



# SALIVA TEST REPORT

**Patient Name**

Jane Doe

**Patient ID**

JD930304

Non-smoker

**BMI** Unspecified **Waist** Unspecified**DOB**

3/4/1993 (24 yrs)

**Report Date and Time**

11/10/2020 15:00

**Medications**

None.

**Gender**

F

**Received Date and Time**

11/2/2020 15:00

**Menopausal Status**

Premenopausal

**Specimen Collection Date and Time**

Saliva Morning 10/26/2020 08:16

**Provider ID:** 0000 Doctor T

17387 63rd Ave

Lake Oswego OR 97035

**Ph:** xxx-xxx-xxxx

## YOUR TEST RESULTS

Normal Range

Low or High Range

Your Levels

**Estradiol (pg/mL)****Progesterone (pg/mL)****Pg/E2 Ratio****Testosterone (pg/mL)**

# What do your hormone results mean?

## **ESTRADIOL**

Estradiol acts mainly as a growth hormone for the reproductive structures in females. In addition, estradiol works in conjunction with progesterone during the menstrual cycle and pregnancy. Low estrogen levels can cause low libido or diminished sex drive and too much estrogens can cause symptoms of estrogen dominance. In males, estradiol is involved in sperm maturation and also helps to maintain a healthy libido.

Estradiol has a significant role in maintaining healthy bone growth and improving blood flow in coronary arteries in addition to offering neuroprotective effects. Estrogens have been known to contribute to risk of breast cancer as well as some non-cancerous conditions like endometriosis and uterine fibroids.

## **PROGESTERONE**

Progesterone in females is known to be involved in maintaining normal menstrual cycles and early stages of pregnancy. Low levels of progesterone can cause abnormal cycles or conception problems. Low progesterone levels could also result in higher estrogen levels, which has been known to decrease sex drive and cause weight gain. High progesterone levels have been known to be responsible for symptoms like mood swings, bloating, breast tenderness.

In men, progesterone acts as a precursor to testosterone. As men age, the testosterone levels decrease, the estradiol increases, and progesterone levels decline. Low progesterone levels in men can cause problems like weight gain, low sex drive, hair loss, depression or erectile dysfunction.

## **RATIO OF PROGESTERONE/ESTRADIOL**

The ideal ratio of progesterone/estradiol ranges from 100-500 in premenopausal women, and 150-1000 in pre and postmenopausal women supplementing with oral or topical progesterone (excludes postmenopausal women with low estrogen levels and women on synthetic hormones (oral contraceptives or conventional hormone replacement therapy-HRT)).

## **TESTOSTERONE**

Testosterone has important role in maintaining bone strength, muscle mass and energy level. In women, testosterone contributes to sex drive or libido. Menopause causes significant decline in the testosterone levels. In men, testosterone is responsible for growth and development of sexual characteristics, facial and body hair, increased sexual drive and sperm production.

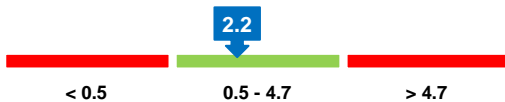
Low testosterone levels can result in conditions like hair loss, reduced muscle mass, hot flashes, depression and increased breast size. High testosterone levels have been linked with aggressive behavior, acne, low sperm count, liver disease and heart muscle damage.

# BLOOD TEST REPORT

<b>Patient Name</b> Jane Doe	<b>Patient ID</b> JD930304	<b>Non-smoker</b> <b>BMI</b> Unspecified <b>Waist</b> Unspecified
<b>DOB</b> 3/4/1993 (24 yrs)	<b>Report Date and Time</b> 11/10/2020 15:00	<b>Medications</b> None.
<b>Gender</b> F	<b>Received Date and Time</b> 11/2/2020 15:00	
<b>Systolic blood pressure</b> Unspecified	<b>Specimen Collection Date and Time</b> Blood Spot 10/30/2020 6:49:00 AM	
<b>Menopausal Status</b> Premenopausal	<b>Hours of Fasting</b> 10:50	<b>Provider ID:</b> 0000 Doctor T 17387 63rd Ave Lake Oswego OR 97035 <b>Ph:</b> xxx-xxx-xxxx
	<b>Family History of</b> Heart Disease No Diabetes No Cancer No	

## YOUR TEST RESULTS

### TSH (uIU/mL)



Normal Range

Borderline High

Low or High Range

Your Levels

### HbA1c (%)



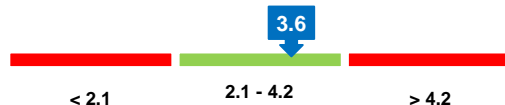
### hs-CRP (mg/L)



### FSH (mIU/mL)



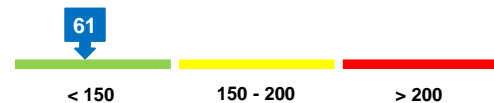
### fT3 (pg/mL)



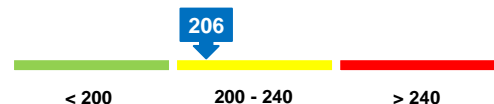
### fT4 (ng/dL)



### Triglycerides (mg/dL)



### Cholesterol (mg/dL)



# What do your test results mean?

## **THYROID-STIMULATING HORMONE (TSH)**

In primary hypothyroidism, thyroid-stimulating hormone (TSH) levels are elevated. In primary hyperthyroidism, TSH levels are low. The ability to quantitate circulating levels of TSH is important in evaluating thyroid function. It is especially useful in the differential diagnosis of primary (thyroid) from secondary (pituitary) and tertiary (hypothalamus) hypothyroidism. In primary hypothyroidism, TSH levels are significantly elevated, while in secondary and tertiary hypothyroidism, TSH levels are low or normal.

Elevated or low TSH in the context of normal free thyroxine is often referred to as subclinical hypo- or hyperthyroidism, respectively.

## **FT3 (TRIIODOTHYRONINE)**

Normally triiodothyronine (T3) circulates tightly bound to thyroxine-binding globulin and albumin. Only 0.3% of the total T3 is unbound (free); the free fraction is the active form. In hyperthyroidism, both thyroxine (tetraiodothyronine; thyroxine: T4) and T3 levels (total and free) are usually elevated, but in a small subset of hyperthyroid patients (T3 toxicosis) only T3 is elevated.

## **FT4 (THYROXINE)**

Free thyroxine (fT4) comprises a small fraction of total thyroxine. The fT4 is available to the tissues and is, therefore, the metabolically active fraction. Elevations in fT4 cause hyperthyroidism, while decreases cause hypothyroidism.

## **TRIGLYCERIDES**

Increased plasma triglyceride levels are indicative of a metabolic abnormality and, along with elevated cholesterol, are considered a risk factor for atherosclerotic disease. In the presence of other coronary heart disease risk factors, both borderline-high (150-200 mg/dL) and high values (>200 mg/dL) require attention. Triglyceride concentrations >1,000 mg/dL can lead to abdominal pain and may be life-threatening due to chylomicron-induced pancreatitis.

## **TOTAL CHOLESTEROL**

Measure of the total amount of cholesterol in your blood, including low-density lipoprotein (LDL) cholesterol and high density lipoprotein (HDL) cholesterol.

## **HEMOGLOBIN A1C (HBA1C)**

This is a form of hemoglobin (a blood pigment that carries oxygen) that is bound to glucose. HbA1c levels are reflective of blood glucose levels over the past three months and do not reflect daily ups and downs of blood glucose. High HbA1c levels indicate poorer control of diabetes than levels in the normal range. The normal range for HbA1c is less than 5.7%. Value between 5.7% and 6.4% signals prediabetes. For known diabetics, a value <7% indicates that their diabetes is well controlled.

HbA1c targets should be individualized based on duration of diabetes, age, comorbidities, and other considerations.

## **HS-C-REACTIVE PROTEIN (HS-CRP)**

Blood measurements of hs-CRP are often performed to assess the risk of future heart disease. C-reactive protein (CRP) is produced by the liver and elevated CRP levels can be measured in blood in response to inflammation. High-sensitivity CRP (hs-CRP) is more precise than standard CRP while measuring baseline (i.e., normal) concentrations and enables a measure of chronic inflammation. Atherosclerosis is an inflammatory disease and hs-CRP is known as a biomarker of atherosclerotic cardiovascular disease risk.

## **Follicle Stimulating Hormone (FSH):**

FSH helps the reproductive system both in men and women. In women, it is responsible for growth of ovarian follicles, which produce estrogens and progesterone to maintain a normal menstrual cycle. In men, FSH is involved in development of gonads and sperm production.

In women, high FSH levels may indicate a loss of ovarian function, menopause, polycystic ovarian syndrome (PCOS) or chromosomal abnormality such as Turner's syndrome. An increase in FSH may also indicate decline in fertility. Low FSH levels may indicate a woman not producing eggs.

This report is only for information purpose and does not provide any diagnosis or treatment. There may be many other risk factors that must be considered for a complete assessment of your health. Please consult your healthcare provider to discuss your results and any questions you may have about your wellness. This test was developed and its performance characteristics determined by AYUMETRIX. It has not been cleared or approved by the FDA. The laboratory is regulated under CLIA as qualified to perform high-complexity testing.

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