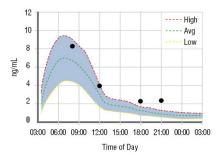
COMMON PATTERNS OF CORTISOL IMBALANCE

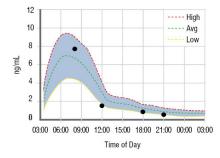


Cortisol that does not follow the normal pattern can trigger blood sugar imbalances, food cravings and fat storage, especially around the middle. Related imbalances of low DHEA commonly result in loss of lean muscle, lack of strength, decreased stamina and low exercise tolerance.

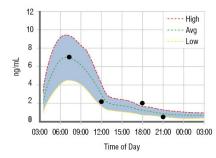
Chronically Elevated Cortisol



Steep Drop in Cortisol



Rebound Cortisol



Overall higher than normal cortisol production throughout the day from prolonged stress demands. High cortisol also depletes its precursor hormone progesterone.

General symptoms:

- · Food/sugar cravings
- · Feeling "tired but wired"
- Insomnia
- Anxiety

Stress/fatigued pattern – morning cortisol in the high normal range or elevated, but levels drop off rapidly, indicating adrenal dysfunction.

General symptoms:

- · Mid-day energy drop
- Drowsiness
- Caffeine/sugar cravings
- Low exercise tolerance/ poor recovery

Up and down/ irregular cortisol, not following the normal pattern.

General symptoms:

- Morning & evening fatigue
- Dips/spikes in energy
- Anxiety
- Irritability & impatience
- Poor concentration
- Food/sugar cravings
- Low exercise tolerance/ poor recovery

Lifestyle suggestions:

- · Reduce stress and improve coping skills
- Protein at each meal, no skipping lunch
- Hydrate throughout the day, herbal teas and water, avoid soft drinks
- · Reduce consumption of refined carbohydrates and caffeine
- · Get adequate sleep (at least 7 hours); catnaps
- Aerobic exercise: <40 min low moderate intensity during time when cortisol level within optimal range
- · Strength training: with guidance 2-3 times per week
- · Enjoy exercise that decreases excessive stress symptoms
- Exercise in the morning

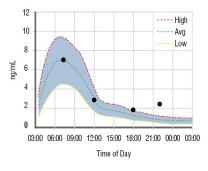
Lifestyle suggestions:

- · Reduce stress and improve coping skills
- Protein at each meal, no skipping lunch
- Hydrate throughout the day, herbal teas and water, avoid soft drinks
- · Reduce consumption of refined carbohydrates and caffeine
- · Get adequate sleep (at least 7 hours); catnaps
- Exercise mid morning to boost energy with a combination of muscle building and cardiovascular activities
- · Schedule more time for fun activities

Lifestyle suggestions:

- Reduce stress and improve coping skills
- Take breaks, stretching, yoga, deep breathing
- No skipping meals; protein snacks between meals to stabilize blood sugars
- Hydrate throughout the day, herbal teas and water, avoid soft drinks
- · Reduce consumption of refined carbohydrates and caffeine
- Get adequate sleep (at least 7 hours)
- Exercise mid-morning to boost energy with a combination of toning and stimulating activities

Elevated Evening Cortisol



Higher than normal evening and night cortisol production.

General symptoms:

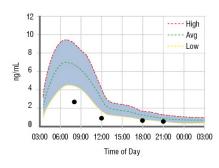
- Food/sugar cravings
- Tired but wired
- Irritability
- Food/sugar cravings
- Low exercise tolerance/ poor recovery,
- · Can't get to sleep or wake frequently

<u>Note:</u> high night cortisol promotes wakefulness.

Lifestyle suggestions:

- · Reduce stress and improve coping skills
- Gentle exercise: stretching, yoga (no exercise after 4pm)
- Eliminate caffeine, hydrate throughout the day, herbal teas and water, avoid soft drinks
- Protein snack before bed to prevent drop in blood sugar
- Improve sleep hygiene: establish routine bed/waking time; no TV, laptop, phone in bedroom; dark and cool room
- · Personalized exercise and fitness program

Adrenal Exhaustion



Adrenal fatigue/burnout pattern with overall low cortisol; normal morning cortisol surge is suppressed and diurnal pattern is flattened.

General symptoms:

- Tired all the time
- Burned-out feeling
- · Allergies/chemical sensitivities
- Susceptibility to illness
- Irritability
- · Food/sugar cravings
- Sleep disturbances
- Exhaustion

Lifestyle suggestions:

- · Reduce stress and improve coping skills
- Establish routine bedtime; no TV, laptop, cell phone in bedroom; dark and cool room
- Take catnaps during the day
- Glass of salt water in the morning (sea salt to taste)
- Consume small, frequent meals every 3-4 hours; protein snack at bedtime
- · Reduce consumption of refined carbs and caffeine
- Choose physical exercises that do not cause rebound or worsening fatigue
- · Do not exercise after 4pm



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