

SOUTHEASTERN ENDOCRINE & DIABETES

LAB TEST DEFINITIONS/ INDEX

The following test(s) have been ordered for you:

- ❑ **Cortisol:** steroid made in adrenal gland; helps body cope with stress of illness, injury, surgery and maintains normal blood pressure, blood sugar and energy.
Too Much: causes weight gain, insulin resistance, facial hair, diabetes, Cushing's Syndrome
Too Little: causes profound fatigue; Addison's Disease.
- ❑ **Carnitine:** protein fuel source for muscles; used to generate energy
Too Little: fatigue
Too Much: no known effect
- ❑ **Prolactin:** hormone secreted by pituitary gland.
Too Much: causes milk from breasts, loss of strength, decreased libido, stoppage of periods. May mean a small area in the pituitary causing this.
- ❑ **TSH:** thyroid stimulating hormone; from pituitary telling thyroid to make more/less thyroid hormone.
Normal range: 0.4-5.5
High: hypothyroidism (too little thyroid hormone)
Low: hyperthyroidism (too much thyroid hormone)
- ❑ **T4:** thyroid hormone as it comes out of thyroid gland; in liver/other tissues, converted to T3, active portion of the hormone.
- ❑ **Antibodies:** protein substances made when immune system attacks a part of the body.
GAD and islet cell antibodies: found in Type 1 diabetes; help to distinguish between T1 and T2.
TPO + TG: found in Hashimoto's thyroiditis which usually leads to hypothyroidism
TSH receptor antibodies: found in Grave's disease, a type of hyperthyroidism
Intrinsic factor antibodies: means one cannot absorb Vitamin B-12 by mouth; must take injection, under the tongue or by nasal spray.
- ❑ **Estradiol:** same as estrogen; considered a female hormone, but found in men
- ❑ **FSH:** follicle stimulating hormone; stimulates maturation and release of an egg from the ovary. Normal range: depends on phase of menstrual cycle. Above 23 is considered to be menopause level.
- ❑ **LH:** luteinizing hormone; helps maintain pregnancy until placenta takes over.
- ❑ **FSH/LH Ratio:** usually 1/1. ½ in polycystic ovary syndrome.
- ❑ **Insulin:** made by pancreas to regulate glucose and fat storage.
Too Much: hypoglycemia, insulin resistance, hunger, suppresses ovulation
Too Little: diabetes
- ❑ **Insulin Resistance:** body resists the effects of insulin; considered a precursor to diabetes. May also lead to: gestational diabetes, polycystic ovary syndrome, Syndrome X, heart disease, high blood pressure, stroke, nerve damage.

SOUTHEASTERN ENDOCRINE & DIABETES

- ❑ **Polycystic Ovary Syndrome (PCOS):** characterized by weight gain, especially around the middle, irregular or no periods, excess facial hair, loss of hair on crown of head, infertility.
- ❑ **Vitamin B-12:** vitamin that contributes to energy level and healthy nervous system as well as adequate numbers of red blood cells.
Too Little: fatigue, nerve damage (neuropathy).
- ❑ **Glucose:** same as blood sugar (BS, BG)
Too Much: Greater or Equal to 126 without any food = diabetes or 200 or higher optimal.
Too Little: under 60 = hypoglycemia
- ❑ **Hemoglobin A1c:** blood test used to calculate average blood sugar for past 2-3 months. <7.0 or average sugar.
- ❑ **Urine microalbumin:** microscopic bits of protein found in urine when diabetes has begun to damage the kidney's filtering system. Very early sign of damage. Can be stopped with good blood sugar control and a blood pressure medicine called an ACE inhibitor.
- ❑ **Lipids**
Cholesterol: a type of fat found primarily in animal sources of food: meats, dairy products, eggs, tropical oils
HDL cholesterol: the "good" portion of total cholesterol. This number should be above 40.
LDL cholesterol: the "bad" portion of total cholesterol. In persons with diabetes, this number should be below 100. Unless they have known Vascular Disease then <70.
Triglycerides: another type of blood fat, usually linked to the amount of carbohydrate in the diet. Very high levels (1000 or above) can lead to pancreatitis, an inflammation of the pancreas.
- ❑ **BCP:** biochemical profile; measures chemical called electrolytes, kidney & liver function.
- ❑ **CBC:** complete blood count; looks for evidence of infection, anemia and enough platelets to allow for clotting.
- ❑ **Testosterone:** considered the male hormone, but also found in women
Too Much in Women: causes hair loss, facial hair, no ovulation
Too Little in Men: causes fatigue, loss of muscle, loss of energy & libido
- ❑ **Other:** _____

