

# Cortisol



# UNDERSTANDING THE IMPORTANCE OF SALIVA CORTISOL TESTING



Testing Performed By Alimetrix CLIA #: 01D2113023 Certified High-Complexity Laboratory

### **DIAGNOSE & MONITOR TREATMENT** OF HORMONAL DISORDERS

When we know how the cortisol hormone impacts so many systems and functions in our bodies, it is easy to see how measuring, monitoring, & understanding these levels plays an essential role in living and aging well.

Measuring hormone levels is an Important proactive step in understanding why your body may, or may not, be responding the way it is in certain situations. This data further supports positive, ongoing health maintenance decisions and therapy options.

- Cortisol helps the body respond to stress.
- Cortisol regulates blood sugar levels and supports immunity.
- Cortisol influences weight management, weight gain, and high blood pressure.

# **BENEFITS OF MEASURING CORTISOL USING SALIVA**

- Saliva is an easy, noninvasive, and an accurate way to provide a good "snap shot" of hormone production throughout the day.
- Saliva testing reports the levels of active hormone available for bodily use.
- Cortisol levels change throughout the day and can increase because of stress.
- The levels are highest from 6 to 8 AM and lowest around midnight.

### NEURODEGENERATIVE DISORDER, STRESS, & MOOD<sup>1,2</sup> Cortisol works with the brain to help

regulate motivation, fight-or-flight responses, & moods. Chronic high cortisol is a major risk factor associated with several neurodegenerative disorders, dementia, and cognitive dysfunction.

#### **CARDIOVASCULAR DISEASE** & METABOLISM<sup>3,4,5</sup>

Long-term consistent stress affects all the cardiac risk factors such as blood pressure, triglycerides, and glucose leading to atherosclerosis. Cortisol regulates the metabolism by breaking down fat for energy.

#### ONCOLOGY<sup>6,7</sup>

Chronic stress increases the production of certain growth factors and blood flow which accelerates cancerous tumor formation.

#### **ANTI-INFLAMMATORY8**

Cortisol prevents the release of substances in the body that cause inflammation.

## **BLOOD SUGAR & DIABETES**<sup>9,10</sup>

Elevated cortisol levels over the long term spike the production of glucose, increasing the risk of type 2 diabetes. Cortisol affects blood sugar levels by adding glucose to the blood in stressful situations.



[2] https://www.urmc.rochester.edu/encyclopedia/content.aspx?ContentTypeID=1&ContentID=2171
[4] https://pubmed.ncbi.nlm.nih.gov/20739384/
[5] https://pubmed.ncbi.nlm.nih.gov/25755918/#:~text=Cancer%20patients%20may%20have%20a,with%20different%20types%20of%20tumors.

[7] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7466429/

[8] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4263906/
#:~:tet=Cortisol%20is%20also%20a%20potent,nerve%20damage%20associated%20with%20inflammation.&text=In%20addition%20to%20its%20paramount,player%20in%20the%20stress%20response.

[9] https://dtc.ucsf.edu/types-of-diabetes/type2/understanding-type-2-diabetes/how-the-body-processes-sugar/blood-sugar-stress/[10] https://pro.endocrineweb.com/type-2-diabetes/high-evening-cortisol-levels-linked-increased-risk-type-2-diabetes

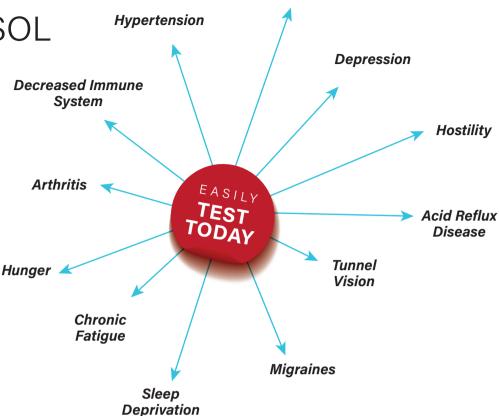
[11] https://www.heart.org/en/healthy-living/healthy-lifestyle/stress-management/lower-stress-how-does-stress-affect-the-body

**EFFECTS OF EXCESS CORTISOL** ON THE BODY

Stress comes in many forms: mental, physiological, and environmental, but all forms of stress can generate a physiological response. The capacity to handle daily stress is influenced by factors that strain body systems, such as: allergies, environmental pollutants, infections, sleep deprivation, and mental illnesses.

Physical and emotional stress cause cortisol to be release from adrenal glands. Cortisol helps the body respond to stress by increasing glucose metabolism for quick energy, decreasing immune response and stimulating a cascade of other hormones.11

Contemporary life provides little time for people to allow their bodies to recover from stress. Chronic stress impacts cardiovascular health, reproduction, mental health and increases cancer risk.



Decreased

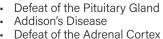
Metabolism

# **BALANCED** LEVELS VS. HIGH/LOW RISKS

- Laser Focus
- Sharp Memory
- Stronger Libido
- Restorative Sleep
- Less Stress Triggers
- Positive Outlook Better Mood
- Faster Brain & Body Recovery
- Fast Cognitive Processing & Recall
- More Energy
- Anti-inflamitory & Reduced Allergic Reactions
- Stronger Bones & Muscle
- Healthier Hair, Skin, & Nails
- Increased Immunity
- Well-Functioning Metabolism
- Regular Periods
- **Balanced Sex Hormones**
- Healthy Production of Testosterone & hGH
- Better Balanced Blood Sugar

- Brain Fog
- Forgetfulness
- Low Libido
- Insomnia
- Stress Susceptibility
- Slower Brain & Body Recovery
- Slow Cognitive Processing & Recall
- Tiredness & Fatique
- Increase Depression Risk
- Bone Loss & Muscle Weakness
- Thinning & Weakened Hair, Skin, & Nails
- Weakened Immune System
- Irregular Periods & Infertility

- Weight Gain
- Low Testosterone & hGH
- Insulin Resistance
- Malignant Adrenal **Tumors** 
  - Defeat of the Pituitary Gland
  - Tumors that feed on Hormonal Failure
  - Dysfunction of the Ovaries & Testes
  - Disease of the Thyroid Gland
  - Diabetes
  - Severe Obesity
  - Alcoholism
  - Polycystic Ovaries
  - Cushing's Disease



- Increase of Thyroid Hormones
- Prolonged use of Drugs
- The use of Medicines Levodop & **Ephedrine**

