



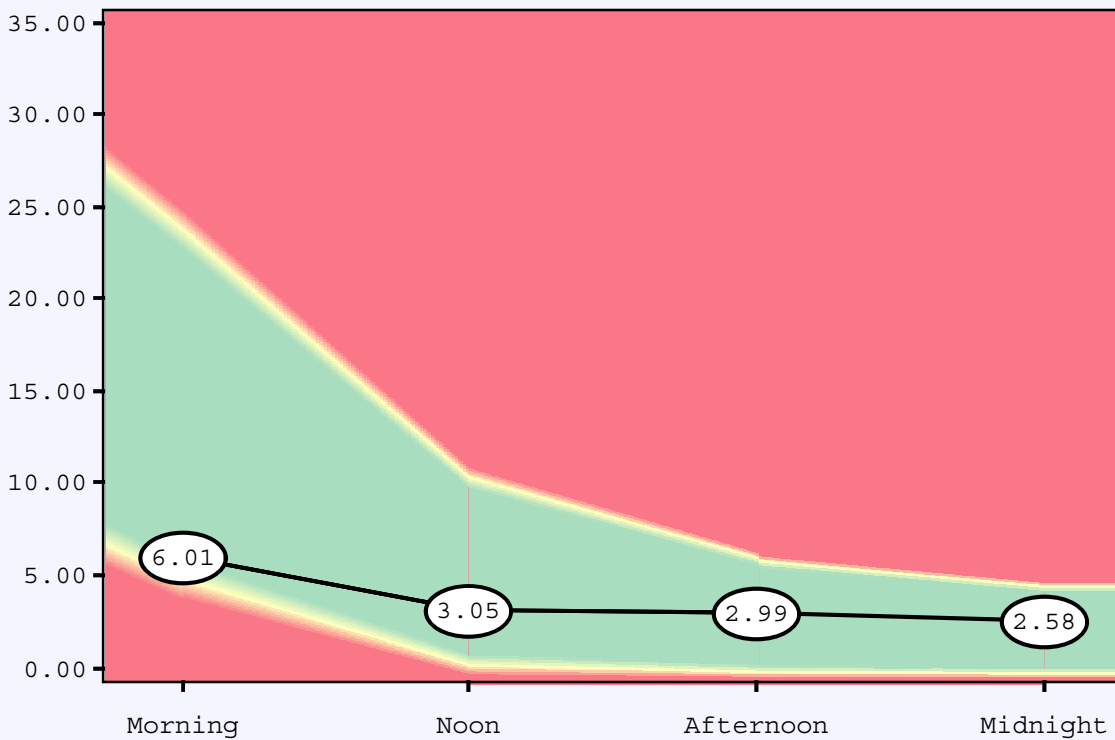
Adrenocortex Stress Profile (Saliva)

Great Smokies Diagnostic LaboratorySM

63 Zillicoa Street · Asheville, NC 28801-1074
www.gsd.com

Patient:	Order Number:	INSTITUUT VOOR FUNCTIONELE GENEESKUNDE
Age:	Completed:	Mathaak 3
Sex:	Received:	Malden, 6581VK
MRN:	Collected:	THE NETHERLANDS

Salivary Cortisol



Reference Range

Morning:
5.00-23.00 nmol/L

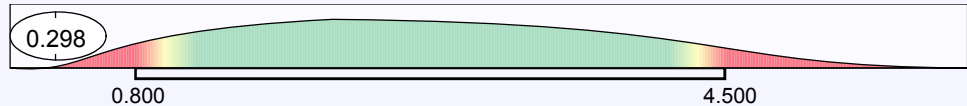
Noon:
1.80-11.00 nmol/L

Afternoon:
1.00-6.50 nmol/L

Midnight:
0.80-4.70 nmol/L

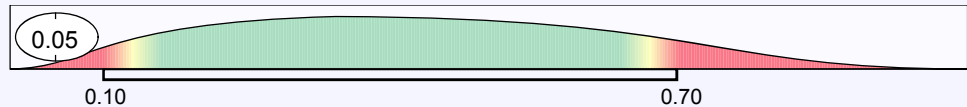
DHEA 8 AM

Ref Range
nmol/L



DHEA/Cortisol

Ref Range
Ratio



Histogram for the DHEA/cortisol ratio was not based on data from reference populations and should be used for illustrative purposes only.

This test has been developed and its performance characteristics determined by GSDL, Inc. It has not been cleared or approved by the U.S. Food and Drug Administration.

Commentary

Commentary is provided to the practitioner for educational purposes, and should not be interpreted as diagnostic or treatment recommendations. Diagnosis and treatment decisions are the responsibility of the practitioner.

Commentary

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 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, the morning cortisol level is within reference range. Morning cortisol levels may be a good indication of peak adrenal gland function since they represent peak circadian activity. Morning cortisol levels within reference range suggest a component of normal adrenal function with regard to peak circadian activity.

The noon cortisol level is within reference range. Noon 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. Noon cortisol levels within reference range suggest a component of normal adrenal function in regard to adaptive response.

The afternoon cortisol level is within reference range. Afternoon cortisol levels collected between 4:00 and 5:00 p.m. may be a good indication of glycemic control exerted by the adrenal gland since they represent a postprandial sample. Afternoon levels within reference range suggest a component of normal adrenal function in regard to glycemic control.

The midnight cortisol level is within reference range. Midnight cortisol levels may be a good indication of baseline adrenal gland function since they represent lowest circadian activity. Normal midnight cortisol levels suggest there is some component of normal adrenal function with regard to baseline circadian activity.

DHEA is below the reference range. Decreased DHEA levels may be seen in thyroid disorders, cardiovascular disease, obesity, reduced immunity, rheumatologic diseases, and excess cortisol production, or with administration of pharmacological doses of glucocorticosteroids. Low DHEA levels are indicative of a lowered capacity to endure physiological or psychological stress/trauma/injury, and may present with abnormal immune response, with increased incidence of autoimmune disease.

A low DHEA: cortisol ratio is generally associated with chronic stress and hypothalamic-pituitary-adrenal imbalances. While often observed in individuals as they age, it may also be associated with cognitive and mood disorders, anxiety, and depressive symptoms. DHEA levels in women tend to decrease more rapidly with aging (especially between 50-60 years of age) than DHEA levels in men.

A pattern showing cortisol levels within reference range with a low DHEA is clinically significant. Low DHEA suggests adrenal hypofunction of zona reticularis. In such a shift, there is increased probability of dysglycemia. This pattern represents a component of adrenal hypofunction, which has been noted in fatigue disorders, post-traumatic stress disorders, and chronic physiological or psychological stress.