

Hormone Balance

For Ideal Health and Long Life

Definition: Hormone

(hormo--- to set in motion)

A substance produced by one tissue and carried by the bloodstream to another to trigger a physiological effect.

About Hormones

- **Regulators (point and click)**
- **Miniscule amounts**
- **Receptors**
- **Highly interactive**

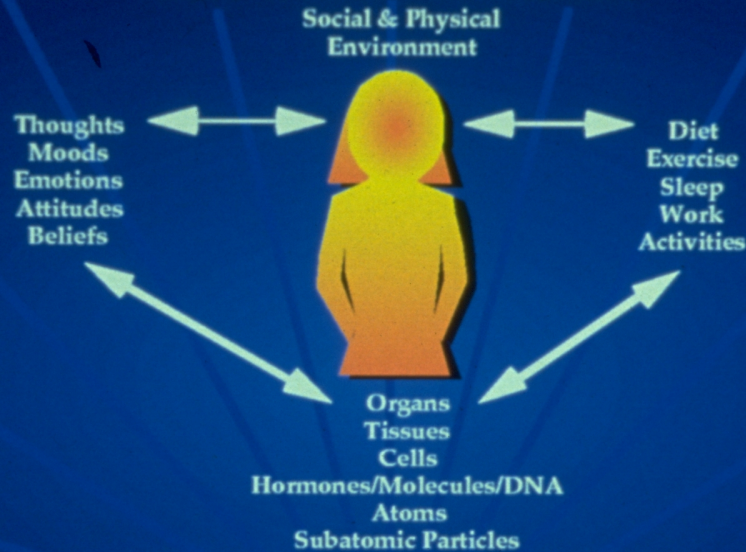
Balance for Healthy Aging

GROWTH

DECAY



Psychophysiological Expressions of Biological Intelligence: The Three Doshas



Subatomic Particles

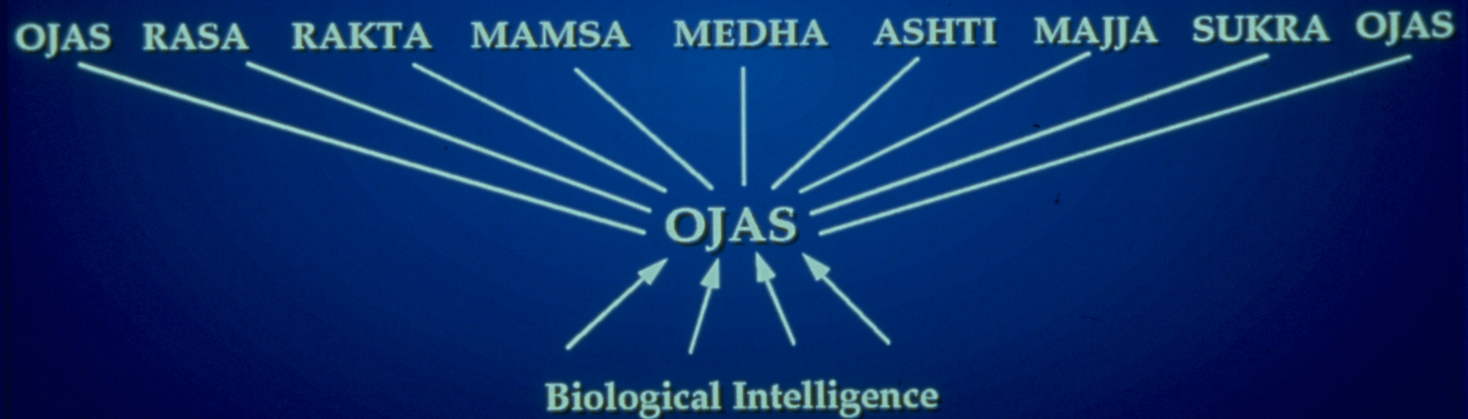
VATA

PITTA

KAPHA

Unified Field
Organizing Value of Biological Intelligence

OJAS: Interface of Matter and Intelligence



Dosha Functions

VATA-- Moving

- Neuroendocrine
- Circulation



PITTA--Transforming

- Digestion
- Metabolism



KAPHA-- Structural

- Physical body



Three Stages of Life

- Birth to age 30--Kapha
- Age 30 to 60-----Pitta
- Age 60 +-----Vata

Hormone Decline with Age

- Growth hormone
- Melatonin
- DHEA
- Estrogen, progesterone
- Testosterone

Hypothalamic-Pituitary-Adrenal Axis

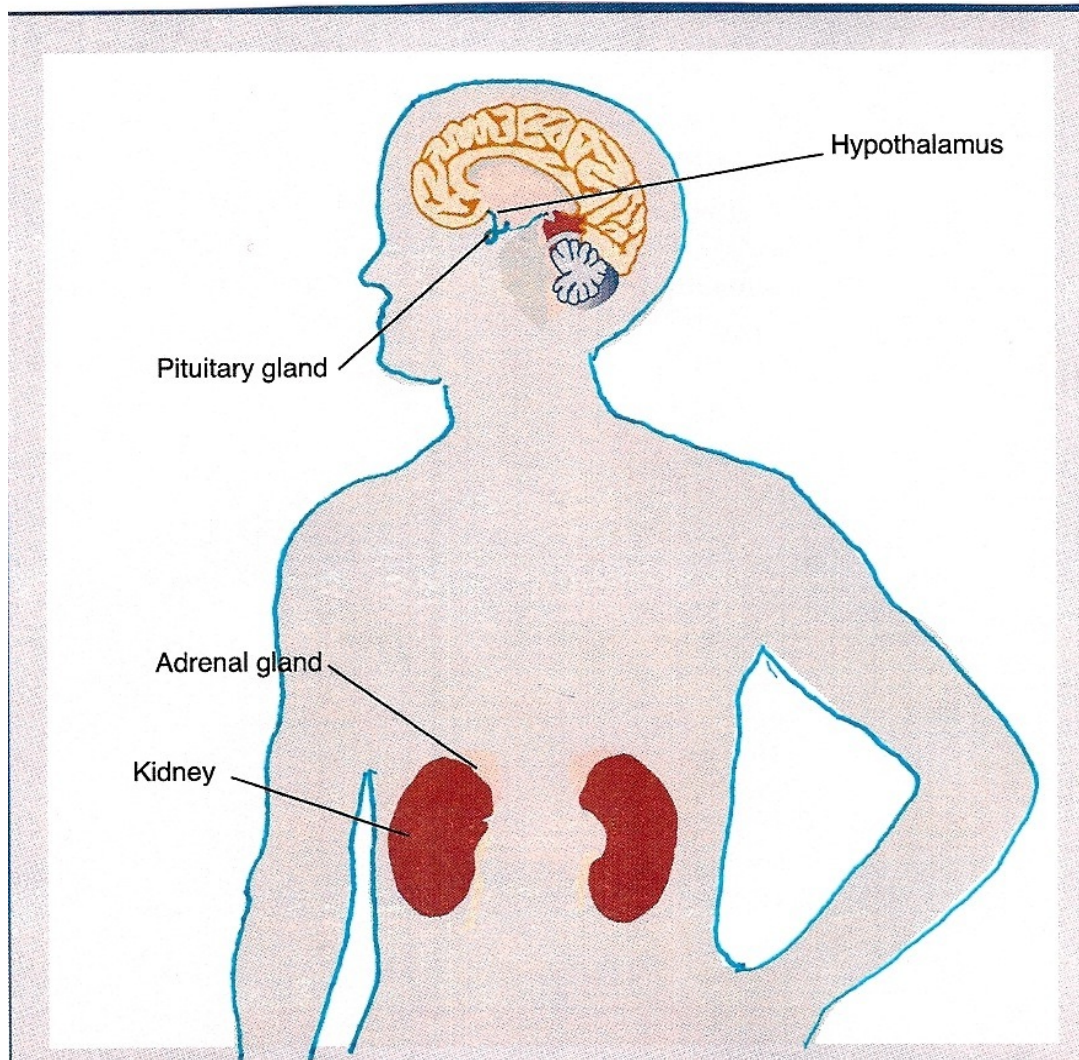


Figure 1 Location of the components of the hypothalamic-pituitary-adrenal (HPA) axis. The hypothalamus is located in the brain, directly above the pituitary gland. The adrenal glands are located in the lower back, one atop each kidney.

Steroid Hormone Family

- **Stress response**
- **Reproductive hormones**
- **Repair and recovery**
- **Blood sugar**
- **Fluid balance, BP**
- **Strength and vitality**

Cholesterol



Pregnenolone



DHEA



Progesterone

Aldosterone



♂/♀ Hormones

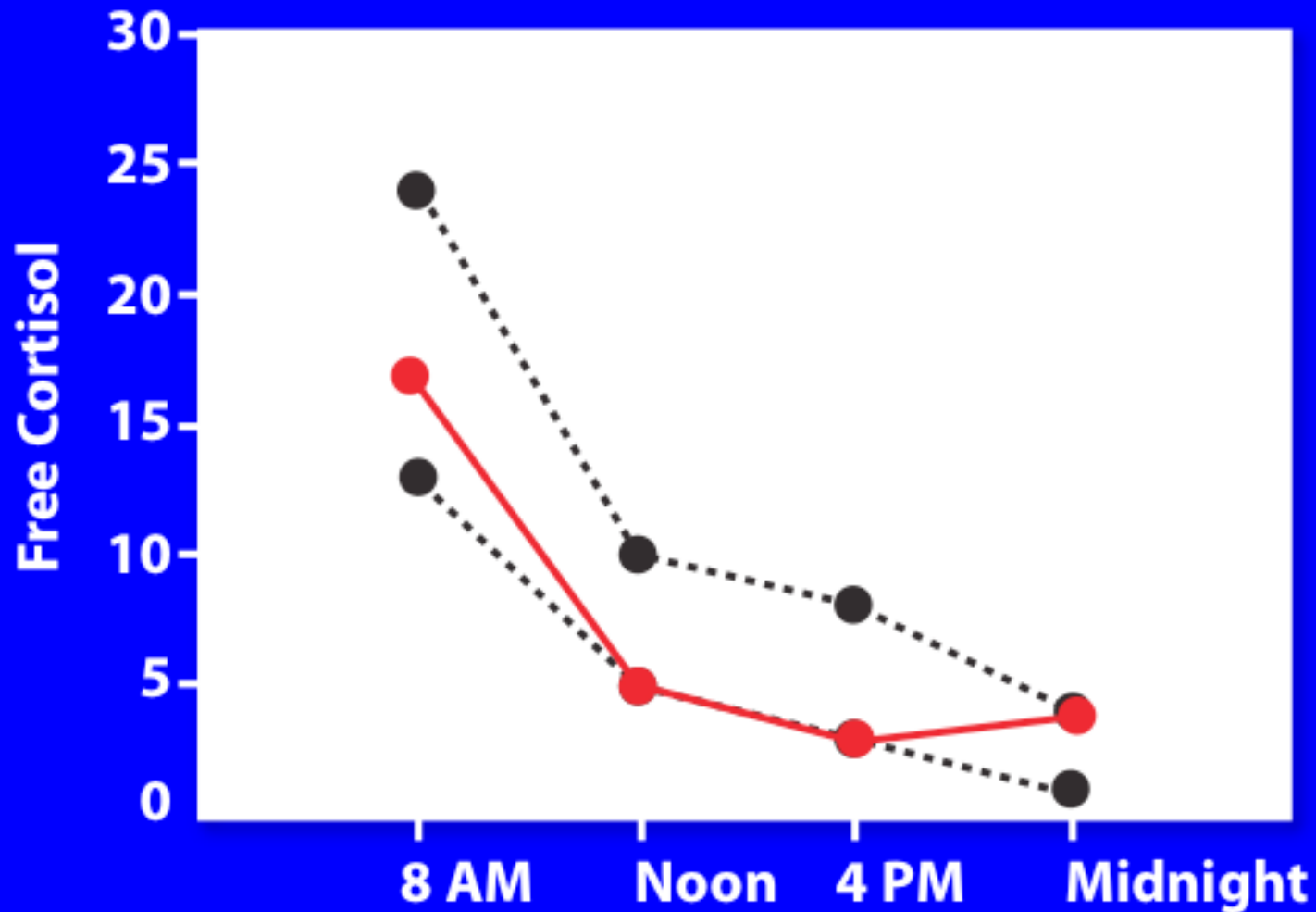


Cortisol

Aromatization

- Testosterone turns into Estradiol
- *Via aromatase enzyme*

Circadian Cortisol Profile



●--- Reference Ranges

●— Patient Results

Veitch



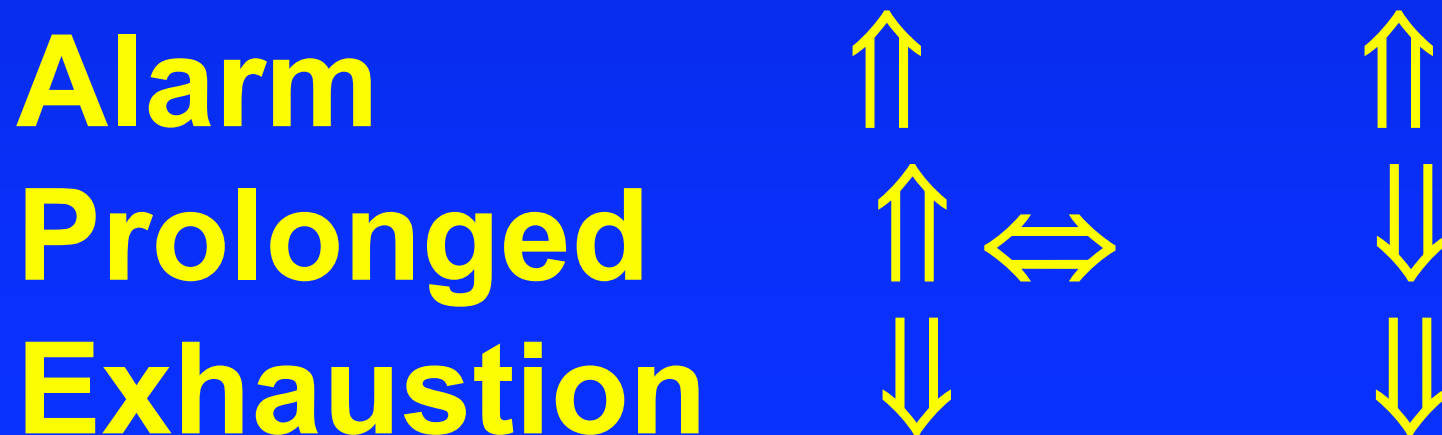
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12-6

Difficult as it was to cut down on her caffeine consumption, Marcie strictly observed her self-imposed limit of one cup of coffee a day.

Stress Response— Hans Selye

Cortisol DHEA



Chronic Stress → Excess Cortisol → AGING

- **Late nights / Lack of sleep**
- **Skipped and delayed meals**
- **Worry, fear, anger**
- **Excessive exercise**

Excess Cortisol → AGING

- Overweight, Diabetes, CVD**
- Immune suppression, Cancer**
- Memory, Mood, Brain**
- Muscle, Bone, Collagen loss**

Excess Cortisol → AGING

- Male: ↓↓ testosterone
↑↑ estradiol
- Female: ↓↓ progesterone
- Resistance to other hormones

Cortisol Deficiency

Slow healing, weak muscles

Fatigue, depression, anxiety

Low blood pressure

Low blood sugar

Low immunity

Hypo-thyroid symptoms

Postmenopausal Estradiol Sources

- **Adrenals***
- **Fat, brain**
- **Arterial walls, skin**
- **Ovaries**

Recovering Balance

The 3 (5!) Pillars of Health

- **Stress Reduction (mind/cs)**
- **Diet— (digestion, eating habits, gut health)**
- **Sleep— (timing, length)**
- **Exercise— (physical, mental)**
- **Detox**

Cortisol Balance= Anti- Aging

- **Nutritional supplements**
- **Herbal therapies**
- **Panchakarma**
- **Hormonal support**

Cortisol Modulators

- **Ashwagandha**
(Withania somnifera)
- **Licorice root**
(Glycyrrhiza glabra)
- **Amrit Kalash Ambrosia[®] tablet**
- *Rehmannia glutinosa*

Cortisol (Modulators) cont' d

- **Holy Basil**
(*Ocimum Sanctum*)
- **Gotu Kola**
(*Centella asiatica*)
- **Brahmi**
(*Bacopa monniera*)
- **Worry Free[®]**

MAPI Stress Protectors

- **Stress-Free Mind®**
- **Youthful Mind®**
- **Mind Plus®**
- **Worry Free®**
- **MA 686 (*Ashwagandha*)**
- **Ambrosia® tablet**

Hormone Support-

www.mapi.com

Women

Hot Flash Relief (shatavari)

Midlife II

Rejuvenation for Ladies

Vital Lady

Hormone Support- www.mapi.com

Men

- Rejuvenation for Men
- Vital Man

Testosterone

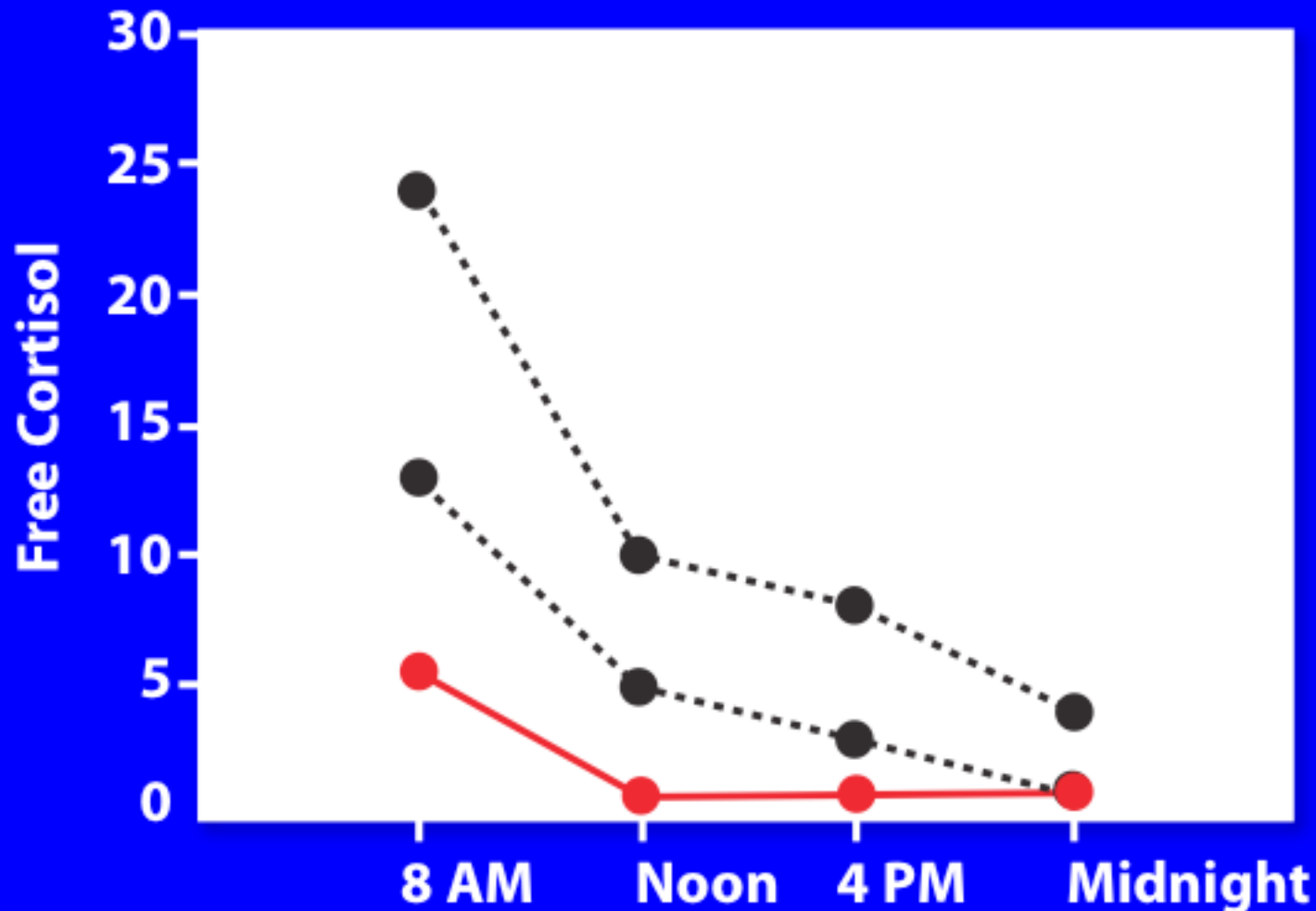
Growth Hormone

- Increase lean muscle (4.4 lb)
- Decrease in fat
- No increase in strength
- Increased diabetes
- Increased arthritis
- Recombinant DNA

Growth Hormone

- Deep sleep (50%)
- Ghrelin (hunger hormone)
- Weight lifting (not endurance)
- Estrogen (cortisol inhibits)
- L-Arginine (pyroglutamate)

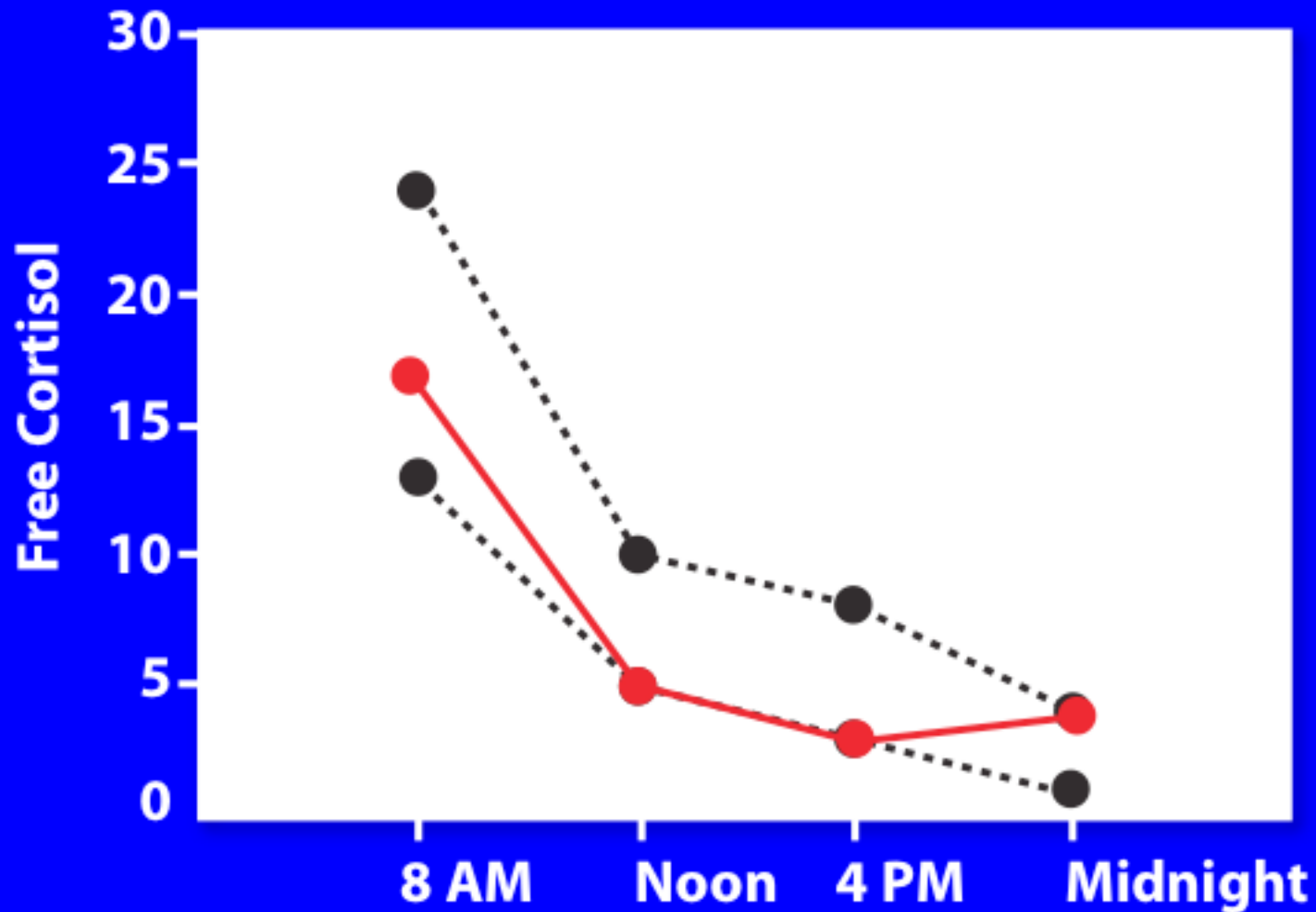
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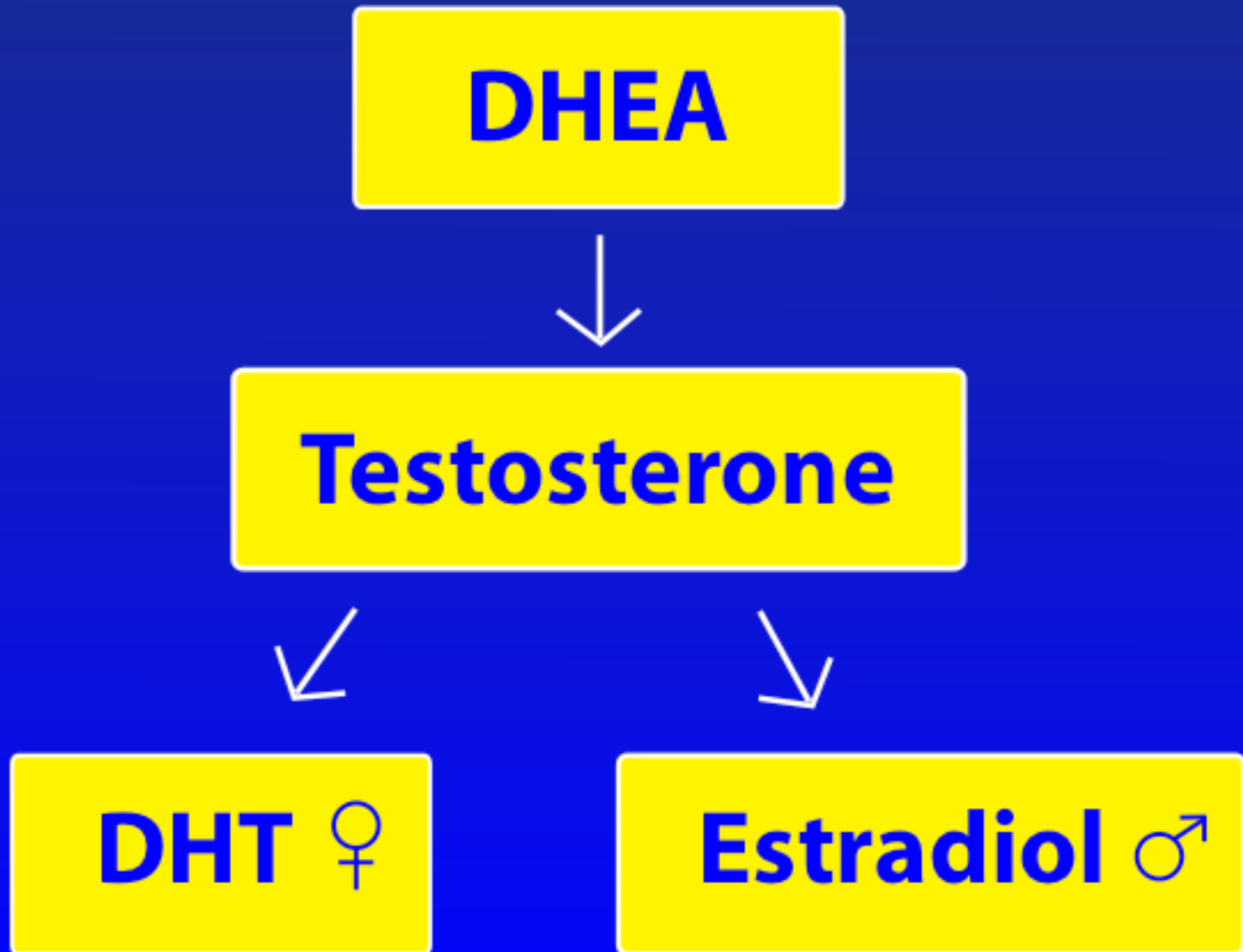
Case of Mysterious DHEA

51 y.o. perimenopause, low progest.,

Fatigue, mild hot flashes

| | DHEA | Testosterone (DHT) |
|-------|----------|--------------------|
| 9/09 | 4 (3-10) | 33 (15-75) |
| 12/09 | 25 ↑↑ | 75 ↑↑ |

DHEA Excess



Cholesterol



Pregnenolone



DHEA



Progesterone

Aldosterone



♂/♀ Hormones



Cortisol

Bioidentical Hormone Cream Overdose

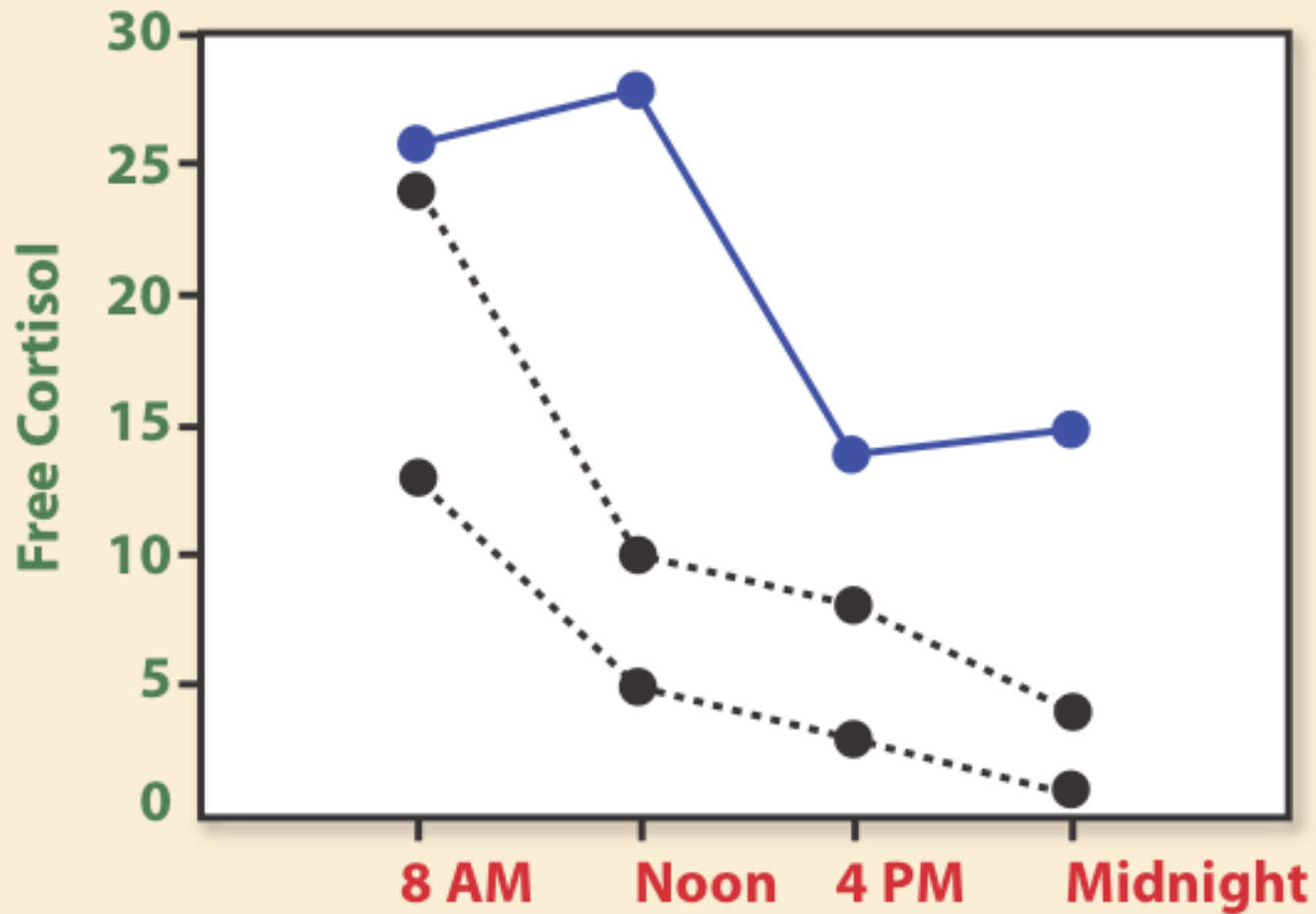
Estradiol--- >99 (<20)

Progesterone-- >1000 (<500)

FSH—124 (< 125)

LH—170 (< 30)

Circadian Cortisol Profile



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