

# **HORMONE LEVELS IN MEN – PATIENT INFORMATION SHEET**

Understanding your hormone levels can provide important insight into your health and well-being. Below is a breakdown of key hormones and what it may mean when levels are too low or too high.

# 1. Testosterone (Total Testosterone)

#### What it is:

Testosterone is the primary male sex hormone. It plays a critical role in muscle mass, energy levels, libido (sex drive), bone density, and mood regulation.

#### Normal Range:

300-1,000 ng/dL varies by lab

#### Symptoms of LOW Levels:

- - Low sex drive
- - Fatigue or low energy
- - Loss of muscle mass
- Increased body fat
- · Mood changes, depression
- - Difficulty concentrating
- - Erectile dysfunction

### Symptoms of HIGH Levels:

- - Aggressive behavior
- - Acne or oily skin
- · Increased body hair
- Risk of blood clots or liver issues (especially with testosterone therapy)

# 2. Sex Hormone Binding Globulin (SHBG)

#### What it is:

SHBG is a protein made by the liver that binds to sex hormones (including testosterone and estrogen), controlling how much is available for your body to use.

#### Normal Range:

16.5-55.9 nmol/L (can vary)

Symptoms of LOW Levels:

- - May lead to higher free testosterone
- - Associated with insulin resistance, obesity, or hypothyroidism
- - May increase risk for symptoms of high testosterone

### Symptoms of HIGH Levels:

- - Less free (usable) testosterone
- - Symptoms may mimic low testosterone

#### 3. Calculated Free Testosterone

#### What it is:

This is the amount of testosterone not bound to SHBG or albumin—meaning it's bioavailable and active in your body.

#### Normal Range:

47-244 Pg/dL (depending on age and lab)

# Symptoms of LOW Levels:

- Same as low total testosterone (but can occur even if total testosterone appears normal)
- - Especially important in diagnosing symptoms when SHBG is abnormal

### Symptoms of HIGH Levels:

- - Aggressiveness
- - Excess body hair
- - Acne
- - Enlarged prostate or other androgen-related symptoms

# 4. Estradiol (E2)

#### What it is:

Estradiol is a form of estrogen, present in men in small but important amounts. It helps with bone health, mood, libido, and regulating testosterone effects.

### Normal Range:

<60.7 PG/mL

# Symptoms of LOW Levels:

- Decreased libido
- Poor bone density
- - Joint discomfort
- Mood swings

### Symptoms of HIGH Levels:

- - Water retention
- - Gynecomastia (breast tissue development)
- - Irritability
- - Weight gain, especially in abdomen and hips
- - Lower testosterone symptoms due to hormonal imbalance

# **Why It Matters**

An imbalance in any of these hormones may impact your energy, strength, sexual health, and overall quality of life. That's why it's important to evaluate all hormone levels together, not just total testosterone alone.

**Questions?** Contact us for free phone consultation.

# **Clinic Contact Information**

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