

# Diagnos-Techs, Inc.

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Accession #

DR. RITA MARIE LLC

A

Received : /2013  
Reported : /

Results For:  
Age/DOB:60 /

Sex:Female

Dx Code:PhenRtsTiled

Specimen Collected:

| Test | Description | Result | Ref Values |
|------|-------------|--------|------------|
|------|-------------|--------|------------|

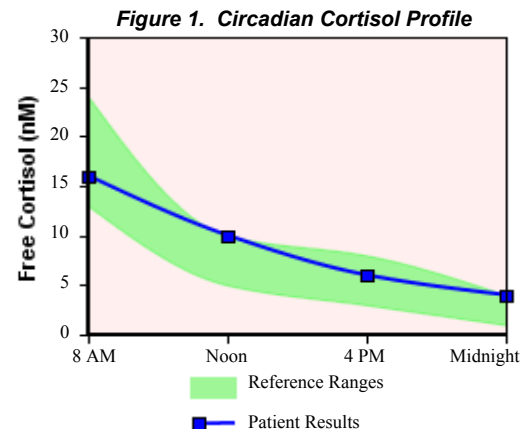
## ASI Adrenal Stress Index (Original) - Saliva

### TAF Free Cortisol Rhythm - Saliva

|                  |    |        |          |
|------------------|----|--------|----------|
| 06:00 - 08:00 AM | 16 | Normal | 13-24 nM |
| 11:00 - 1:00 PM  | 10 | Normal | 5-10 nM  |
| 04:00 - 05:00 PM | 6  | Normal | 3-8 nM   |
| 10:00 - Midnight | 4  | Normal | 1-4 nM   |

**Cortisol Load:** 36 22 - 46 nM

The cortisol load reflects the area under the cortisol curve. This is an indicator of overall cortisol exposure, where high values favor a catabolic state, and low values are sign of adrenal deterioration.



### Figure 2.

The Cortisol release inducers fall into 4 broad categories shown in the adjacent flowchart. Long term adrenal axis maintenance and restoration, require optimization of all the cortisol inducers.

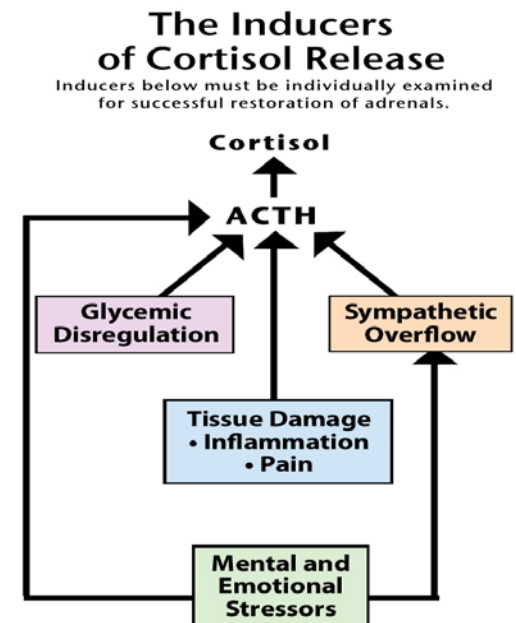


Figure 2.

| Accession:<br>Test | Description | Result | Ref Values |
|--------------------|-------------|--------|------------|
|--------------------|-------------|--------|------------|

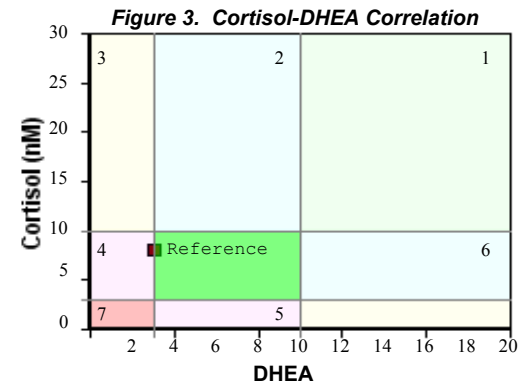
|             |                                    |                        |  |
|-------------|------------------------------------|------------------------|--|
| <b>DHEA</b> | <b>Dehydroepiandrosterone Free</b> | <b>[DHEA + DHEA-S]</b> |  |
|             | Pooled Value                       | 3                      | Borderline<br>Adults (M/F): 3-10 ng/ml |

**Figure 3 shows your cortisol-DHEA correlation was in:**



#### **Zone 4 - Maladapted phase II**

This zone represents a marginal cortisol output with reduced DHEA levels reflecting a limited adrenal response. The utilization of the precursor pregnenolone is usually limited and the adrenal cortex may show hypertrophic changes. Under stress most patients in maladaptation phase II will have a suboptimal response to stress. This suboptimal response is any response not consistent with a normal diurnal cortisol production pattern. This condition is usually the outcome of chronic and protracted stress exposure.



#### **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.

|            |                         |    |          |                      |
|------------|-------------------------|----|----------|----------------------|
| <b>ISN</b> | <b>Insulin - Saliva</b> |    |          |                      |
|            | Fasting                 | 4  | Normal   | Normal: 3-12 uIU/mL  |
|            | Non-Fasting             | 33 | Elevated | Optimal: 5-20 uIU/mL |

Non Fasting insulin elevation comes from high carbohydrate intake, or hyperinsulinic state usually associated with chronic stress and increased cortisol production.

#### **Why Test for Insulin?**

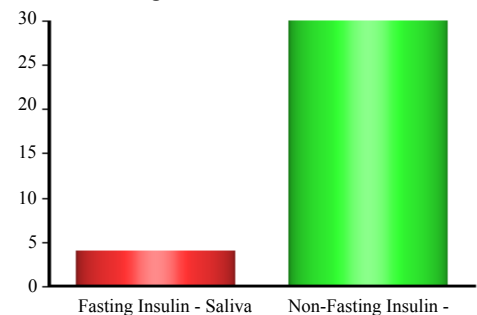
Insulin activity is affected by the stress and cortisol responses. Chronic stress with cortisol elevation antagonizes insulin, and may cause functional insulin resistance. Furthermore, chronic hypercortisol causes hyperinsulin responses to carbohydrate intake. Chronic insulin resistance and overproduction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

Basic facts about insulin values.

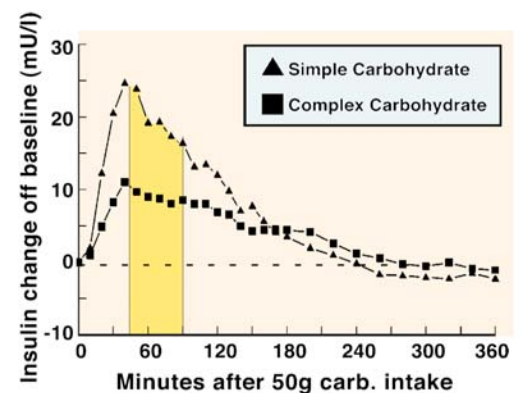
Fasting: This insulin value is elevated in cases of insulin resistance.

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**



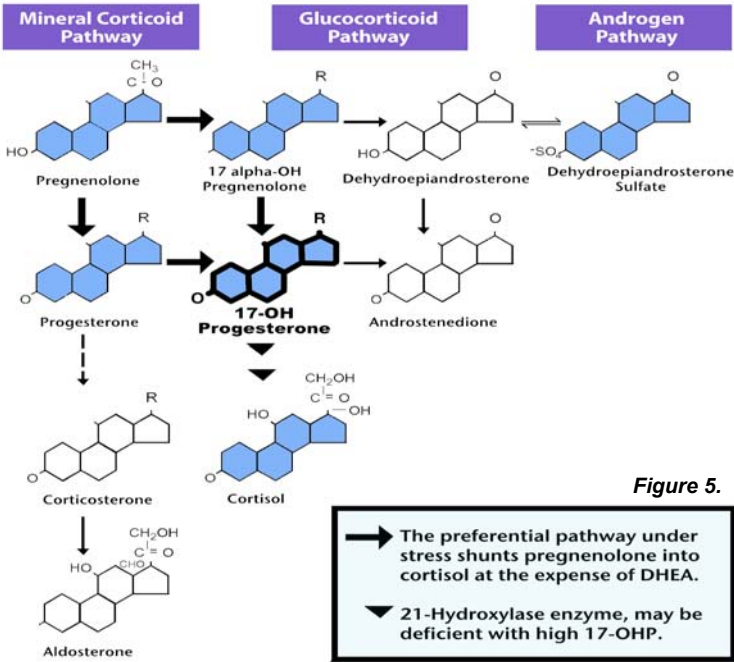
Shaded area is optimal period of post-prandial collection.

| Test | Description | Result | Ref Values |
|------|-------------|--------|------------|
|------|-------------|--------|------------|

P17-OH 17-OH Progesterone 17 Depressed

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 9 Depressed

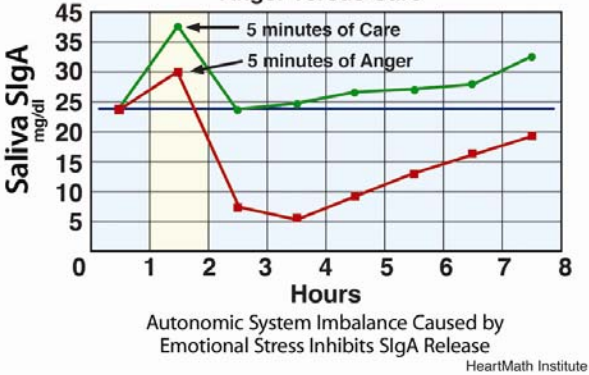
Normal: 25-60 mg/dl  
Borderline: 20-25 mg/dl  
**Basic Facts About SIgA**

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.

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



| Accession: |                             |          | Continue Results For:   |  |
|------------|-----------------------------|----------|---|--|
| Test       | Description                 | Result   | Ref Values  |  |
| FI4        | Gliadin Ab, SIgA (Saliva) 4 | Negative | Borderline: 13-15 U/ml<br>Positive: >15 U/ml<br><b><u>Notes on Gliadin Ab Test</u></b><br>Gliadins are polypeptides found in wheat, rye, oat, barley, and other grain glutes, and are toxic to the intestinal mucosa in susceptible individuals.<br>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.<br>Scan. J. Gastroenterol. 29:248(1994). |  |

COURTESY INTERPRETATION of test and technical support are available upon request, to Physicians Only