

# Optimize Adrenal Health to Reduce Stress

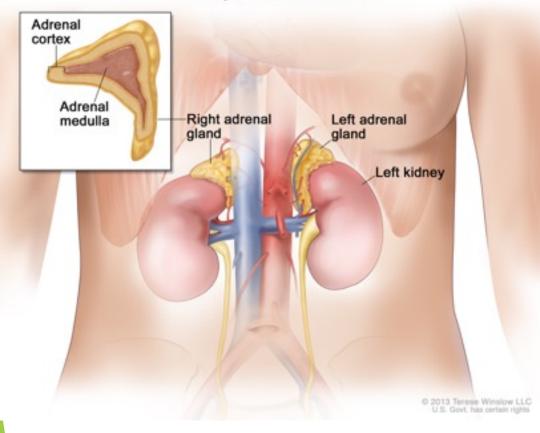
Annmarie McManus MMSc, PA-C, PT, IFMCP Georgia Tetlow, MD, ABIOM Lauren Houser, CRNP Rachel Hershberger, MS, CNS, LDN

# Agenda

- What are the adrenals and what do they do?
- How does stress affect your body?
- Testing
- Lifestyle support for adrenal health
- Nutrition and Supplementation for adrenal health
  - ► Foods to avoid and incorporate
  - Supplementation
  - Helpful tips

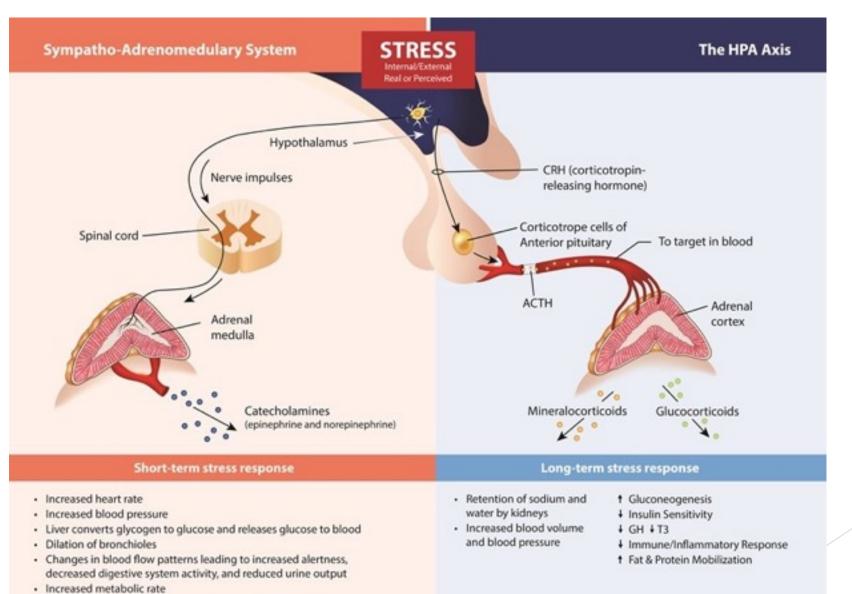
# What are your adrenal glands?

#### Anatomy of the Adrenal Gland



- Produce hormones that
  - Control blood sugar
  - React to stress
  - Regulate blood pressure

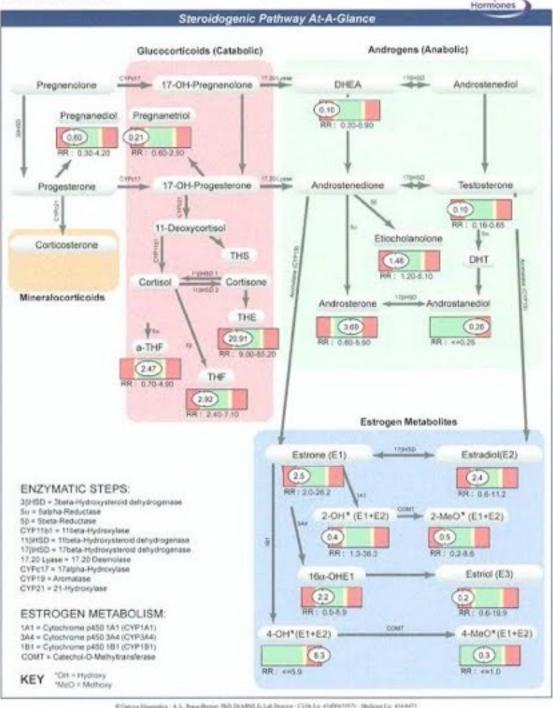
### Adrenals and Stress Connection



#### Sympathetic nervous system Parasympathetic nervous system sympathetic outflow to smooth muscle sympathetic outflow to organs 0 of the head and trunk ciliary ganglion of hair follicles, sweat glands, and eye peripheral blood vessels pterygopalatine ganglion submandibular ganglion lacrimal gland otic ganglion salivary glands salivary midbraingland sympathetic VII X medulla oblongata chain heart C1 C2 C3 C1 C3 C3 C4 C5 C6 head and --neck C4 C5 vagus bronchi 08 C7 nerve liver and C7 C8 upper lungs C8 limb T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 - T2 -T3+ -T4stomach -T6spleen pancreas -T7celiac body-TB - TO ganglia -T10-Intestines T11 -T11adrenal gland T12-T12 L1 - L1 -- L2 -L2 L3 L4 L5 S1 S2 L3 L4 L5 S1 •S2 •S3 •S4 S5 lower kidney limb superior mesenteric 83 floor ganglion pelvic e e ganglion distal colon inferior - preganglionic nerve fibres bladder and nerve mesenteric === postganglionic nerve fibres spinal cord spinal cord external genitalia ganglion © 2007 Encyclopædia Britannica, Inc.

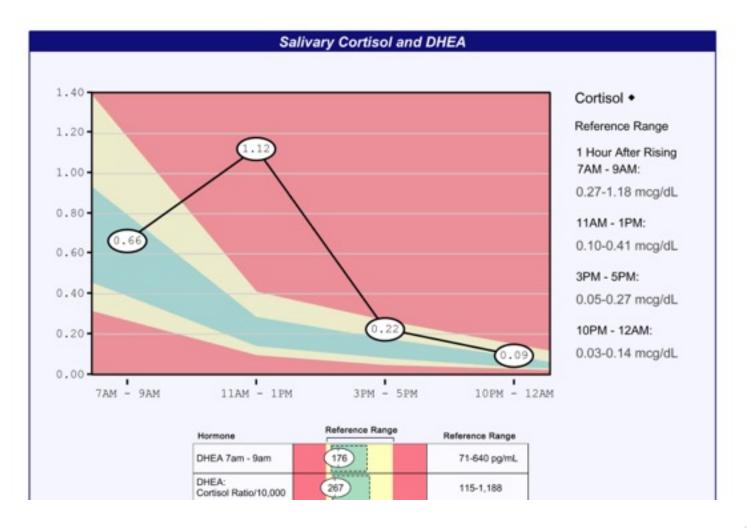
# Functional Medicine Testing

- Quest/Labcorp: Cortisol, DHEA-S, Insulin, HgbA1C
- Adrenal Stress Profile (Saliva Test)
- ► Hormone Testing



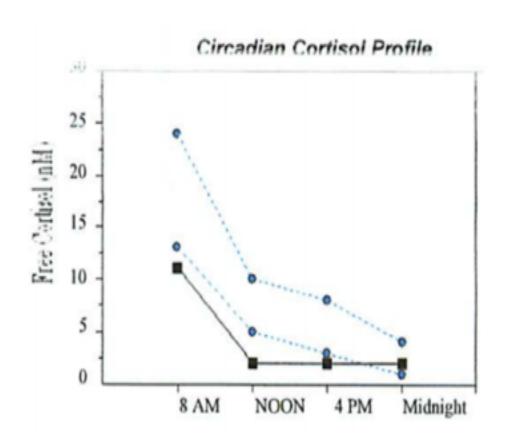
Complete Hormones

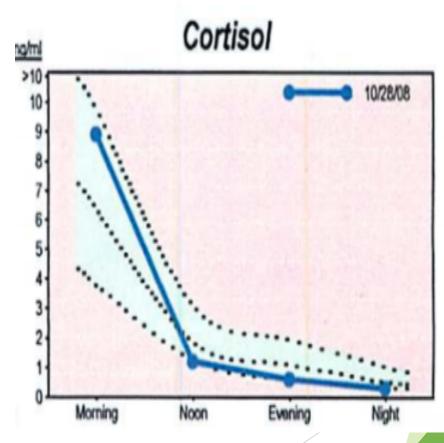
## Adrenal Cortex Stress Profile



### Patient A







# Lifestyle Changes

- Re-Evaluate Life Stressors
- Sleep- regular routine, goal is 7-9 hours
- Exercise- Purposeful movement, Cardio 3+/days per week, Daily Stretching/Balance activities
- Restoration- Self awareness, Mindfulness, Guided Imagery/ Visualization, Meditation, Breathing Techniques, Relaxation Response, Heart Rate Variability Use

#### **Nutrition and Your Adrenals**

- Phytonutrient rich diet
- ► Elimination Diet- decrease food triggers, decrease inflammation and toxic burden
- ► Eat small, frequent, low glycemic meals- stabilize blood sugar
- Stop caffeine, alcohol and refined carbohydrates

# Foods that Support our Stress Response

- Pumpkin Seeds
- Free-Range Eggs
- Green Leafy Vegetables
- Fermented Foods
- Wild Caught Fish
- Blueberries
- Sea Vegetables
- Avocado
- Sweet Potatoes
- Asparagus

# General Adrenal Supplemental Support

- ▶ B Vitamins- B5, B6, Biotin and Folate
- Magnesium
- Vitamin C
- Zinc
- Omega 3 Fatty Acids
- Vitamin D

## Adaptogens

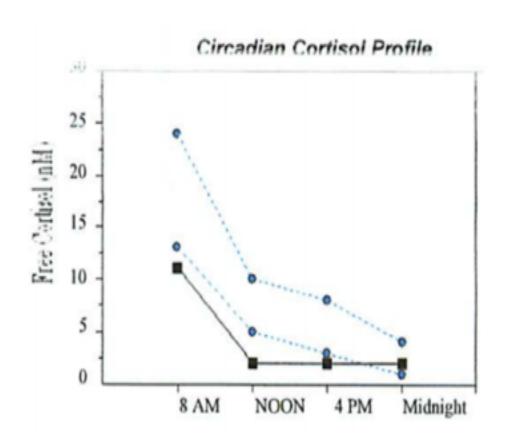
- Hypercortisol State- Ashwagandha, Valerian Root, Passion flower, Schisandra, L-theanine, 5-HTP
- **Early Adrenal Resistance-** Ashwagandha, Rhodiola, Cordyceps, Siberian Ginseng, Phosphatidylserine, Dark chocolate
- Adrenal Exhaustion/Fatigue- Ashwagandha, Licorice Root, Cordyceps, Asian Ginseng, Magnolia flower

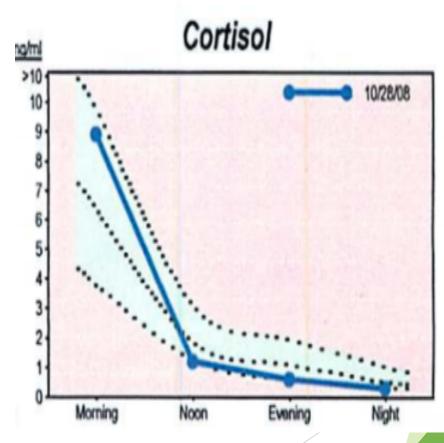
# Hormone Supplementation

- DHEA
- Pregnenolone
- Hydrocortisone

### Patient A

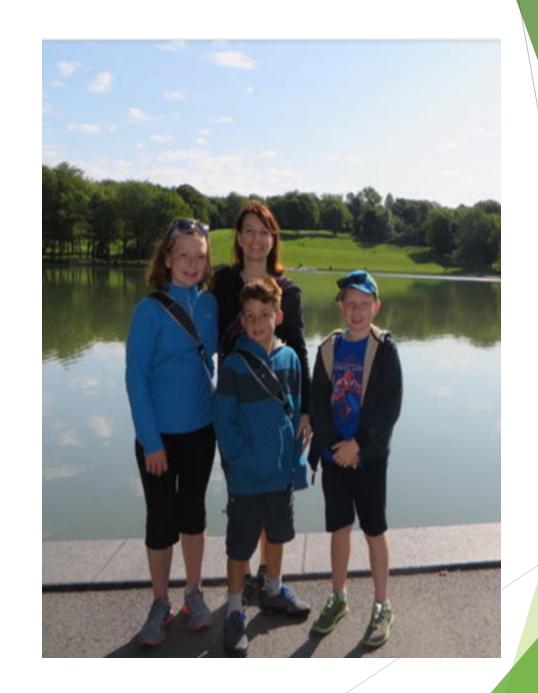






Patient A 08-26-2017

Still working on life balance!!



# Summary

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- Lifestyle supports for adrenal health
- Nutrition and supplementation for adrenal health
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  - Supplementation
  - Helpful tips
- Questions?





Georgia Tetlow, MD, ABIOM

Annmarie McManus, MMSc, PA-C, PT, IFMCP, Lauren Houser, CRNP

& Rachel Hershberger, MS, CNS, LDN present...

10.17.17

# Live Long and Prosper: Functional & Integrative Medicine for Cardiovascular Health

Keys to Heart and Blood Vessel Health

Annmarie McManus, MMSc, PA-C, PT, IFMCP leads an interactive evening with Georgia Tetlow, MD, ABIOM exploring how to optimize your heart health!

Heart disease is not just about low serum cholesterol. Blood sugar, blood vessel health and body composition are key determining factors in heart health. As the leading cause of death in the US, heart disease can be prevented and even reversed through lifestyle and integrative interventions. Join us and engage in your health. Tuesday, October 17th 6:30-8:00pm

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Join Annmarie for this month's wellness class to explore how integrative medicine can improve your health.

Definitely Register!

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#### Questions?

**Email Denise at** 

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