

Test	Description	Result	Ref Values
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DHEA	Dehydroepiandrosterone Free	[DHEA + DHEA-S]	
	Pooled Value	5	Normal Adults (M/F): 3-10 ng/ml

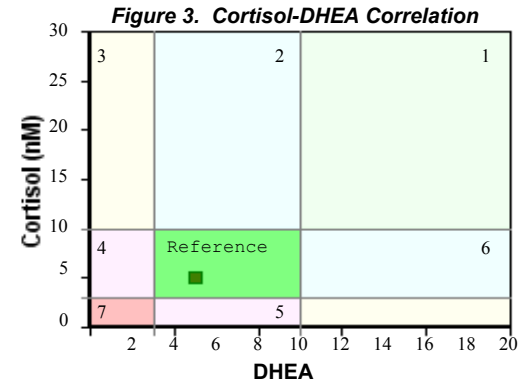
Figure 3 shows your cortisol-DHEA correlation was in:



Reference zone

Individuals with values in this zone usually display a balance in the average values of cortisol to DHEA for the day.

Falling in the reference zone does not preclude the occurrence of high or low cortisol at any specific time on the circadian.



CORTISOL-DHEA CORRELATION SPECTRUM

1. Adapted to stress.
2. Adapted with DHEA slump.
3. Maladapted Phase I.
4. Maladapted Phase II.
5. Non-adapted, Low Reserves
6. High DHEA.
7. Adrenal Fatigue.

ISN	Insulin - Saliva		
	Fasting	<3	Normal: 3-12 uIU/mL
	Non-Fasting	<3 Depressed	Optimal: 5-20 uIU/mL

Depressed Non Fasting insulin within four hours after meal. This may be caused by a small carbohydrate load in the preceding challenge meal or a reduction in pancreatic insulin release or synthesis. Consider a closer examination of challenge meal composition to rule out pre-diabetic tendencies.

Why Test for Insulin?

Insulin activity is affected by the stress and cortisol responses. Chronic stress with cortisol elevation antagonizes insulin, and may cause functional insulin resistance. Furthermore, chronic hypercortisol causes hyperinsulin responses to carbohydrate intake. Chronic insulin resistance and overproduction lead to pancreatic exhaustion.

Basic facts about insulin values.

Fasting: This insulin value is elevated in cases of insulin resistance.

Non Fasting: This insulin value varies with type of meal and time of sample collection. See figure 4b. Adapted, Br. J. Nutr. 2003, 90:853 For an after meal insulin, instruct patient to eat 50g of carbohydrate or what is equivalent to 200 calories about 45-90 minutes before noon sample collection. Examples: 2 slices of white bread and 1 cup of orange juice OR 1 cup of cooked oatmeal and 1 cup of orange juice OR 2 ounces of corn flakes snack.

Figure 4a. Insulin Levels

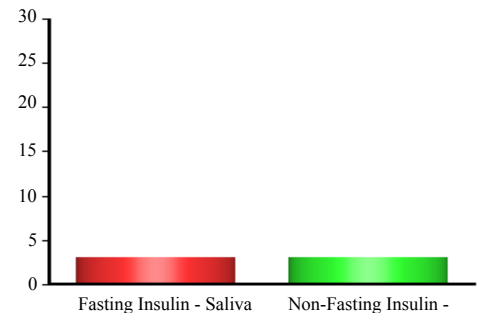
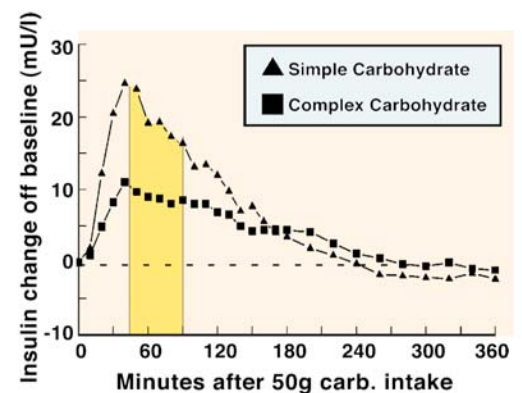


Figure 4b. Serum Insulin - Time Curve



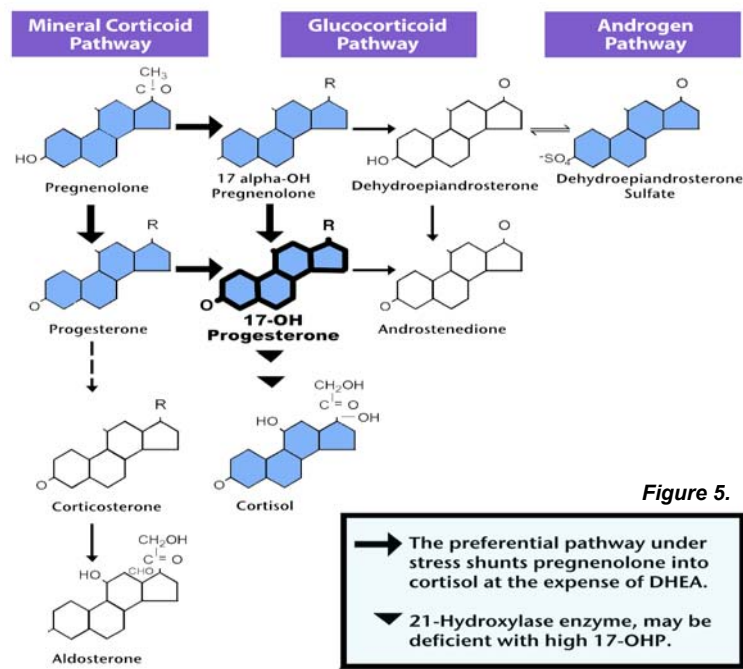
Shaded area is optimal period of post-prandial collection.

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P17-OH
17-OH Progesterone
55
Normal

Adults
Optimal: 22-100 pg/ml
Borderline: 101-130 pg/ml
Elevated: >130 pg/ml

Figure 5. Adrenal Steroid Synthesis Pathway



MB2S
Total Salivary SIgA
15
Depressed

A depressed mucosal SIgA may be attributed to one or more of the following reasons:

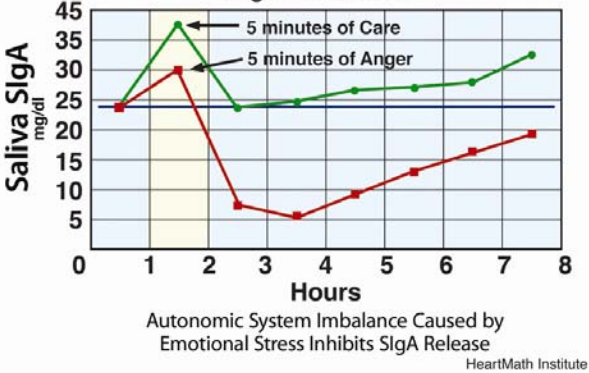
- 1- Excessive chronic cortisol output causes reduction in SIgA production due to low counts of SIgA immunocytes. Appropriate restorative treatments have been shown to produce incremental improvements in SIgA.
- 2- A short imbalance in sympathetic to parasympathetic activity rapidly inhibits SIgA release from the mucosal immunocytes for several hours.
- 3- Chronic deficits in cortisol and/or DHEA levels.
- 4- Possible systemic deficit in capacity to produce IgA - an inherited problem. Rule out possibility with a serum IgA test. A normal finding rules out this possibility.

Normal: 25-60 mg/dl
Borderline: 20-25 mg/dl

Basic Facts About SIgA

1. Secretory IgA (SIgA) is secreted by the various mucosal surfaces. It is mostly a dimeric molecule. Less than 2% of Saliva is of serum origin. The secretory component of SIgA stabilizes it against enzymatic and bacterial degradation.
2. The main functions of SIgA include Immune Exclusion, Viral and Toxin Neutralization, Plasmid Elimination, and Inhibition of Bacterial Colonization. SIgA immune complexes are not inflammatory to the mucosal surfaces.

Figure 6. Effect of Emotion on SIgA Release
Anger versus Care



Test	Description	Result	Ref Values
FI4	Gliadin Ab, SIgA (Saliva) 2	Negative	Borderline: 13-15 U/ml Positive: >15 U/ml <u>Notes on Gliadin Ab Test</u> Gliadins are polypeptides found in wheat, rye, oat, barley, and other grain glutens, and are toxic to the intestinal mucosa in susceptible individuals. Healthy adults and children may have a positive antigliadin test because of subclinical gliadin intolerance. Some of their symptoms include mild enteritis, occasional loose stools, fat intolerance, marginal vitamin and mineral status, fatigue, or accelerated osteoporosis. Scan. J. Gastroenterol. 29:248(1994).

Example of restoration Plan

All Examples of Restoration Plans are for Illustrative/Educational Purpose Only. Actual report data should be used within clinical context.

To reduce high cortisol, consider using ACTH-dampening Phosphorylated serine supplements, take one or two capsules between or 15 to 20 minutes before meals within 1 to 2 hours of elevated cortisol time(s).

To improve SIgA levels consider two aspects:

- 1) Reduction in suppression when applicable:
 - a. Optimize cortisol/DHEA balance
 - b. Balance sympathetic/parasympathetic activity
 - c. Rule out inherited IgA production deficit
 - 2) Production Enhancement may include:
 - a. Exercise program
 - b. Vitamin E complex e.g. wheat germ oil
 - c. Botanical adaptogen supplementation
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COURTESY INTERPRETATION of test and technical support are available upon request, to Physicians Only