



INE | INSTITUTE OF
NUTRITIONAL
ENDOCRINOLOGY

Practitioner's Adrenal Fatigue Training (PAFT) Part 2

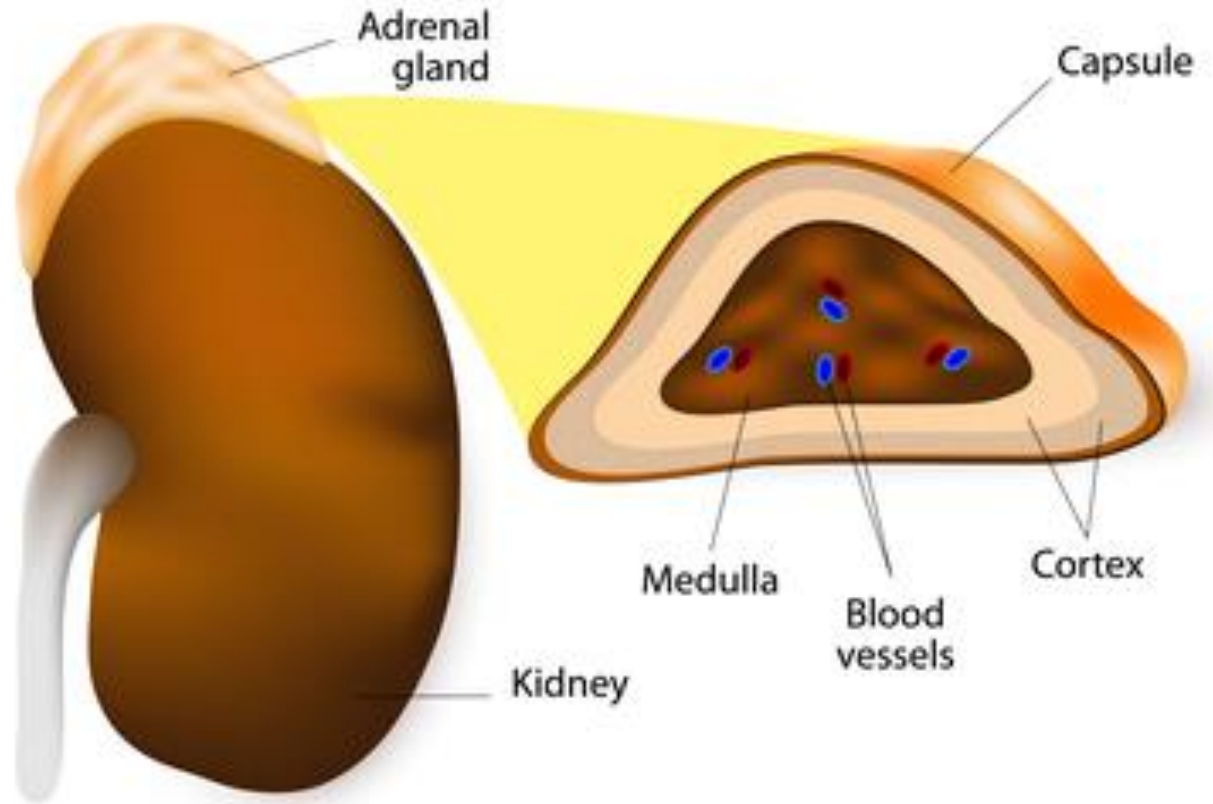
Dr. Ritamarie Loscalzo



Medical Disclaimer: The information in this presentation is not intended to replace a one-on-one relationship with a qualified health care professional and is not intended as medical advice. It is intended as a sharing of knowledge and information from the research and experience of Dr. Ritamarie Loscalzo, drritamarie.com, and the experts who have contributed. We encourage you to make your own health care decisions based upon your research and in partnership with a qualified health care professional.



Adrenal Glands

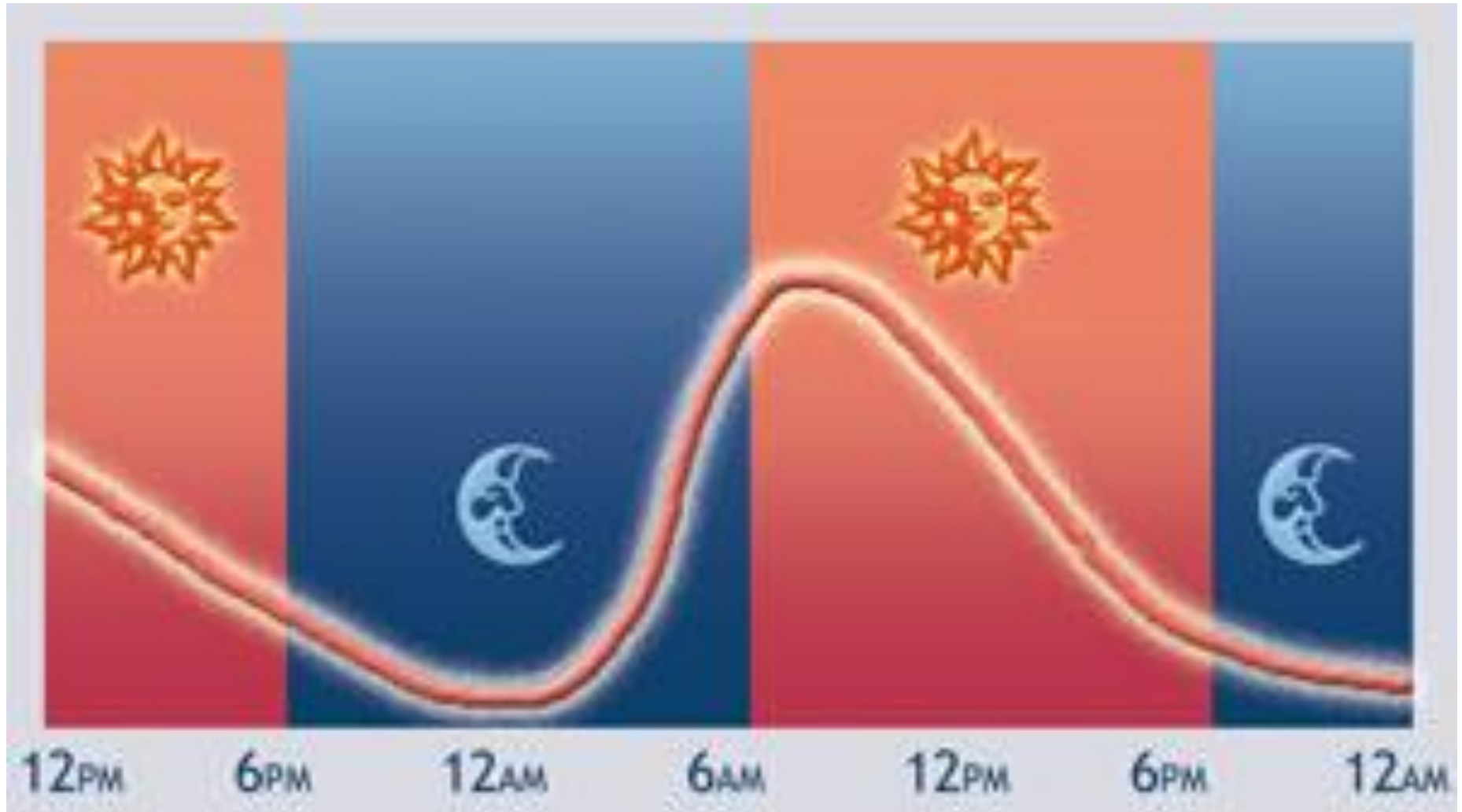


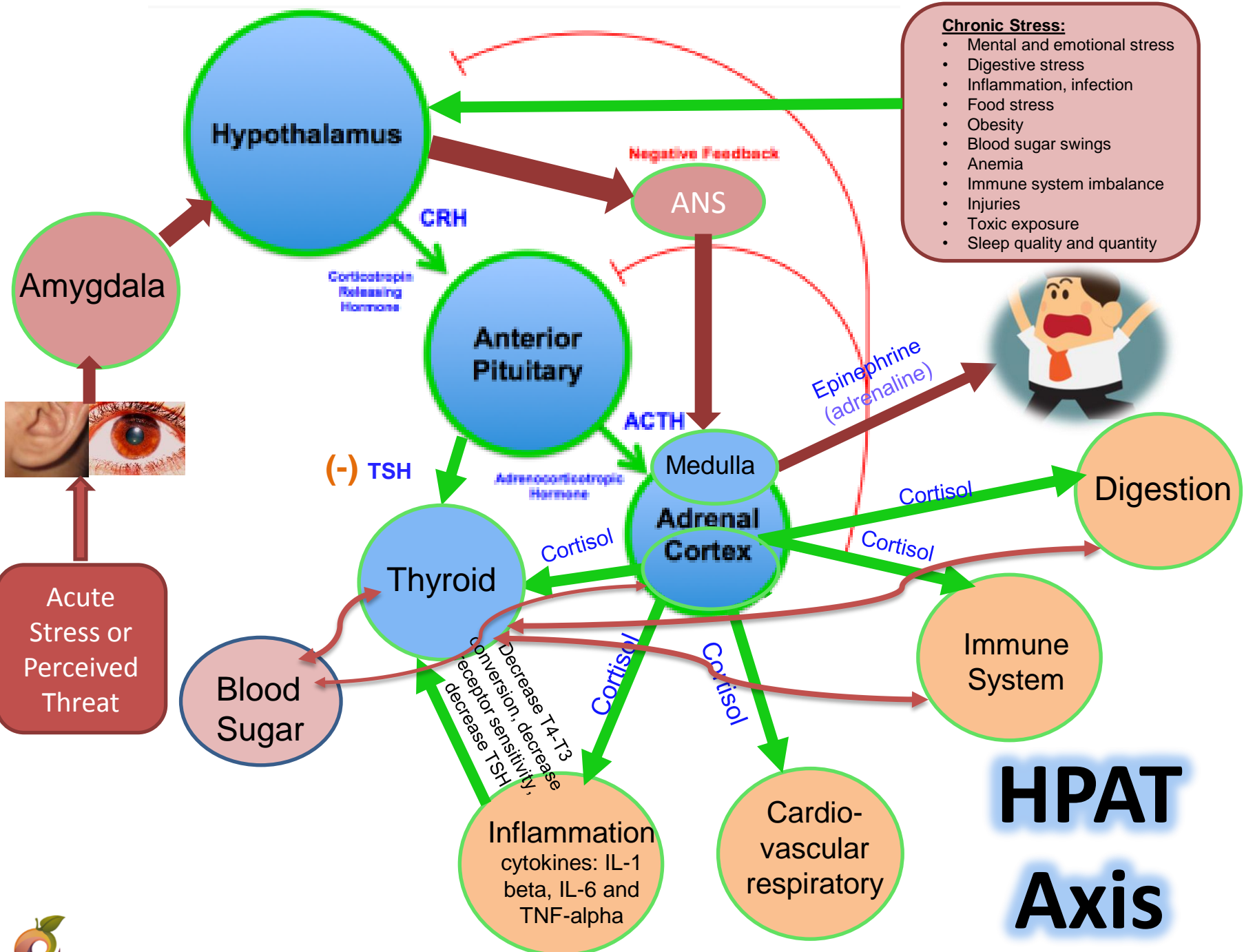
What Can (and Often Does) Go Wrong?

- ✓ Over production of cortisol
- ✓ Causes imbalance of other hormones
 - DHEA
 - Progesterone
 - Estrogen
 - Testosterone
 - Thyroid
 - Oxytocin
- ✓ Adrenal fatigue and exhaustion
- ✓ Immune system issues



Circadian Rhythm

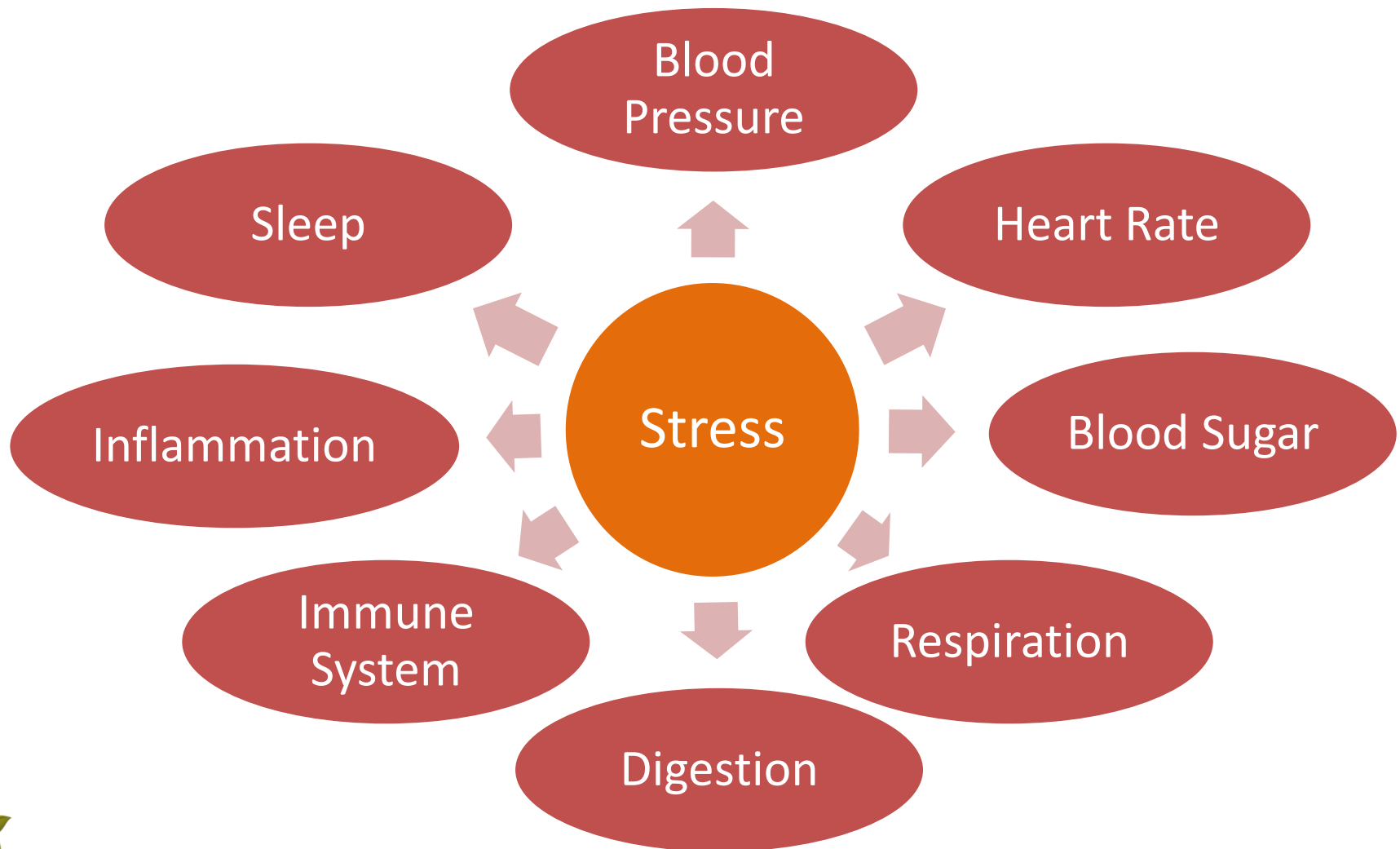




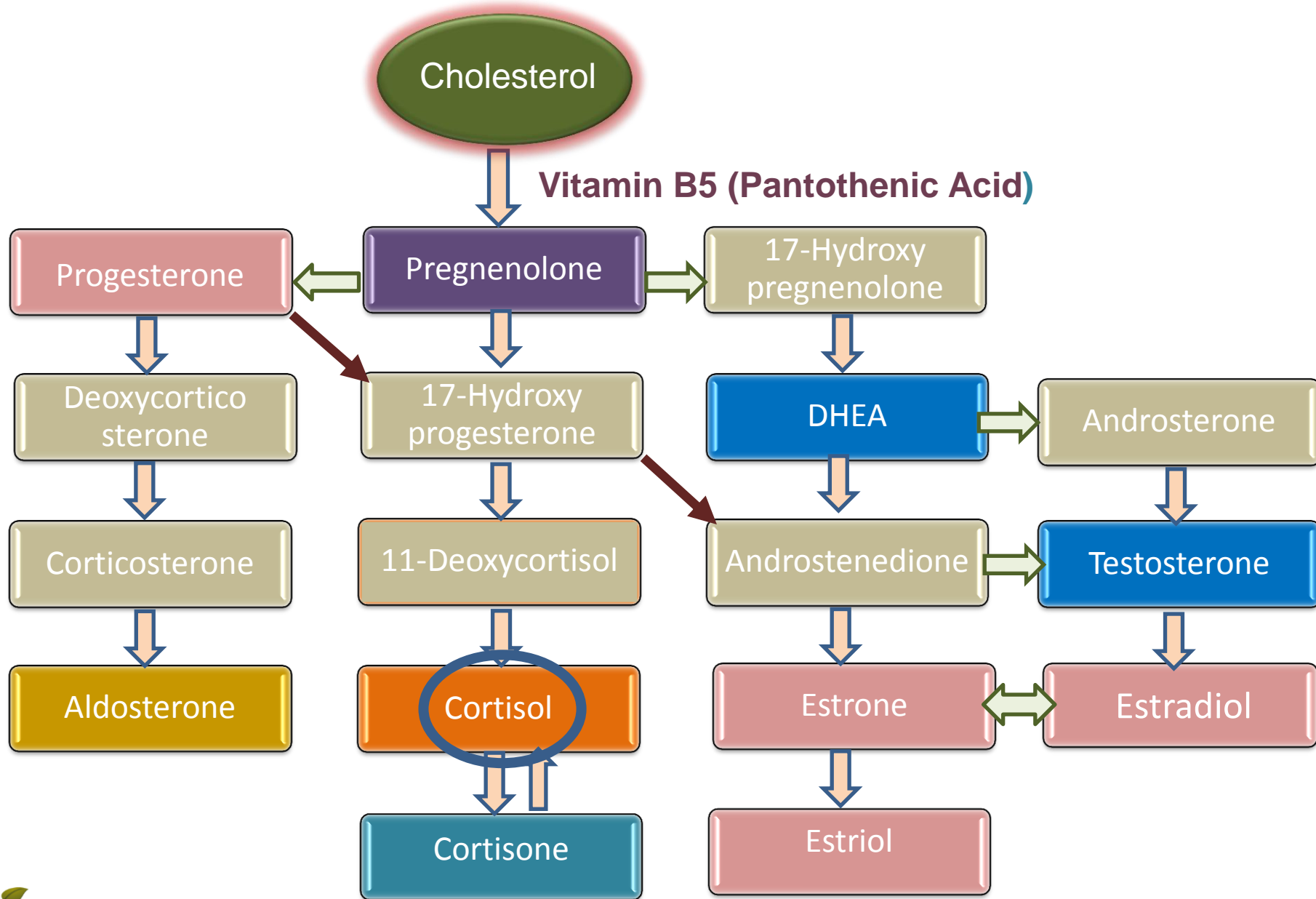
HPA Axis



Dangers Associated with Unmanaged Adrenal Issues

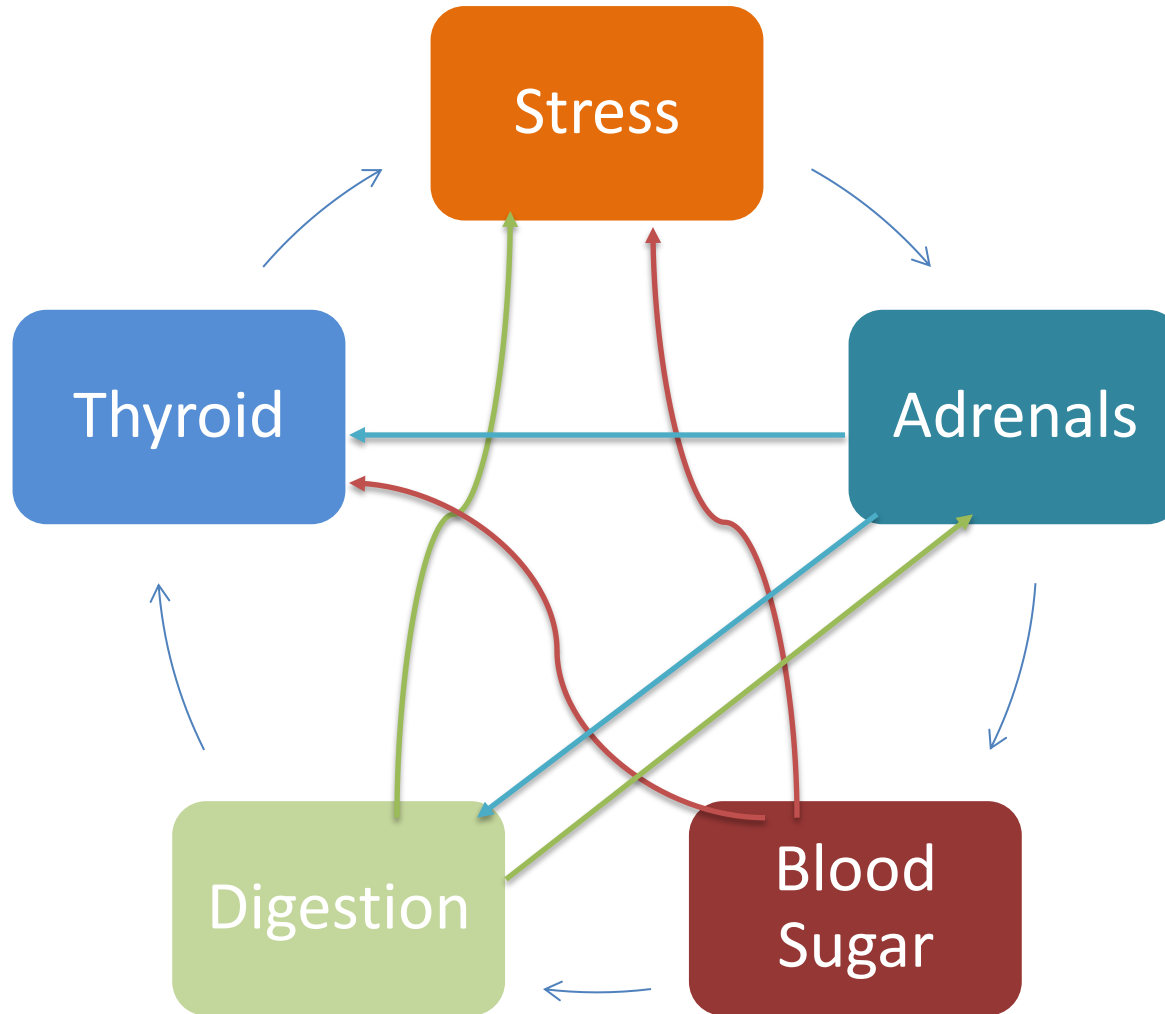


Male/Female Hormones/Stress Interaction





The Vicious Cycle



Breaking the Vicious Cycle

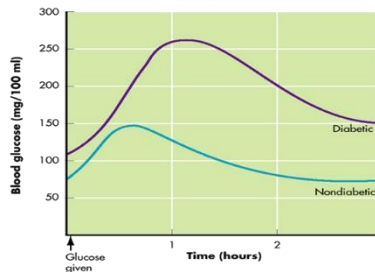
Manage Stress

Repair and Recharge Adrenal

Balance Blood Sugar

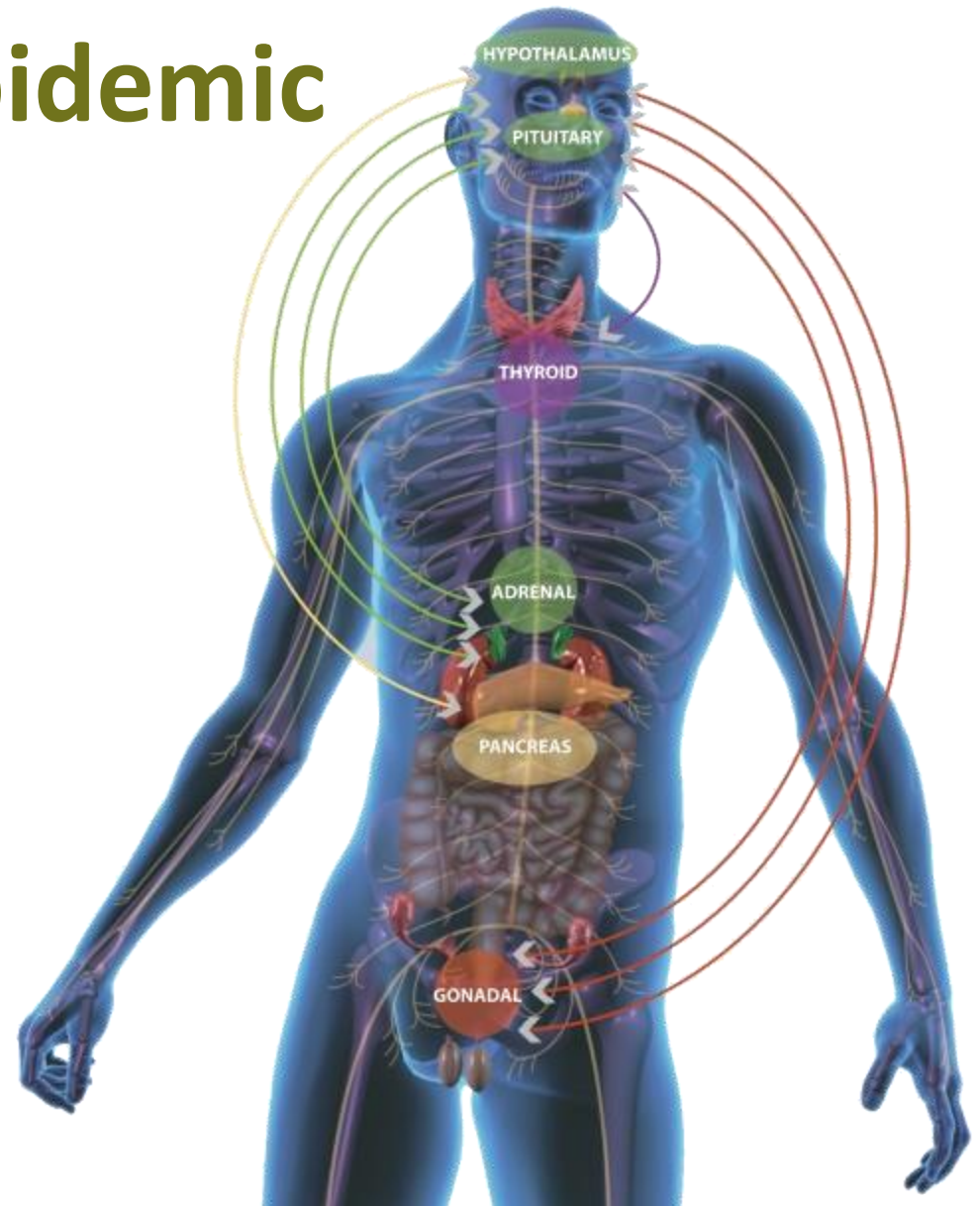
Heal and Optimize Digestion

Protect and Heal Thyroid



HPAT Axis Imbalance – The Modern Epidemic

- ✓ **H**ypothalamus
- ✓ **P**ituitary
- ✓ **A**drenal
- ✓ **T**hyroid



Exam Signs of Adrenal Problems

- ✓ **Blood pressure goes down** upon standing
- ✓ Pupils can't stay **constricted** with bright light
- ✓ **Rib margin tenderness**
- ✓ Brown or black **discoloration below eyelids**
- ✓ **Dark gray or reddish** back of tongue
- ✓ Ulcerations or **canker sores**
- ✓ **Bad breath**
- ✓ Rough, red, **flaky cuticles**
- ✓ **Tongue signs**



Adrenal vs. Thyroid

Major Symptom Differentiations

Sign or Symptom	Hypothyroid Tendency	Hypoadrenal Tendency
Body temperature	Low and consistent	Low and fluctuates
Energy pattern	Generally sluggish	"Wired and tired"
Body type	Difficulty losing fat	Difficulty gaining muscle
Blood pressure	Normal to high	Low to normal
Total cholesterol	High	Low
Facial color	Reddish	Pale
Sweating	Scanty or none	Profuse
Bowels	Sluggish / constipated	Irritable or hyper functioning



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Adrenal Rebalancing Protocols



Actions That Rebalance Adrenals

- ✓ Chill out - De-stress activities
- ✓ Balance blood sugar
- ✓ Heal gut
- ✓ Movement
- ✓ Sleep
- ✓ Diet
- ✓ Nutrients
- ✓ Herbs
- ✓ Bio-identical hormones





Sleep-cation



Foods That Support Adrenals

- ✓ Omega-3 fats
- ✓ Brassicas
- ✓ Sea vegetables
- ✓ Pumpkin seeds
- ✓ Turmeric
- ✓ Coconut oil
- ✓ Cumin
- ✓ Probiotic foods: yogurt, kimchi, kefir
- ✓ **Adaptogenic herbs**: ashwagandha, eleuthero, medicinal mushrooms



Hormone Nourishing Meal Ideas

- ✓ **Large veggie salad** with omega-3 rich salad dressing and seed toppings
- ✓ Green blender soups
- ✓ **Wraps using green leaves** and nori sea vegetable, filled with greens, sprouts, and sauerkraut, and topped with an omega-3 rich dressing or spread
- ✓ Steamed vegetables
- ✓ **“Big Bowl”** – filled with steamed and/or raw veggies and a blended vegetable sauce, made from the steam water, vegetables, and a fat to thicken: chia seed, avocado, tahini, nut butter, coconut, or raw nuts or seeds



Photo by Annette Nolan
www.itsallaboutyou.ca



Avoid Foods That Slow or Damage Adrenals



- ✓ Sugar
- ✓ Trans and heated fats
- ✓ Allergens, especially gluten
- ✓ Caffeine
- ✓ Alcohol



Most Important Nutrients For Adrenal Glands

- ✓ Vitamin C
- ✓ Vitamin B5
- ✓ Vitamin B6
- ✓ Omega-3 fats
- ✓ Zinc
- ✓ Vitamin D
- ✓ B-Complex
- ✓ Magnesium
- ✓ Chromium
- ✓ Potassium



Adrenal Nutrients

Supplemental Nutrients

Universal

Stage 1

Stage 2

Stage 3

Nutrients	Dosages and Instructions	Alarm Stage	Fatigue Stage 1	Fatigue Stage 2	Fatigue Stage 3
*Vitamin C	1000 mg 3 times per day or to bowel tolerance	✓	✓	✓	✓
*Vitamin B5 (pantothenic acid)	500 mg 3 times per day	✓	✓	✓	✓
*B-Complex	Preferably liquid and activated forms; <i>Premier Research Labs</i> has liquid; <i>Pure Encapsulations</i> has a nice capsule	✓	✓	✓	✓
*Zinc	30 mg - 60 mg per day, preferably liquid	✓	✓	✓	✓
Vitamin D plus Vitamin K2	Lab test to determine if you need it; ideal range on lab is 80 ng/ml - 100 ng/ml	✓	✓	✓	✓
Multi-Mineral Drops	See CAFE Part 4 for details on minerals to determine which one you may need; <i>Trace Minerals Research</i> and <i>Body Bio</i> have high quality liquid minerals	✓	✓	✓	✓
Essential Fats	EPA and DHA	✓	✓	✓	✓
Licorice Root	5 - 10 drops prior to low cortisol readings; do not take later than 4:00 pm Avoid if you have high blood pressure and monitor blood pressure to avoid overdose; an alternative for some is Bezwecken Isocort (not vegan)		1-2 hours before times of low cortisol, if any	1-2 hours before times of low cortisol, if any	✓
Phosphorylated Serine	1 or 2 caps, 2 - 3 hours before high cortisol reading	✓	2-3 hours before times of high cortisol, if any	2-3 hours before times of high cortisol, if any	
<u>Adaptogens</u>	See CAFE Part 4 for details and determine which ones sound right for you; add to elixirs or purchase tinctures -- see document " <i>Adrenal Herbal Formulas and Supplements</i> " document for details on formulas and elixirs	✓	✓	✓	✓



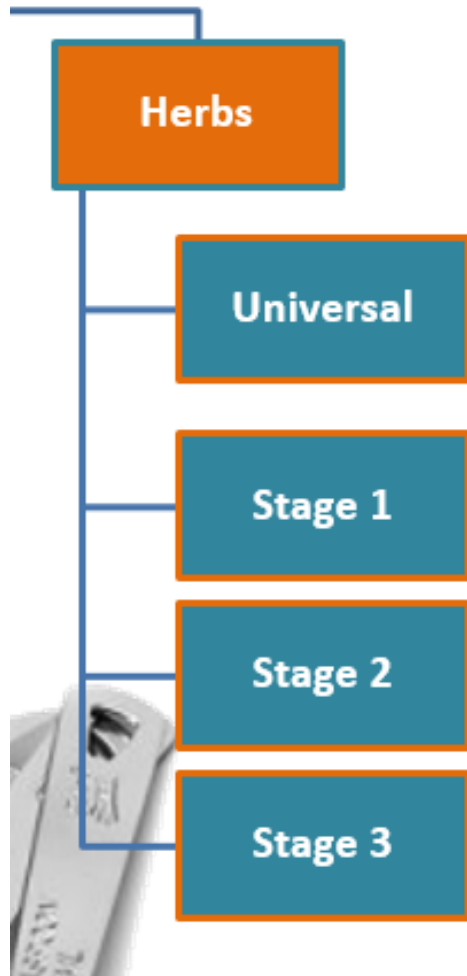
Chart 2: Adrenal Fatigue Traits

Highlight all traits that apply, especially if you haven't done an ASI test.

		Normal	Alarm State	Stage 1	Stage 2	Stage 3
Signs and Symptoms	Blood Pressure	normal	high or normal	high or normal	normal or low	low
	Energy	normal	wired	wired and tired – mid-day slump and awake at bedtime	tired, possibly with spikes of energy	very tired
	Immune system	normal	normal	possibly impaired	probably impaired	Likely impaired
	Libido	normal	normal	possibly low	probably low	likely low
	Salt Cravings	no	no	no	yes	strong
	Perspiration	normal	normal	excessive	variable	minimal
	Memory	normal	normal	intermittent	failing	poor



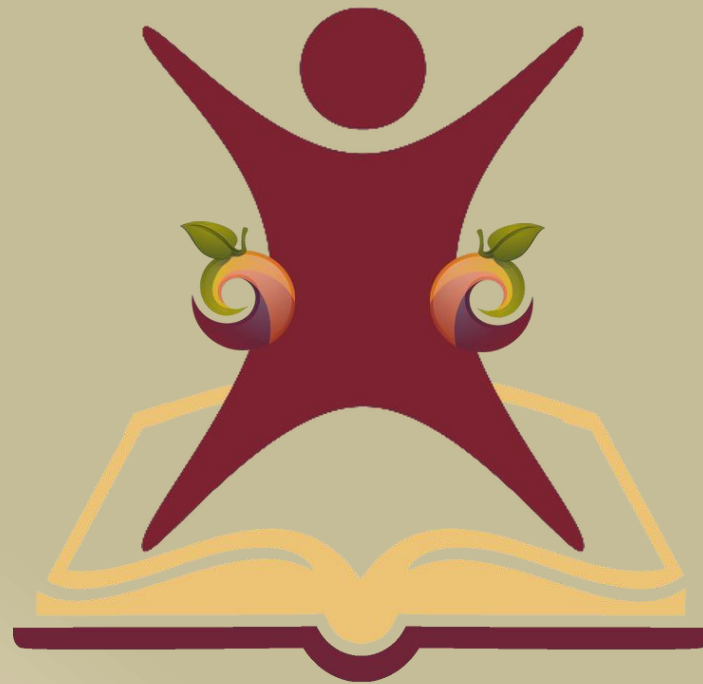
Herbs for Adrenals



- ✓ Maca
- ✓ Ashwagandha
- ✓ Licorice
- ✓ Ginseng
- ✓ Rhodiola
- ✓ Schizandra
- ✓ Reishi
- ✓ Cordyceps
- ✓ Chaga
- ✓ Lemon Balm
- ✓ Chamomile
- ✓ Hops



Adrenal Saliva Test Case Studies



Adrenal Fatigue – Stage 1

Tired and Wired

- ✓ Sympathetic Dominant State
 - DHEA low
 - Cortisol high
- ✓ Draining Your Reserves
- ✓ Negative Effects of Cortisol
- ✓ Slump in Mid-Afternoon
- ✓ Wired at Bedtime



Adrenal Fatigue – Stage 2

Reserves Becoming Depleted

- ✓ Sympathetic Dominant State
 - DHEA low
 - Cortisol normal, with possible low dips
- ✓ Low Reserves
- ✓ Immune System Compromised

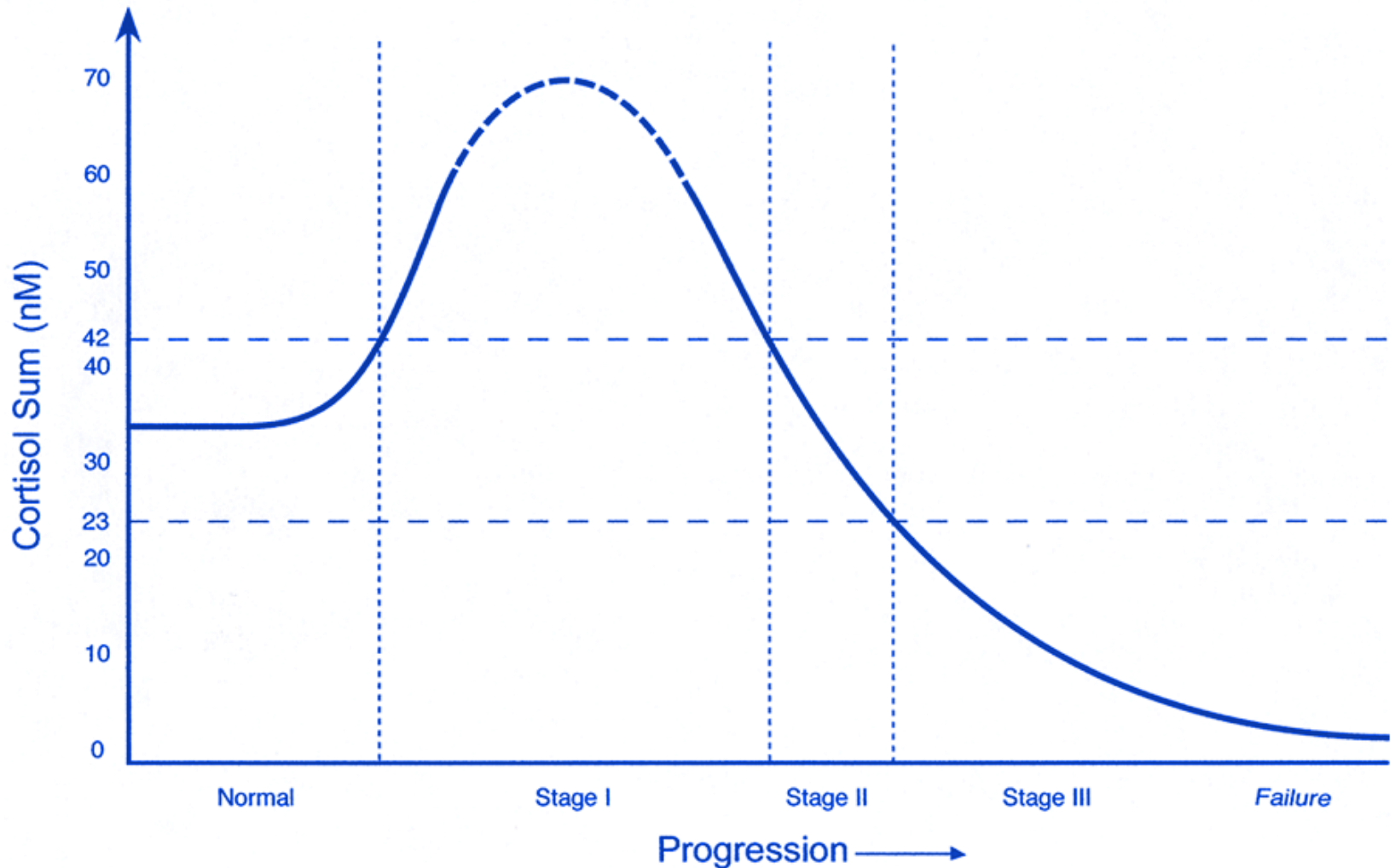


Adrenal Fatigue – Stage 3 Exhaustion

- ✓ Sympathetic Dominant State
 - DHEA low
 - Cortisol low
- ✓ Suffering From Negative Effects of Chronic Elevated Cortisol
- ✓ Low Libido
- ✓ Sex Hormone Imbalances
- ✓ Accelerated Aging
- ✓ Poor Memory



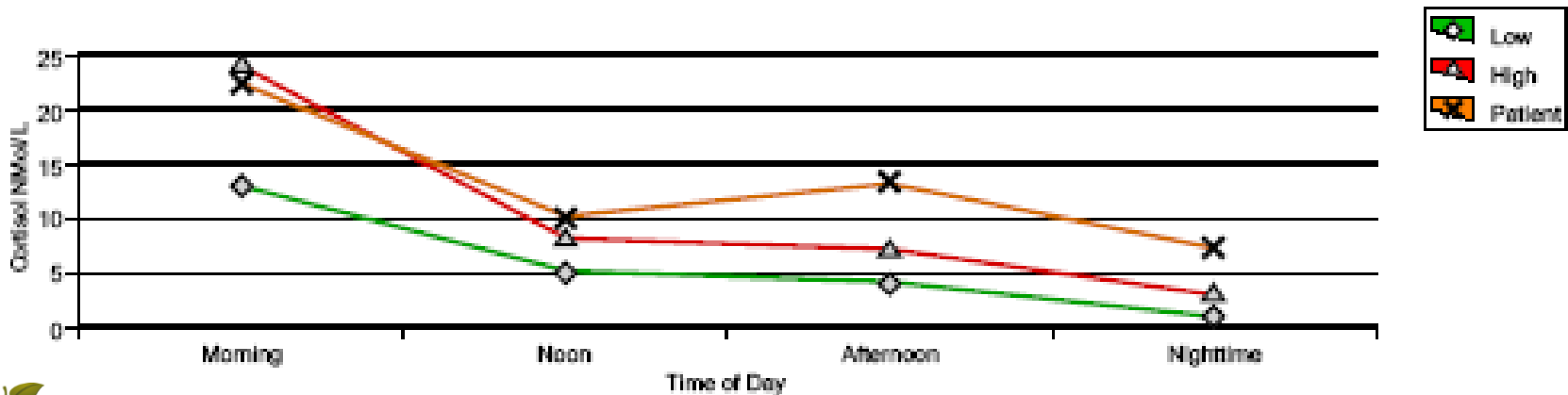
Progression of Stages in Adrenal Exhaustion – per BioHealth



BioHealth Example – Stage 1

Functional Adrenal Stress Profile - 201

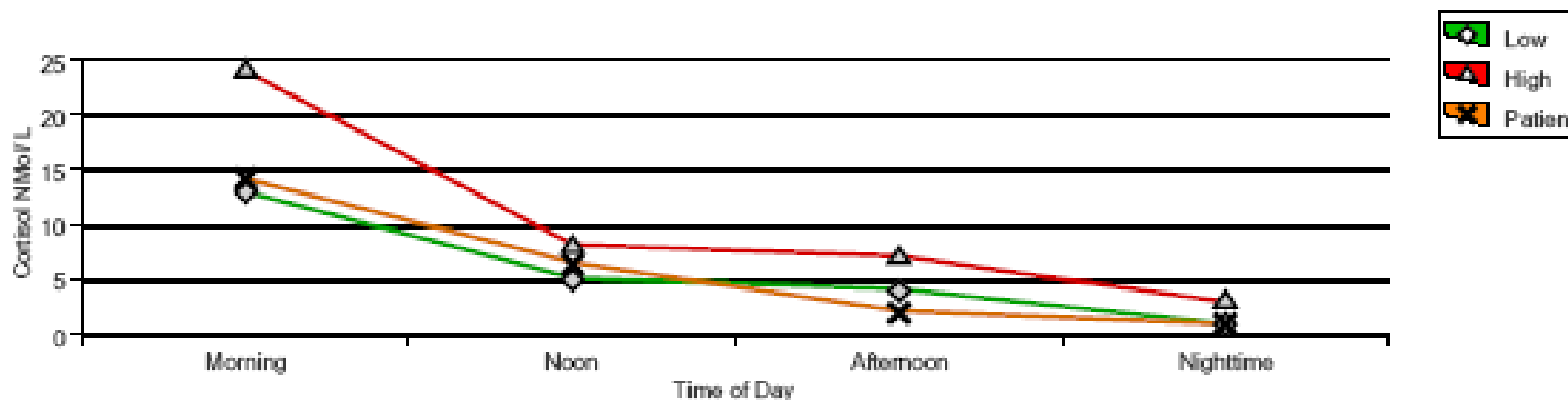
Parameter	Result	Reference Range	Units
Cortisol - Morning (8 - 8 AM)	22.4	13.0 - 24.0	nM/L
Cortisol - Noon (12 - 1 PM)	10.0*	5.0 - 8.0	nM/L
Cortisol - Afternoon (4 - 5 PM)	13.4*	4.0 - 7.0	nM/L
Cortisol - Nighttime (10 PM - 12 AM)	7.3*	1.0 - 3.0	nM/L
Cortisol Sum	53.1*	23.0 - 42.0	nM/L
DHEA-S Average	2.00	2.00 - 10.00	ng/mL
Cortisol/DHEA-S Ratio	26.6*	5.0 - 6.0	Ratio



BioHealth – Stage 2

Functional Adrenal Stress Profile - 201

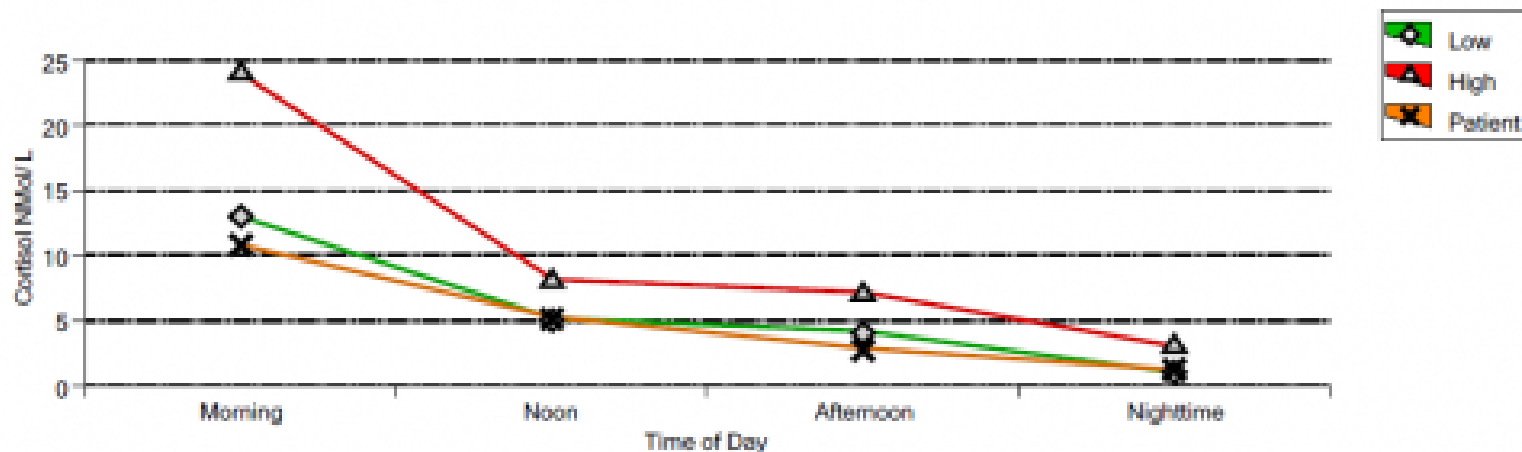
Parameter	Result	Reference Range	Units
Cortisol - Morning (6 - 8 AM)	14.2	13.0 - 24.0	nM/L
Cortisol - Noon (12 - 1 PM)	6.4	5.0 - 8.0	nM/L
Cortisol - Afternoon (4 - 5 PM)	2.0*	4.0 - 7.0	nM/L
Cortisol - Nighttime (10 PM - 12 AM)	1.0	1.0 - 3.0	nM/L
Cortisol Sum	23.6	23.0 - 42.0	nM/L
DHEA-S Average	2.60	2.00 - 10.00	ng/mL
Cortisol/DHEA-S Ratio	9.1*	5.0 - 6.0	Ratio



BioHealth – Stage 3

Functional Adrenal Stress Profile plus V - 205

Parameter	Result	Reference Range	Units
Cortisol - Morning (6 - 8 AM)	10.8*	13.0 - 24.0	nM/L
Cortisol - Noon (12 - 1 PM)	5.1	5.0 - 8.0	nM/L
Cortisol - Afternoon (4 - 5 PM)	2.7*	4.0 - 7.0	nM/L
Cortisol - Nighttime (10 PM - 12 AM)	1.2	1.0 - 3.0	nM/L
Cortisol Sum	19.8*	23.0 - 42.0	nM/L
DHEA-S Average	2.22	2.00 - 10.00	ng/mL
Cortisol/DHEA-S Ratio	8.9*	5.0 - 6.0	Ratio



Diagnos-Techs Example – Stage 3

Figure 1. Circadian Cortisol Profile

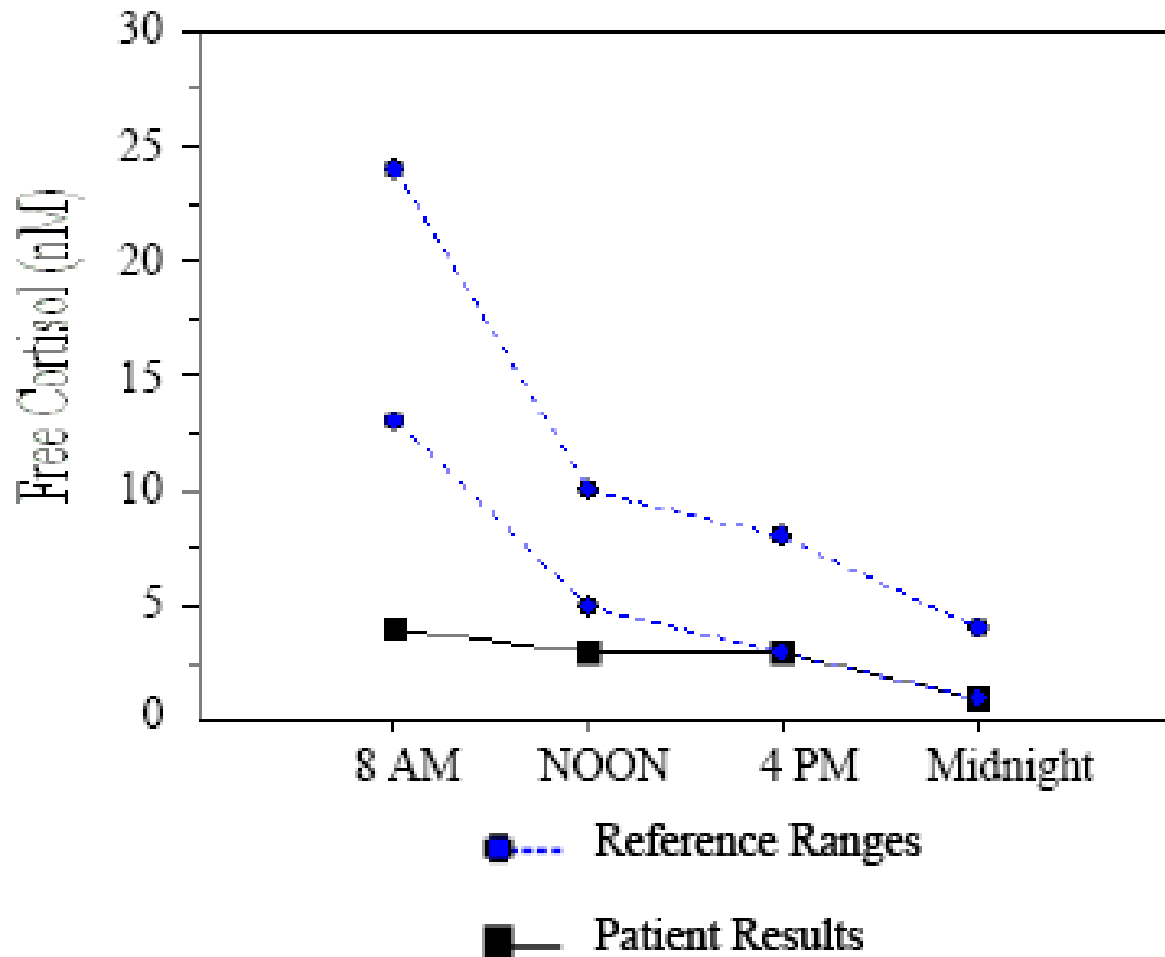


Figure 1. Circadian Cortisol Profile

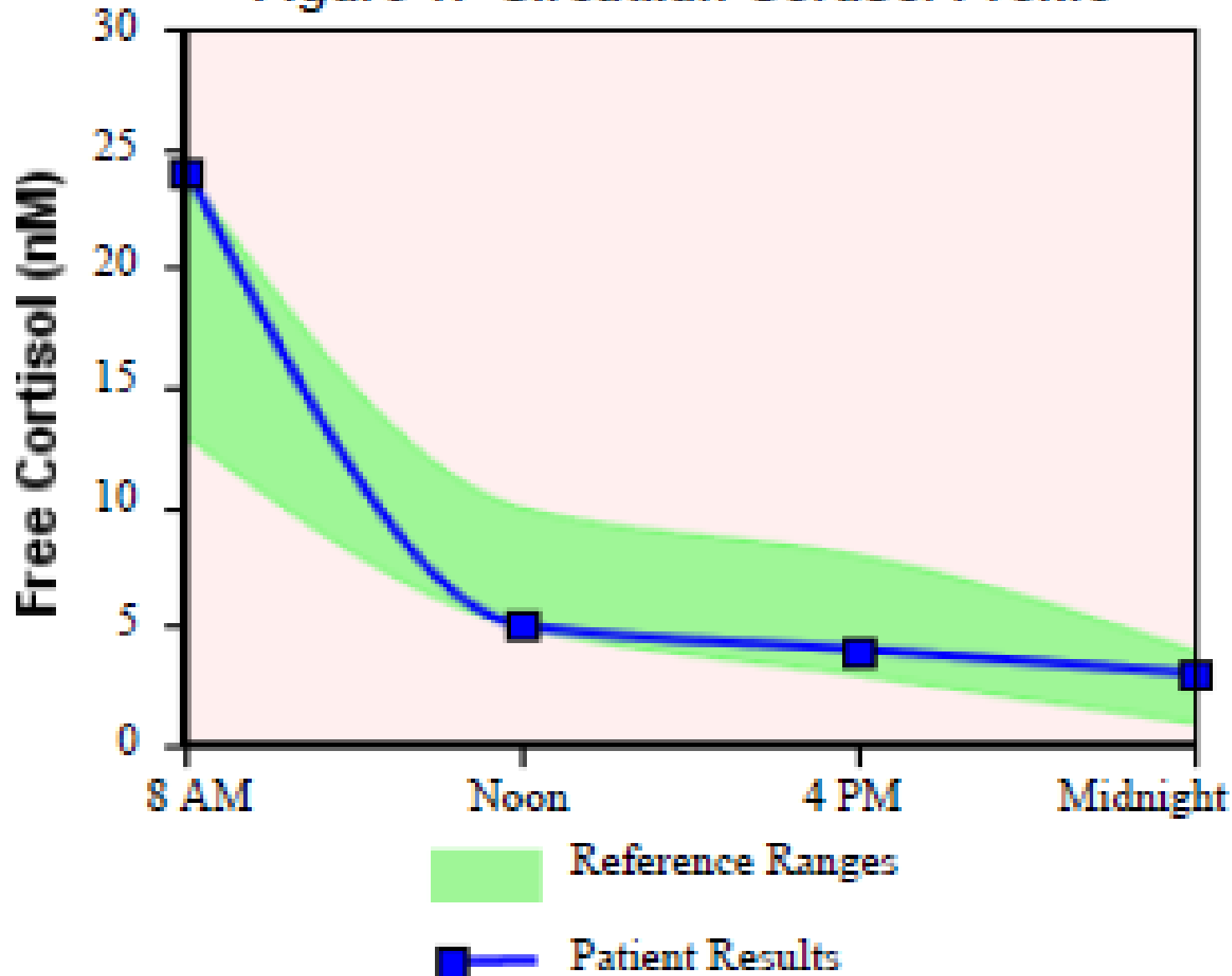


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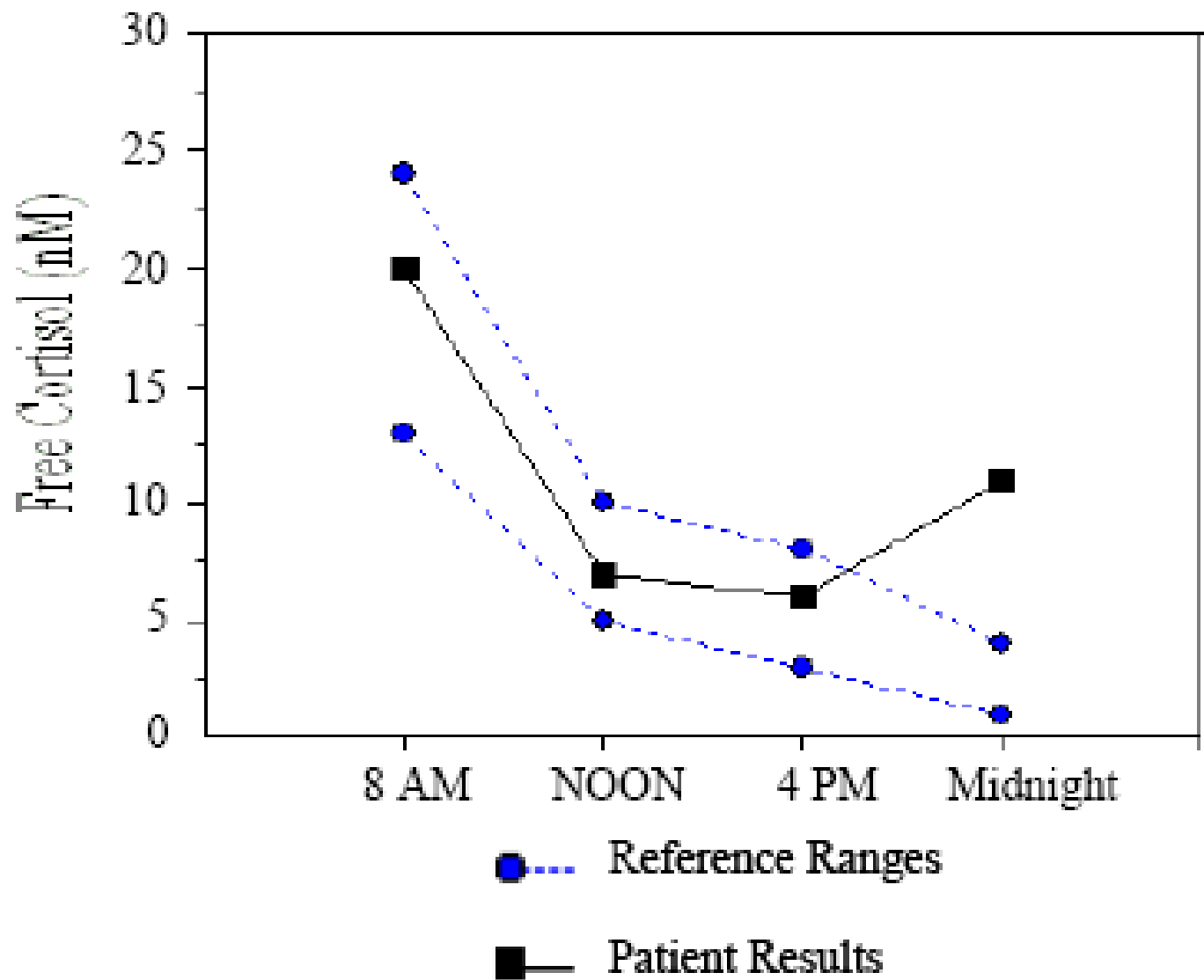


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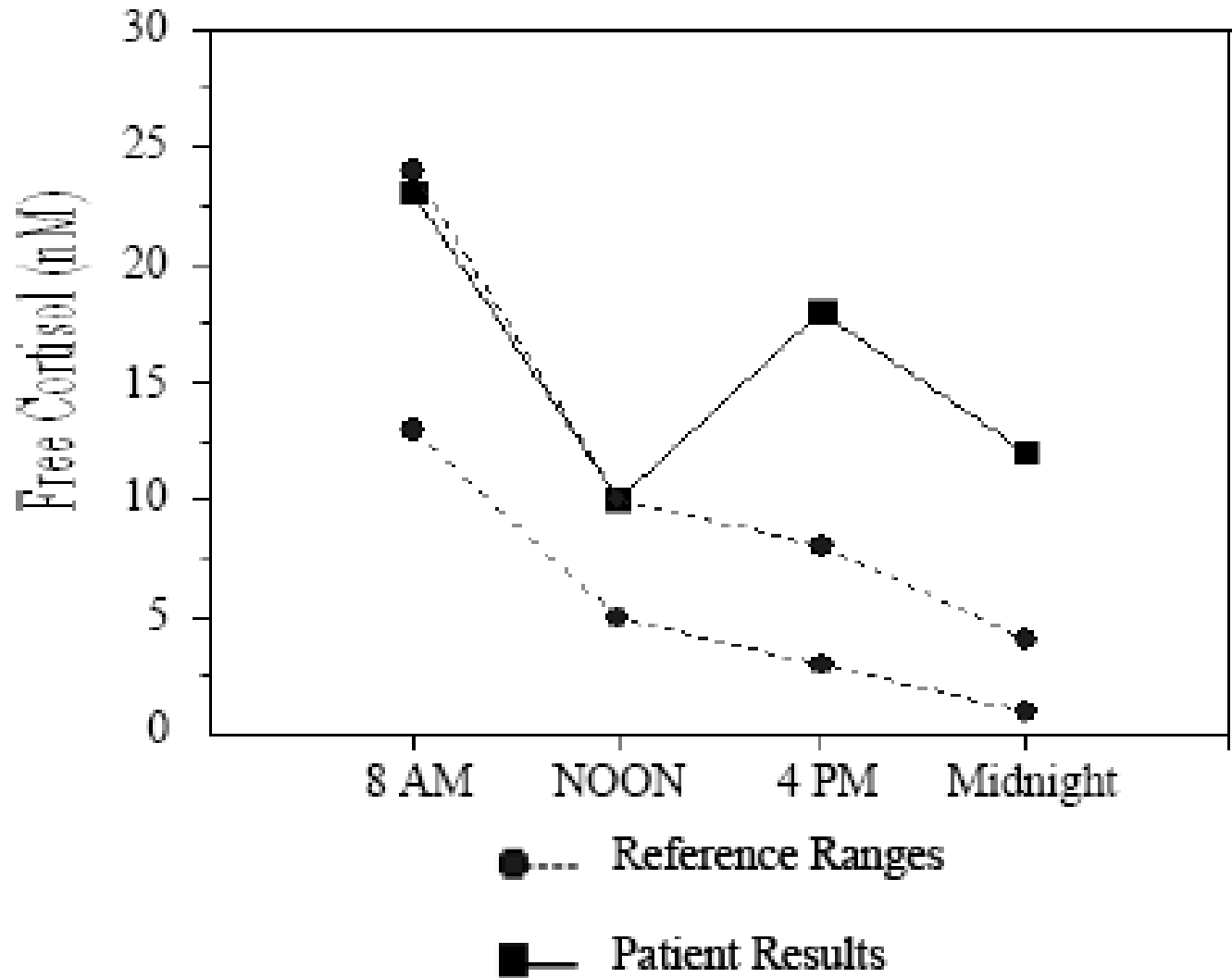


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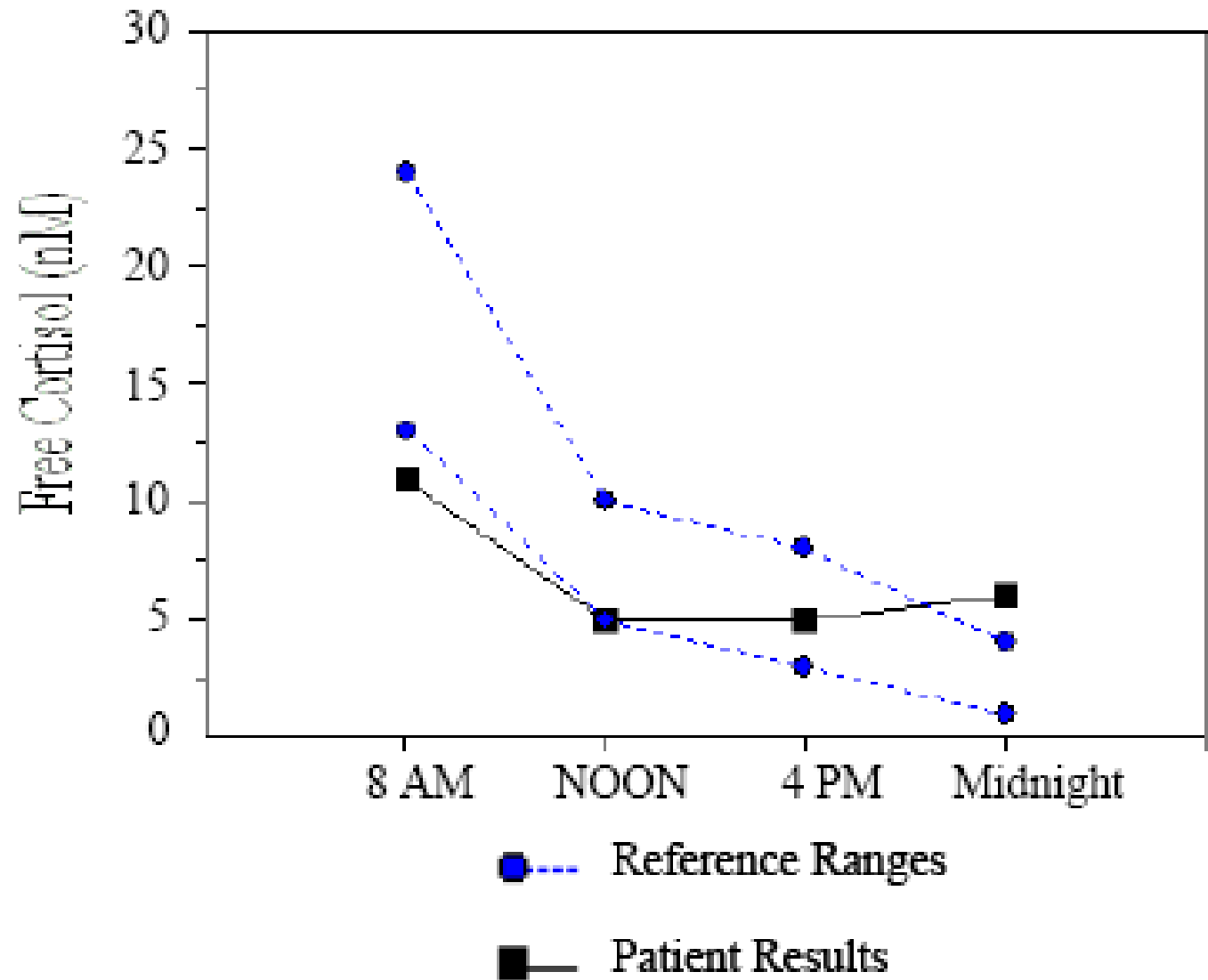


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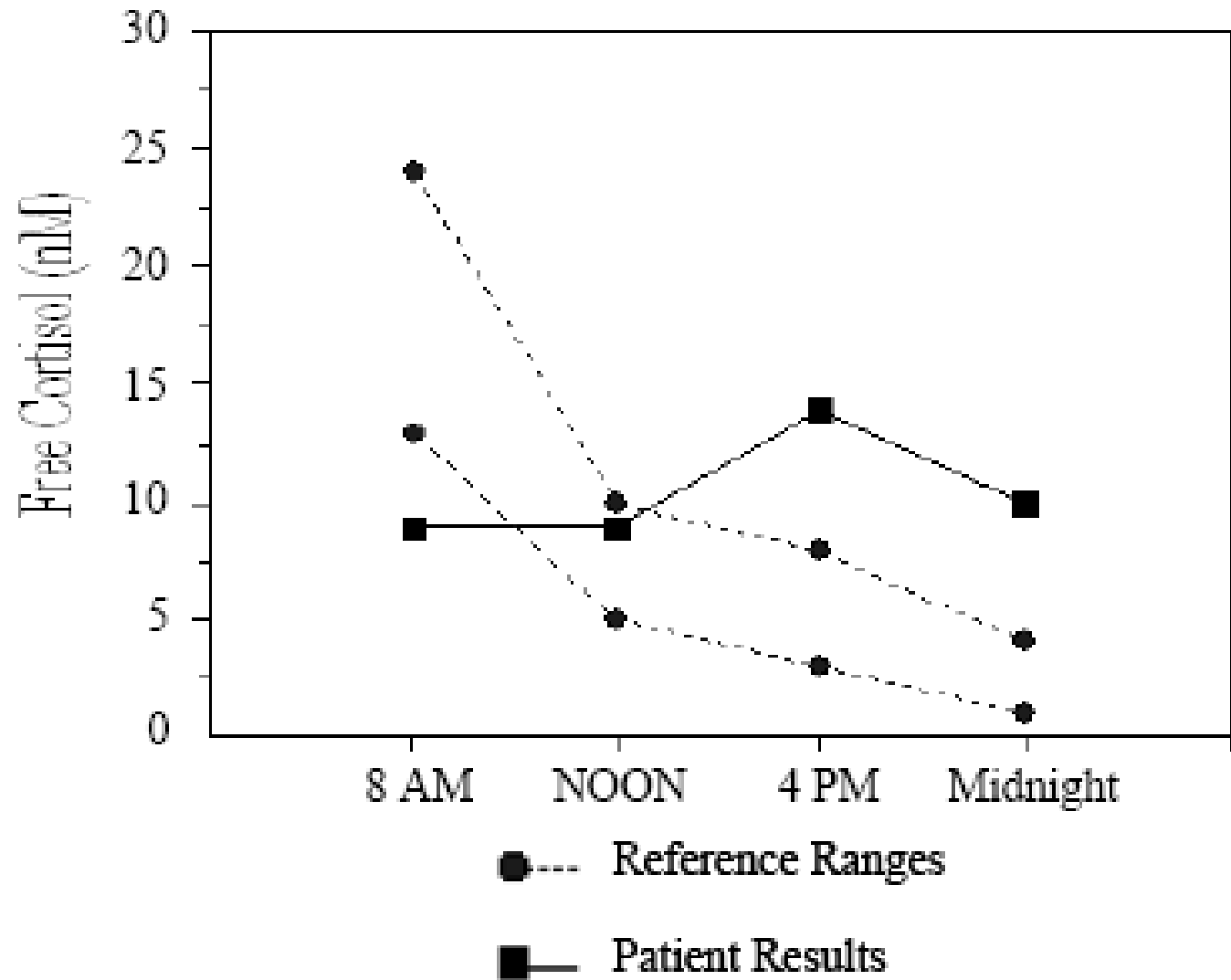


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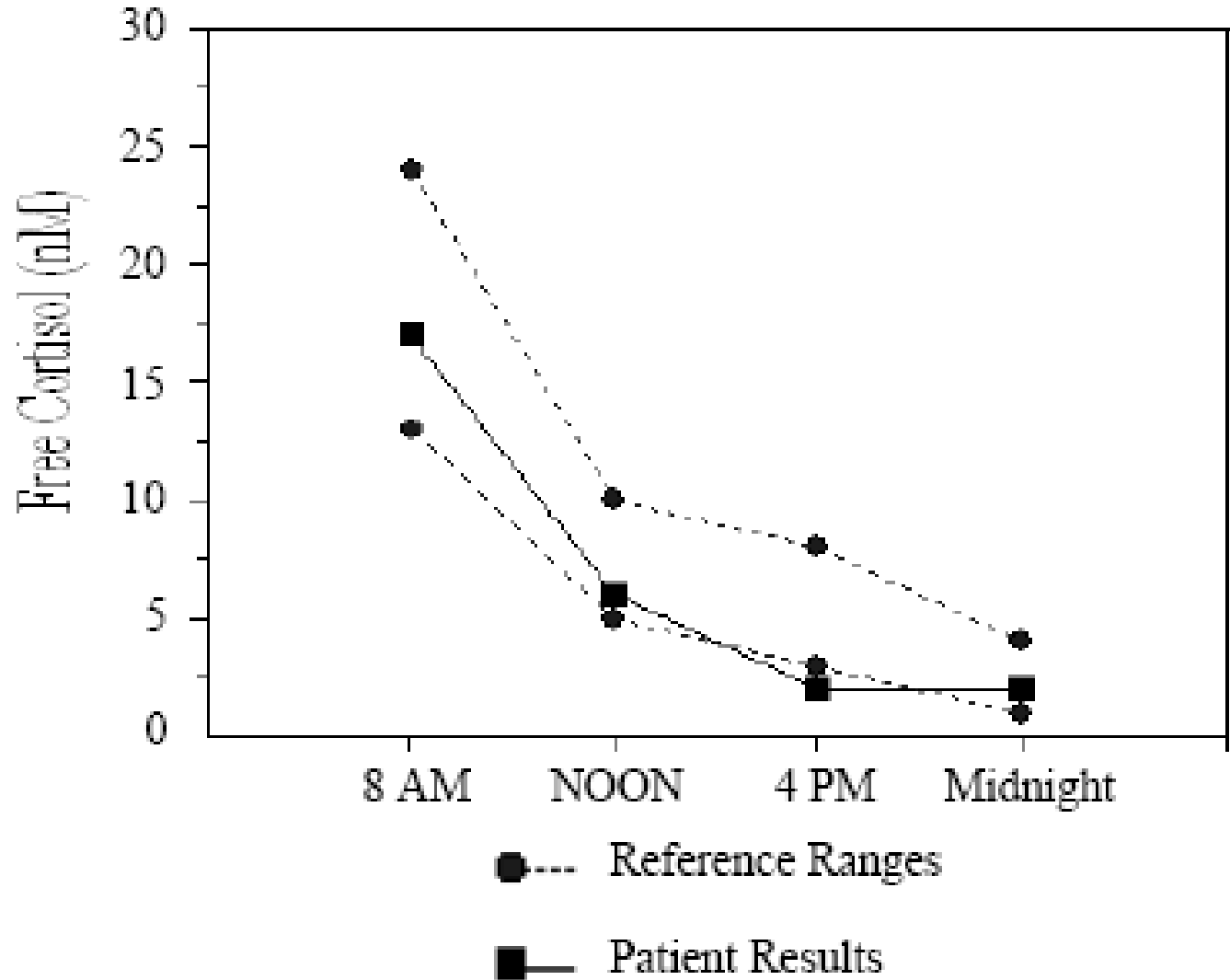


Figure 1. Circadian Cortisol Profile

