis? Y N
- Dermatological: Do you suffer from hives, eczema or psoriasis? Y N
- Respiratory: Do you suffer from asthma, bronchitis, seasonal allergies or hay fever? Y N
- Autoimmune: Do you suffer from any autoimmune condition such as MS, lupus or rheumatoid arthritis? Y N
- Immunological: Do you suffer from food allergies, chronic infections or frequent illness? Y N
- Other _____ Y N

How to Successfully Implement the SOS Stress Recovery Program in Your Practice



VIDEO:
INITIAL OFFICE VISIT

FIRST APPOINTMENT:

Before you meet in the exam room:

Step 1: During the first appointment, the patient completes the **4 Key Stressors Questionnaire**.

In the exam room:

Step 2: While the patient is waiting to see you, the patient watches the **SOS Patient Education Video** as an introduction into how stress impacts health.

Step 3:

- Using the Inventory Sheet and Presentation Pads, discuss the basic physiology of the HPA axis dysfunction. Also, review the symptoms and overall cortisol/DHEA patterns typically observed in each stage.
- Review the 4 Key Stressors Questionnaire and determine the key stressor(s) driving HPA axis dysfunction.
- Begin the patient on the initial treatment protocol, including the comprehensive formulation(s) to address key stressor(s).

At checkout:

Step 4: Patient receives the **SOS Stress Recovery Program Patient Handbook**. Instruct the patient to read the first ten pages of the handbook, along with the chapter correlating to their key stressor(s). The patient should implement the applicable lifestyle and nutritional recommendations and bring questions to the next appointment.

Step 5: The patient goes home with a salivary hormone test kit to assess HPA axis dysfunction (cortisol awakening response (CAR), diurnal cortisol and DHEA imbalances), as well as additional hormone testing (estrogen, progesterone, testosterone, and/or thyroid hormone imbalances) if necessary. Schedule follow-up visit to increase compliance.



VIDEO:
FOLLOW-UP VISIT

FOLLOW-UP VISIT (2-3 WEEKS)

In the exam room:

Step 6:

- Review steps patient has taken to improve nutrition and implement lifestyle change along with any questions the patient has on integrating these steps based on information read in the patient handbook.
- Review test results along with patient history to identify the patient's specific stage of HPA axis dysfunction.
- Patient receives a treatment strategy based on their symptoms, stage of dysfunction and specific cortisol/DHEA imbalances. Patient continues the product chosen during the first office visit to address their underlying key stressor.
- Although the nutritional supplementation protocol will likely improve patient symptomatology, it is important to set patient expectations by reinforcing that if no lifestyle change is implemented, improvement in HPA axis dysfunction will be impeded.

At checkout:

- Provide clear recommendations on length of each therapy
- Schedule follow-up based on patients need for coaching and accountability.

FOLLOW-UP VISIT

Step 7: No sooner than three months of implementing the initial protocol, the patient should be offered a salivary hormone re-test, provided there has been significant symptom change, as well as lifestyle change. Reinforcing the proper changes, as mentioned in Step 6, is crucial to improvement upon retesting. Consider waiting to retest until these steps have been properly implemented by the patient.

**Determine when to schedule a group medical appointment to follow up with 10 to 16 patients in a 90-minute block. Be sure to prescribe it as a required follow-up at the second office visit.*

Initial In-Office Visit

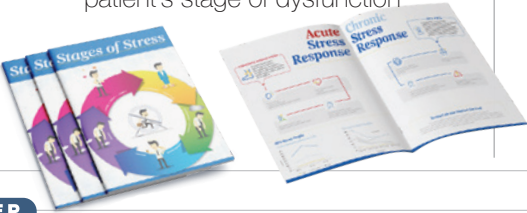
STEP 1 Patient completes the 4 Key Stressors Questionnaire




STEP 2 Patient watches the Patient Education Video



STEP 3 A. Clinician utilizes inventory sheet and presentation pads to discuss the physiology of the HPA axis and the importance of identifying the patient's stage of dysfunction



B. Clinician and patient identify key stressor(s):



C. Patient begins comprehensive formula to address key stressor(s)



STEP 4 Patient receives SOS Patient Handbook




It is recommended that patients review the first 10 pages of the handbook and the chapter correlating with their key stressor(s).


- Chapter 1: Blood Sugar Control**
- Chapter 2: Mental & Emotional Stress**
- Chapter 3: Overcoming Insomnia**
- Chapter 4: Reducing Inflammation**

The patient should also review the lifestyle and nutritional recommendations outlined in each chapter.

STEP 5 A. Patient goes home with lab test kit to assess HPA axis function



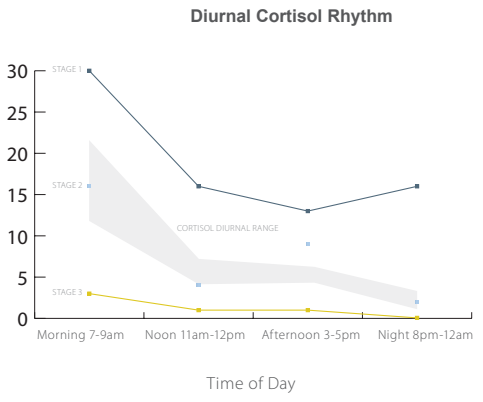
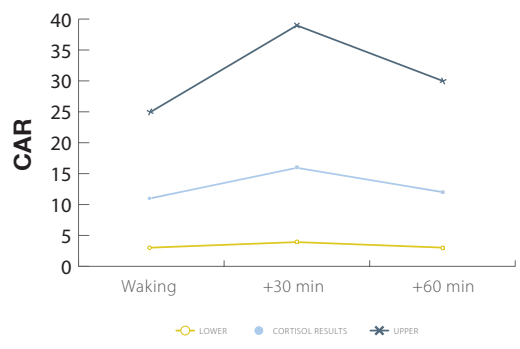
B. Clinician encourages long-term lifestyle changes to begin immediately



Follow-Up Visit (2-3 Weeks)

STEP 6

A. Clinician reviews test results, questionnaire and patient history in order to identify stage of HPA axis dysfunction



B. Clinician develops treatment strategy based on patient's stage of HPA axis dysfunction

		DIURNAL CORTISOL		
		High	Normal	Low
CORTISOL AWAKENING RESPONSE (CAR)	Elevated	Acute Stress Fear, Anxiety, Mental/Emotional Stress Neurotransmitter Support Adaptogen Support	Acute on Chronic Stress PTSD Neurotransmitter Support Adaptogen Support	Acute on Chronic Stress PTSD Neurotransmitter Support Adaptogen Support
	50% - 150%	Appropriate Response Neurotransmitter Support Adaptogen Support	Appropriate Response Neurotransmitter Support Adaptogen Support	Chronic Stress Neurotransmitter Support Adaptogen Support
	Flat	Depleted NT, HPA Response Neurotransmitter Support Adaptogen Support	Depleted NT, HPA Response Neurotransmitter Support Adaptogen Support	Depleted NT, HPA Response Neurotransmitter Support Adaptogen Support



At this time, consider enrolling patients in a Group Visit. We recommend **Restoring the Balance: Stress Hormones and Health** SEE THE FOLLOWING PAGE FOR MORE DETAILS



Stress and the Thyroid



VIDEO:
INTRO TO THYROID
AND STRESS

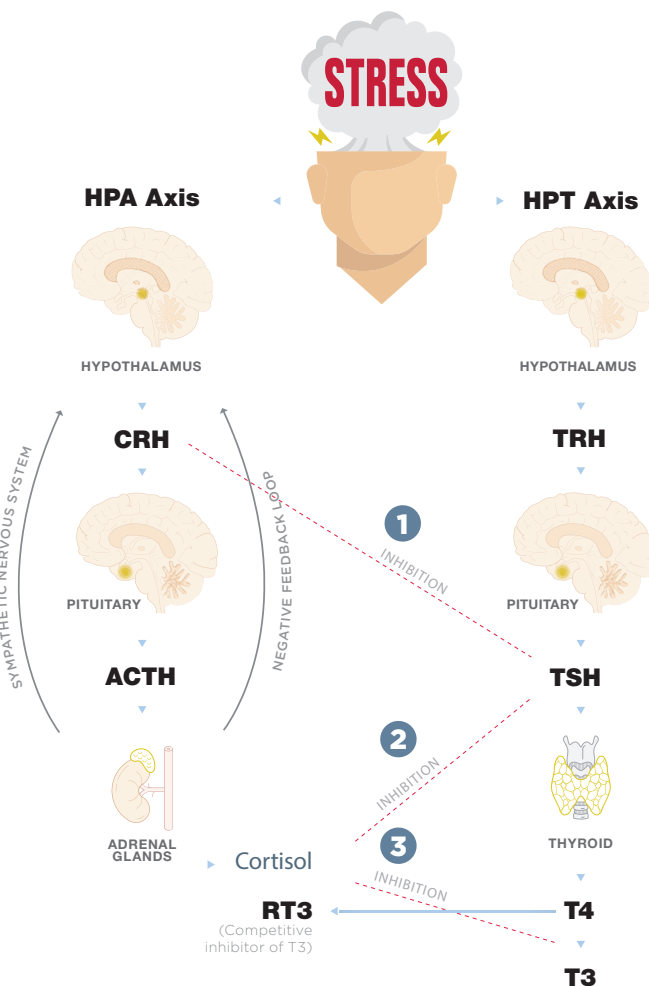
The hypothalamic-pituitary-adrenal (HPA) axis and the hypothalamic-pituitary-thyroid (HPT) axis are closely connected (Figure 26). Imbalances in one system often cause an imbalance in the other. Symptom overlap is also common including fatigue, chronic pain, weight gain, depression and memory problems, and menstrual irregularities. When looking at a patient's list of symptoms, it is difficult to determine without testing whether the HPA and/or HPT axis are affected. Due to the overlap of both of systems, it is important to look at the HPA axis in every case we suspect thyroid issues.



VIDEO:
COMMON
HYPOTHYROID
PATTERNS

Primary thyroid dysfunction occurs when the tissues are not able to produce hormone levels adequate for hypothalamic/pituitary demands, which may be brought on by Hashimoto's thyroiditis, an autoimmune condition, or nutritional deficiencies such as lack of iodine, or iatrogenic causes. More commonly, secondary thyroid suppression is due to reduced signaling from the hypothalamus and pituitary. This is characterized by normal to low thyroid-stimulating hormone (TSH) levels, even when the patient has low or low normal thyroxine (T4) and triiodothyronine (T3). This secondary thyroid suppression is a direct result of the hyperactivation of the HPA axis and the production of cortisol and should be interpreted as a self-defense mechanism against rapid breakdown. When this

Figure 26:
Stress and the HPT Axis



The diagram illustrates the following mechanisms by which the HPA axis directly suppresses the HPT axis:

- 1 As stress activates the HPA axis, corticotropin-releasing hormone (CRH) is released from the hypothalamus in the brain. CRH release directly inhibits the release of thyroid-stimulating hormone (TSH), resulting in a decrease in thyroid hormone output.
- 2 Chronic stress generates excess release of cortisol. This induces a catabolic state and inhibits the release of TSH.
- 3 Cortisol inhibits conversion of T4 to T3 and promotes conversion of T4 to reverse T3 (RT3). RT3 decreases T3 activity by competitively antagonizing T3 at the receptor level.



VIDEO:
1-1 HIGH CAR/HIGH
DIURNAL CORTISOL

**Acute Stress with
Difficulty Focusing and Insomnia**



Elevated CAR and High Diurnal Cortisol

SAMPLE TEST RESULT 1-1

Patient Symptoms

The patient is in the middle of a difficult divorce and is unable to focus while working a high-stress job and with difficulty sleeping at night.

- Overwhelmed and anxious
- Difficulty focusing and sleeping

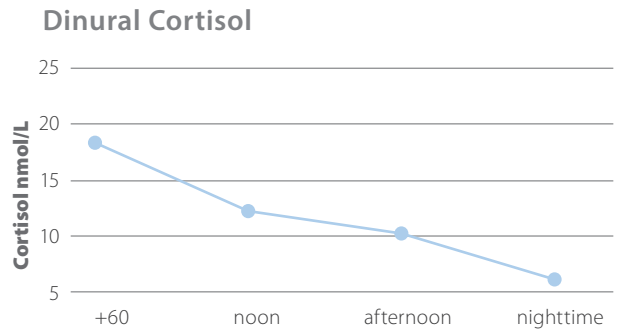
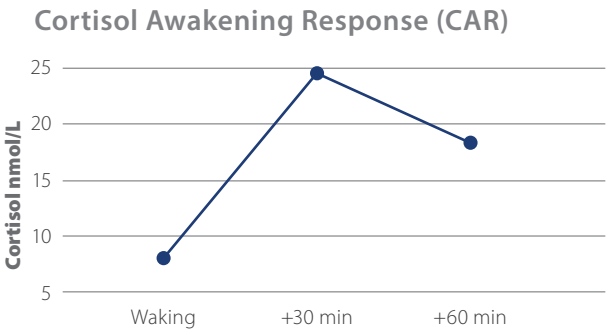
First Office Visit

Patient takes home a 6-point cortisol test kit, neurotransmitter support for day and bedtime, and a multimineral support formula for bedtime to help improve quality sleep and repair. Patient receives a copy of the **SOS Stress Recovery Program Patient Handbook** and is instructed to read Chapter 2: Mental and Emotional Stress, and Chapter 3: Overcoming Insomnia and review the lifestyle recommendations for relieving stress and improving sleep.

Test Results | Following First Office Visit

		Units	Reference
Salivary Readings:		Abnormal in Bold	
Cortisol Readings			
Morning (6:00 – 8:00 a.m.)	8.0	nmol/L	6.0-15.0
Morning +30 minutes	▲ 24.5	nmol/L	7.0-22.0
Morning +60 minutes	▲ 18.3	nmol/L	5.0-16.0
Noon (12:00 – 1:00 p.m.)	▲ 12.2	nmol/L	2.0-7.0
Afternoon (4:00 – 5:00 p.m.)	▲ 10.2	nmol/L	1.0-5.0
Nighttime (10:00 p.m. – 12:00 a.m.)	▲ 6.1	nmol/L	0.4-3.0
Cortisol Sum*	▲ 53.0	nmol/L	10.4-37.0
DHEA-S Waking+30	3.0	nmol/L	1.0 – 10.0

*Cortisol Sum is calculated from the sum of the four results: Waking +30, Noon, Afternoon and Nighttime.



Primary Protocol: Elevated CAR, High Diurnal Cortisol

First Office Visit

Nutrient	Dosage Range	Value
5-HTP	75-300 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Directly converts into serotonin in the brain Increases serotonin production promotes a positive mood and decreases anxiety
PharmaGABA®	100-400 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Natural form of GABA, found to promote a relaxed state by increasing alpha waves and decreasing beta waves in the brain
Inositol	1,000-2,000 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Helps release neurotransmitters from within the cell improving nerve cell signaling
Taurine	100-1,000 mcg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Amino acid that calms the nervous system by binding to GABA receptors and activating glycine receptors in the brain
L-theanine	100-400 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Amino acid naturally found in green tea; increases serotonin and dopamine production in the brain Promotes relaxation by increasing alpha brain wave activity in the brain

Nutrient	Dosage Range	Value
5-HTP	75-300 mg/day bedtime	<ul style="list-style-type: none"> Directly converts into serotonin in the brain Increases serotonin production promotes a positive mood and decreases anxiety
PharmaGABA®	100-400 mg/day bedtime	<ul style="list-style-type: none"> Natural form of GABA, found to promote a relaxed state by increasing alpha waves and decreasing beta waves in the brain
Inositol	1,000-2,000 mg/day bedtime	<ul style="list-style-type: none"> Helps release neurotransmitters from within the cell improving nerve cell signaling
Taurine	100-1,000 mcg/day bedtime	<ul style="list-style-type: none"> Amino acid that calms the nervous system by binding to GABA receptors and activating glycine receptors in the brain
Calcium	300 mg/day bedtime	<ul style="list-style-type: none"> Calcium is required for heart health, muscle function, nerve transmission, intracellular signaling and hormonal secretion
Magnesium	100-600 mg/day bedtime	<ul style="list-style-type: none"> Required to produce serotonin Promotes relaxation by blocking excitatory glutamate (NMDA receptors)
Phosphatidylserine	100-600 mg bedtime	<ul style="list-style-type: none"> Reduces elevated cortisol levels by blunting ACTH release within the HPA axis

Nutrient	Dosage Range	Value
Calcium	300 mg/day bedtime	<ul style="list-style-type: none"> Calcium is required for heart health, muscle function, nerve transmission, intracellular signaling and hormonal secretion
Magnesium	100-600 mg/day bedtime	<ul style="list-style-type: none"> Required to produce serotonin Promotes relaxation by blocking excitatory glutamate (NMDA receptors)
Potassium	90 mg/day bedtime	<ul style="list-style-type: none"> Potassium is critical to maintaining electrolyte balance in the body Potassium can contribute to heart and bone health and is an integral part of muscle contraction and muscle building
Zinc	25 mg/day bedtime	<ul style="list-style-type: none"> Zinc is fundamental to the activity of over 100 enzymes and supports immune function, protein synthesis, tissue regeneration and healing, DNA synthesis and cell division
Selenium	190 mcg/day bedtime	<ul style="list-style-type: none"> Selenium is an antioxidant and catalyst in the production of active thyroid hormone Selenium is essential in the balance and support of immune system function Selenium promotes sperm motility, supports positive mood, antioxidant status, inflammation balance and heart health

Second Office Visit *(following a review of test results)*

Nutrient	Dosage Range	Value
5-HTP	75-300 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Directly converts into serotonin in the brain Increases serotonin production promotes a positive mood and decreases anxiety
PharmaGABA®	100-400 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Natural form of GABA, found to promote a relaxed state by increasing alpha waves and decreasing beta waves in the brain
L-theanine	100-400 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Amino acid naturally found in green tea; increases serotonin and dopamine production in the brain Promotes relaxation by increasing alpha brain wave activity in the brain
Inositol	1,000-2,000mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Helps release neurotransmitters from within the cell improving nerve cell signaling
L-tyrosine	200-2,000 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Supports mood regulation by converting into the neurotransmitters dopamine, norepinephrine and epinephrine
<i>Mucuna pruriens</i>	400-800 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Commonly known as velvet bean, naturally contains L-dopa which converts directly into the mood-enhancing neurotransmitter dopamine

Nutrient	Dosage Range	Value
5-HTP	75-300 mg/day bedtime	<ul style="list-style-type: none"> Directly converts into serotonin in the brain Increases serotonin production promotes a positive mood and decreases anxiety
PharmaGABA®	100-400 mg/day bedtime	<ul style="list-style-type: none"> Natural form of GABA, found to promote a relaxed state by increasing alpha waves and decreasing beta waves in the brain
Inositol	1,000-2,000 mg/day bedtime	<ul style="list-style-type: none"> Helps release neurotransmitters from within the cell improving nerve cell signaling
Taurine	100-1,000 mcg/day bedtime	<ul style="list-style-type: none"> Amino acid that calms the nervous system by binding to GABA receptors and activating glycine receptors in the brain
Calcium	300 mg/day bedtime	<ul style="list-style-type: none"> Calcium is required for heart health, muscle function, nerve transmission, intracellular signaling and hormonal secretion
Magnesium	100-600 mg/day bedtime	<ul style="list-style-type: none"> Required to produce serotonin Promotes relaxation by blocking excitatory glutamate (NMDA receptors)
Phosphatidylserine	100-600 mg bedtime	<ul style="list-style-type: none"> Reduces elevated cortisol levels by blunting ACTH release within the HPA axis

Nutrient	Dosage Range	Value
Ashwagandha	100-1,200 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Reduces elevated cortisol levels by blunting ACTH release within the HPA axis
Bacopa	100-640 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Nootropic and adaptogenic herb found to improve stress resilience, enhance concentration, focus and memory Shown to protect against DNA cleavage and boost immune system with free-radical scavenging activity
Eleuthero	100-600 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Adaptogenic herb used to help improve mental and physical fatigue Shown to help improve mental performance during stress
Rhodiola	100-680 mg/day split dose between a.m. and noon	<ul style="list-style-type: none"> Adaptogenic herb found to support mood, memory and mental performance while decreasing anxiety
Phosphatidylserine	100-600 mg split dose between a.m. and noon	<ul style="list-style-type: none"> Reduces elevated cortisol levels by blunting ACTH release within the HPA axis

Nutrient	Dosage Range	Value
Calcium	300 mg/day bedtime	<ul style="list-style-type: none"> Calcium is required for heart health, muscle function, nerve transmission, intracellular signaling and hormonal secretion
Magnesium	100-600 mg/day bedtime	<ul style="list-style-type: none"> Required to produce serotonin Promotes relaxation by blocking excitatory glutamate (NMDA receptors)
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Zinc	25 mg/day bedtime	<ul style="list-style-type: none"> Zinc is fundamental to the activity of over 100 enzymes and supports immune function, protein synthesis, tissue regeneration and healing, DNA synthesis and cell division
Selenium	190 mcg/day bedtime	<ul style="list-style-type: none"> Selenium is an antioxidant and catalyst in the production of active thyroid hormone Selenium is essential in the balance and support of immune system function Selenium promotes sperm motility, supports positive mood, antioxidant status, inflammation balance and heart health

Nutrient	Dosage Range	Value
Phosphatidylserine	100-600 mg split dose between 6 p.m. and bedtime	<ul style="list-style-type: none"> Reduces elevated cortisol levels by blunting ACTH release within the HPA axis
DHEA	5-20 mg/day split dose 2-4 times per day tablet under the tongue	<ul style="list-style-type: none"> Improves mood regulation and provides antagonist activity against elevated glucocorticoids
Pregnenolone	10- 40 mg/day split dose 2-4 times per day tablet under the tongue	<ul style="list-style-type: none"> Pregnenolone plays a key role in hormonal balance as a key precursor to cortisol, DHEA and progesterone Pregnenolone has been shown to support a balanced mood and promote cognitive health by modulating the transmission of messages between neurons

PROTOCOL SUMMARY

This patient is experiencing an acute stress response and the inability to focus and sleep are secondary to elevated cortisol and its effects on neurologic function. Therapy should include neurotransmitter support for the elevated CAR and attempt to reduce elevated cortisol, especially at end of day. This amino acid support increases serotonin and GABA activity to help improve stress perception, reduce anxiety and restlessness. The suggested protocol also utilizes adaptogenic botanicals and phosphatidylserine to help improve resistance to stress and lower excess cortisol levels. Additional phosphatidylserine can be used as inhibitory support in the evening, particularly if the patient is reporting frequent waking throughout the night. DHEA supplementation is crucial, as the cortisol sum relative to DHEA level is very high. The glucocorticoid antagonist mechanisms of DHEA protect against the neurological effects of excess cortisol in the brain as well as tissue breakdown. Minerals such as calcium and magnesium are used at bedtime to help induce sleep and promote deeper stages of sleep. From a lifestyle standpoint, reinforcing the stress reduction techniques outlined in Chapter 2 and sleep strategies from Chapter 3 of the **SOS Stress Recovery Program Patient Handbook**, and prescribing specific strategies, such as scheduling downtime or taking part in relaxing exercises, will further improve symptoms and enhance HPA axis recovery. The patient's salivary hormone test should be re-evaluated in 3-6 months or sooner if acute stress changes.

Sample SOS In-Practice Revenue Generation Model

The following tables provide a general model for revenue generation based on each patient that is run through the SOS Stress Recovery Program for six months. This includes a first and second office visit, baseline and follow-up salivary hormone tests, a group visit, as well as a six months' supply of supplements for HPA axis support.

The revenue generation models below include an insurance-based model (Table A) and a cash practice model (Table B). The indications for administering a test kit include fatigue, insomnia, anxiety, depression, hypothyroidism, and menopause/HRT, a Group Visit, as well as the 10 Patient Symptoms Indicating Possible HPA Axis Dysfunction (Figure 1 at the beginning of this guide).

TABLE A: REVENUE GENERATION BASED ON INSURANCE MODEL

First office visit	\$150	\$220 bill sent to insurance for new patient E&M code #99203 or established patient code #99214 billed on time, with roughly 70% gross collection
Approximate initial supplement sales profit	\$112	Products may include, but not limited to: adaptogenic blends, neurotransmitter support formulas, phosphatidylserine, DHEA
Salivary hormone test kit (plus other initial baseline tests)	\$100 (variable \$)	Paid at the front desk—part administrative/part evaluation fee, not billed to insurance (Other baseline tests refer to CBC, glucose, thyroid panel, lipid panel, ferritin, HbA1c, hsCRP, Vitamin D)
Group Visit	\$60	Bill a level 3, 99213 CPT code. Billing is based on complexity, not time in a Group Visit. See figure on next page for additional information regarding Group Visits
Second office visit	\$150	\$220 bill sent to insurance for E&M code #99214 billed on time with roughly 70% gross collection
Salivary hormone kit #2 (plus other baseline testing) (Re-test in 3-4 months)	\$100 (variable \$)	Paid at the front desk—part administrative/part evaluation fee, not billed to insurance
Supplement sales profit for 5-month refills	\$560	Products may include, but not limited to: adaptogenic blends, neurotransmitter support formulas, phosphatidylserine, DHEA
Total profit from 6-month SOS Program (per patient)	\$ 1,232	This represents profits based on salivary testing only

Based on the insurance model, if, each week, the practice has one patient starting and adhering to a six-month SOS Stress Recovery Program, the total revenue generated will be \$64,064 in 12 months.

Decision Tier	Test	
1	Baseline Testing*	Test Options will vary based on patient presentation, how many key stressors are contributing factors and the stage of stress. (Refer to Testing/Treatment Decision Tree)
2	Salivary cortisol 6 point, DHEA**	
2	Sleep Apnea	
2	Stool Analysis	
3	Food Allergies	
3	Environmental Toxins/Molds	
3	Bacterial/Viral Infections	
3	Oral/Dental Infections	

*Baseline testing includes CBC, glucose, thyroid panel (with anti-thyroperoxidase (TPO) antibodies and anti-thyroglobulin (TG) antibodies), lipid panel, ferritin, HbA1c, hsCRP, Vitamin D.
 **If patient is experiencing sleep disturbances, it is appropriate to include on the salivary panel, melatonin, progesterone and bed-time cortisol.

TABLE B: REVENUE GENERATION BASED ON CASH PRACTICE MODEL

First office visit	\$220	Based on 30 minute office visit
Approximate initial supplement sales profit	\$112	Products may include, but not limited to: adaptogenic blends, neurotransmitter support formulas, phosphatidylserine, DHEA
Salivary hormone test kit (initial baseline test)	\$100 (variable \$)	Based on a \$100 mark-up for each test kit (paid by patient) (Other baseline tests refer to CBC, glucose, thyroid panel, lipid panel, ferritin, HbA1c, hsCRP, Vitamin D)
Group Visit	\$75	See Figure 8 for additional information regarding group visits
Second office visit	\$220	Based on 30-minute office visit
Salivary hormone kit #2 (plus other baseline testing) (Re-test in 3-4 months)	\$100 (variable \$)	Based on a \$100 mark-up for each test kit (paid by patient) (See Testing/Treatment Decision Tree for other potentially necessary testing)
Supplement sales profit for 5-month refills	\$560	Products may include, but not limited to: adaptogenic blends, neurotransmitter support formulas, phosphatidylserine, DHEA
Total profit from 6-month SOS Program (per patient)	\$ 1,387	This represents profits based on salivary testing only

Based on the cash practice model, if, each week, the practice has one patient starting and adhering to a six-month SOS Stress Recovery Program, the total revenue generated will be \$72,124 in 12 months.

RESTORING THE BALANCE:

Stress Hormones and Health Group Visit Toolkit

Following the second office visit, it is recommended to have the patient set up their next appointment with you approximately one month later in a Group Visit. Group Visits help to maximize your time with patients who need lifestyle education. **The Restoring the Balance: Stress Hormones and Health Group Visit Toolkit** provides the necessary components to implement and conduct a successful Group Visit Model in your practice. This relieves practitioners from the task of creating group classes on their own. The tools include the SOAP note, patient handouts, promotional flyers, and PowerPoint slides at a quality level that patients enjoy and understand.

For insurance-based practices: Each patient will have a face-to-face E/M with you, the provider, while the presentation segment of the Group Visit is being conducted. Each Group Visit lasts 90 minutes from the time patients check in to conclusion and can be conducted at the end of a regularly scheduled business day (4:30-6 p.m.).

To learn more about how Group Visits can help you grow your practice and improve patient care, please visit LifestyleMatrix.com.





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