Comprehensive Adrenal Stress Profile (Saliva)

GENOVA DIAGNOSTICS EUROPE

46-50 Coombe Road
New Malden
Surrey KT3 4QF

63 Zillicoa Street
Asheville, NC 28801 USA

Patient:

DOB:

Sex:

MRN:

Order Number:

Completed:

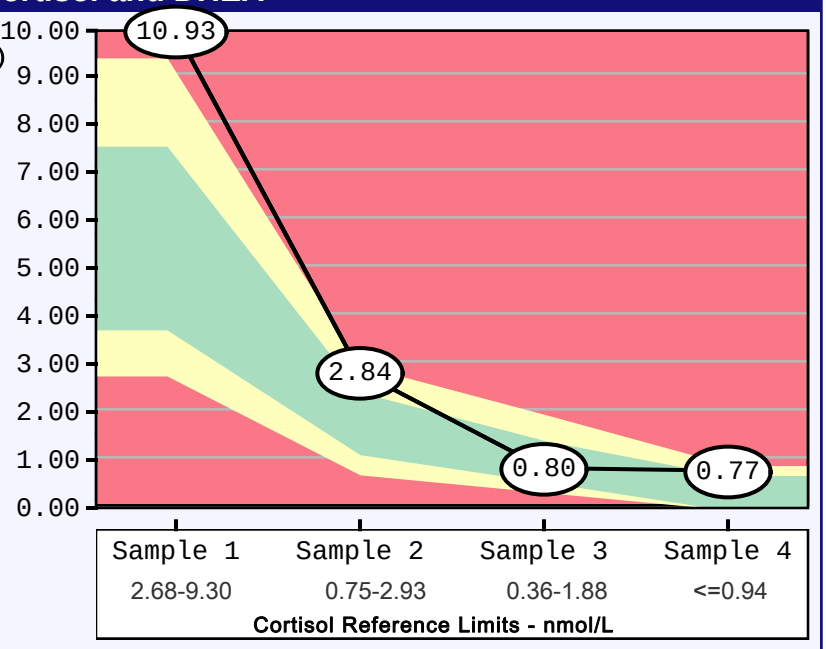
Received:

Collected:

Salivary Cortisol and DHEA

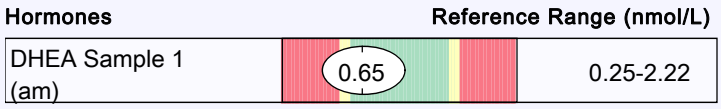
Cortisol Levels

			Reference Range (nmol/L)
Sample 1 Post Awakening	10.93	H	2.68-9.30
Sample 2 (+ 4 - 5 Hours)	2.84		0.75-2.93
Sample 3 (+ 4 - 5 Hours)	0.80		0.36-1.88
Sample 4 (Prior to Sleep)	0.77		<=0.94
Sum of Cortisol	15.340		



DHEA Level

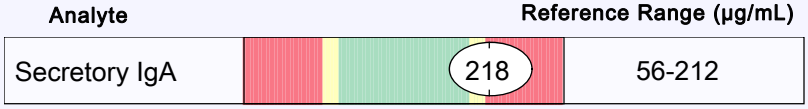
DHEA : Cortisol Ratio	0.06		0.05-0.32



Testing performed by Genova Diagnostics, Inc. 63 Zillicoa St., Asheville, NC 28801-0174

Secretory IgA Results

Analyte	Result		Units	Normal Range
Secretory IgA	218	H	µg/mL	56-212



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Commentary

Please note the cortisol reference ranges have been updated due to a change in the assay manufacturer.

Commentary is provided to the practitioner for educational purposes, and should not be interpreted as diagnostic or

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treatment recommendations. Diagnosis and treatment decisions are the responsibility of the practitioner.

Cortisol reference ranges are based on samples collected over one day during the following time periods (+/- 2hrs):
#1: 7AM - 9AM
#2: 11AM - 1PM
#3: 3PM - 5PM
#4: 10PM - 12PM

Results for samples collected outside the recommended time period should be interpreted with caution as the stated reference range may not apply.

For the patient:
This profile measures the levels of cortisol and DHEA and provides an evaluation of how cortisol levels differ throughout the day. Cortisol levels typically peak shortly after rising and are at their lowest after the onset of sleep. Cortisol is involved in many important functions in your body, including the metabolism and utilization of proteins, carbohydrates and fats, your body's response to physiological or psychological stress, and the control of inflammation and proper blood sugar levels. Cortisol also helps maintain proper blood pressure, normal nerve and brain activity and normal heart and immune function. DHEA also plays a role in the metabolism of protein, carbohydrates and fats, and works with cortisol to help maintain proper blood sugar levels. DHEA helps regulate body weight, blood pressure and immune function, and is used by the body to make the hormones, testosterone and estradiol. Too much or too little of cortisol or DHEA can lead to illness, and it is important that these two hormones be in balance with each other.

For the Physician:

In this profile, Sample 1 (Post awakening) cortisol level is significantly elevated. Because cortisol levels are typically at their peak shortly after awakening, morning cortisol may be a good indicator of peak adrenal gland function. High morning cortisol levels suggest a degree of adrenal hyperfunction in regard to peak circadian activity, stress being the most common inducer. High cortisol levels cannot be sustained and are often a precursor to adrenal fatigue. Other possible causes of high salivary cortisol include heavy exercise, pregnancy, hypoglycaemia, smoking, obesity, depression, alcoholism, and if significantly elevated, adrenal hyperplasia or Cushing's syndrome.

Sample 2 cortisol level is within the reference range. Mid-day cortisol levels may be a good indication of adaptive adrenal gland function since they represent the adrenal glands' response to the demands of the first few hours of the day. Mid-day cortisol levels within reference range suggest a component of normal adrenal function in regard to adaptive response.

Sample 3 cortisol level is within the reference range. Afternoon cortisol levels may be a good indication of the adrenal glands' ability to help regulate blood sugar, since they represent a postprandial sample. Afternoon levels within the reference range suggest normal adrenal function, especially in the area of glycaemic control.

Sample 4 cortisol level is within the reference range. Late-night cortisol levels may be a good indication of baseline adrenal gland function since they typically represent the lowest level during the day. Normal late-night cortisol levels suggest normal adrenal function with regard to baseline circadian activity.

DHEA is within the reference range. Proper levels contribute to the ideal metabolism of proteins, carbohydrates and fats, including efficient glycaemic control.

The ratio of DHEA to cortisol is normal. This ratio indicates a relative balance of the adrenal output of androgens and

Commentary

cortisol. Both of the hormones are released in response to ACTH from the pituitary and a normal ratio indicates a balanced function of the hypothalamic-pituitary-adrenal axis.

Please note the Secretory IgA reference range has been updated due to a change in the methodology.

Methodology: Immunoturbidimetric

Secretory immunoglobulin A (SIgA) is the dominant immunoglobulin in external secretions that bathe mucosal surfaces (respiratory and intestines) and is a vital component of the immune systems "first-line of defence" against pathogenic microorganisms, viruses and bacteria. The daily production is weight and age dependent with the maximum production level being reached at the age of 7-10 which then declines with age. (60+).

SIgA production is both beneficially and adversely affected by a number of diverse factors including stress, emotions such as frustration and anger, nutrients, commensals, pathogens and inflammation.

HIGH LEVELS of Secretory IgA

Elevated levels in saliva are associated with an immune response to stimulation by infections and inflammatory reactions. High levels of SIgA production may indicate an infection of the digestive system, in which case a Comprehensive Stool Analysis with parasites would be recommended.