

# TEST REPORT

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# 2018 07 10 300 B

Ordering Provider:  
Jane Getuwell, MD

Samples Received  
07/17/2018

Report Date  
07/19/2018

Samples Collected  
Blood Spot - 07/13/18 07:30

Patient Name: CardioMetabolic Profile  
Patient Phone Number: 555 555 5555

<b>Gender</b> Female	<b>Last Menses</b> Unspecified	<b>Height</b> 5 ft 5 in	<b>Waist</b> 50 in
<b>DOB</b> 10/3/1957 (60 yrs)	<b>Menses Status</b> Postmenopausal	<b>Weight</b> 265 lb	<b>BMI</b> 44.1

TEST NAME	RESULTS   07/13/18	RANGE
<b>Blood Spot CardioMetabolic Markers</b>		
Insulin	11.6	1-15 µIU/mL (optimal 2-6)
hsCRP	0.6	<3 mg/L
Hemoglobin A1c	8.8 H	<6%
Triglycerides	561 H	<150 mg/dL
Cholesterol	256 H	<200 mg/dL
HDL	32 L	40 mg/dL or higher
LDL Cholesterol	112	<130 mg/dL (optimal <100)
VLDL	112 H	<30 mg/dL

<dL = Less than the detectable limit of the lab. N/A = Not applicable; 1 or more values used in this calculation is less than the detectable limit. H = High. L = Low.

## Therapies

None

**Disclaimer:** Symptom Categories below show percent of symptoms self-reported by the patient compared to total available symptoms for each category. For detailed information on category breakdowns, go to [www.zrtlab.com/patient-symptoms](http://www.zrtlab.com/patient-symptoms).

SYMPTOM CATEGORIES	RESULTS   07/13/18
Estrogen / Progesterone Deficiency	33%
Estrogen Dominance / Progesterone Deficiency	11%
Low Androgens (DHEA/Testosterone)	25%
High Androgens (DHEA/Testosterone)	53%
Low Cortisol	45%
High Cortisol	28%
Hypometabolism	22%
Metabolic Syndrome	53%

SYMPTOM CHECKLIST	MILD	MODERATE	SEVERE
Aches and Pains			
Acne			
Allergies			
Anxious			
Bleeding Changes			
Blood Pressure High			
Blood Pressure Low			
Blood Sugar Low			
Body Temperature Cold			
Bone Loss			
Breast Cancer			
Breasts - Fibrocystic			
Breasts - Tender			
Chemical Sensitivity			
Cholesterol High			
Constipation			
Depressed			
Fatigue - Evening			
Fatigue - Morning			
Fibromyalgia			
Foggy Thinking			
Goiter			
Hair - Dry or Brittle			
Hair - Increased Facial or Body			
Hair - Scalp Loss			
Headaches			
Hearing Loss			
Heart Palpitations			
Hoarseness			
Hot Flashes			
Incontinence			
Infertility			
Irritable			
Libido Decreased			
Memory Lapse			
Mood Swings			
Muscle Size Decreased			
Nails Breaking or Brittle			
Nervous			
Night Sweats			
Numbness - Feet or Hands			

SYMPTOM CHECKLIST	MILD	MODERATE	SEVERE
Pulse Rate Slow			
Rapid Aging			
Rapid Heartbeat			
Skin Thinning			
Sleep Disturbed			
Stamina Decreased			
Stress			
Sugar Cravings			
Sweating Decreased			
Swelling or Puffy Eyes/Face			
Tearful			
Triglycerides Elevated			
Urinary Urge Increased			
Uterine Fibroids			
Vaginal Dryness			
Water Retention			
Weight Gain - Hips			
Weight Gain - Waist			

### Lab Comments

Fasting insulin is within normal range, but higher than the optimal range of 1-8, suggesting an evolving insulin resistance. Insulin resistance predisposes to significantly increased lifetime risk for developing more serious health conditions such as metabolic syndrome (high blood pressure, excessive weight gain in the waist, elevated blood lipids), diabetes, and cardiovascular disease. Stress reduction, exercise, proper diet (reducing consumption of excessive carbohydrates), and balancing hormones within normal physiological ranges are important for prevention of insulin resistance/metabolic syndrome and long term risks to health.

High Sensitivity C-Reactive Protein (hs-CRP) is within normal range (< 3 mg/L). Elevated hs-CRP is a marker of inflammation and contributor to pro-inflammatory and pro-thrombotic elements of cardiovascular disease risk.

HbA1c is elevated. HbA1c is a measure of red blood cell hemoglobin glycation. Because red blood cells have about a 120 day life span, a high HbA1c reflects mean hyperglycemia (elevated glucose) for the previous 3 months. In people without diabetes, a normal HbA1c value is somewhere between 3.5% and 5.5%. The American Diabetic Association recommends that HbA1c is normal if it is between 4% and 6%. People with diabetes have higher HbA1c values because their bodies have difficulty managing their blood sugar levels (hyperglycemia). A healthy goal for most people with diabetes is to keep HbA1c under 7% (or the goal set for you by your doctor). With persistently high levels of HbA1c, there is increased risk of developing problems such as eye disease, kidney disease, nerve damage, heart disease, and stroke. The recommendation is to measure HbA1c every 3-6 months, and treat to a target level of < 7%. If these recommendations are successfully followed in most people with diabetes, long-term complications, especially microvascular complications, can be significantly reduced.

Triglycerides are very elevated (> 400 ng/dL). Triglycerides are a type of fat in the bloodstream that is taken up by tissues and used as a primary energy source. Triglycerides are derived from fats consumed in food and synthesized in the body from carbohydrates (sugars). Triglycerides are stored by tissues and released into the bloodstream in response to hormonal signals. Elevated triglycerides (hypertriglyceridemia) above 200 mg/dL are associated with increased risk for heart disease and stroke. Hypertriglyceridemia above 150 mg/dL signals insulin resistance/metabolic syndrome and is often found in untreated type 2 diabetes. Calorie restriction, lowering simple carbohydrates in the diet, and exercise are natural ways to lower triglycerides and reduce risk for cardiovascular disease and diabetes.

Cholesterol is within a range (>240 mg/dL) considered by most health experts as high risk for cardiovascular disease. Cholesterol should be evaluated in parallel with other lipid risk factors, which include triglycerides, LDL and HDL cholesterol. High levels of triglycerides and LDL cholesterol further increase risk, whereas high HDL cholesterol decreases risk. The current NCEP-ATP III recommendations for LDL cholesterol are <100 optimal, 100-129 near optimal, and 130 and above becomes the high range. The ADA and American College of Cardiology Foundation's consensus statement recommended a cutoff of 100 mg/dL for LDL in patients at high risk who have 2 or more additional risk factors for CVD. For additional information see <http://en.wikipedia.org/wiki/Cholesterol>

HDL cholesterol is low, which many health experts consider a higher risk for cardiovascular disease. However, HDL should be evaluated in parallel with other lipid risk factors, including total cholesterol, LDL cholesterol, and triglycerides.