MEN'S HEALTH · HORMONE OPTIMIZATION

Men's Hormone Guide

A clear look at testosterone and the hormones it becomes, what optimal actually looks like, and how to know where yours stand.

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PRECISION · OPTIMAL RANGES · ROOT CAUSE

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Where to begin

You pay attention to your body. You train, you read, you track what you can, and you want the inputs that move the needle most.

Your sex hormones are among the most powerful of those inputs, and among the least measured. Most men are handed a single testosterone number, told it is normal, and sent on their way.

Normal is a wide range built around disease. Optimal is a narrower target built around how a body actually performs. The two are not the same, and the gap between them is where most of the opportunity sits.

This is a clear briefing on testosterone and the two hormones it becomes, what optimal looks like, and how it can be measured precisely enough to act on.

Testosterone, working as a system

Testosterone is the central male hormone, but it rarely works alone. Much of what it does, it does by converting into two other active hormones, dihydrotestosterone and estradiol. Reading testosterone without reading those two leaves part of the picture blank.

Testosterone is the parent. It supports sex drive and sexual function, mood, motivation and drive, muscle and strength, bone, and the making of red blood cells. When it runs low, the effect reads as a broad flattening, not only a change in the bedroom.

The two hormones it becomes

Testosterone becomes DHT. An enzyme called 5-alpha-reductase converts testosterone into dihydrotestosterone, a more potent androgen in the skin, hair follicles, and prostate. DHT carries out much of testosterone's work in those tissues.

Testosterone becomes estradiol. An enzyme called aromatase converts a portion of testosterone into estradiol. Estradiol is often thought of as a female hormone, but men need it too. It supports bone strength, libido, mood, and the health of the brain and blood vessels. Too little is as much a problem as too much.

Why the balance matters

The balance among the three, not the level of any one alone, is what holds the system steady. Low testosterone flattens everything downstream. Too much conversion toward estradiol, or toward DHT, brings its own pattern of effects. A clear read looks at the parent and both of its products together.

How much actually reaches you

Not all of your testosterone is available to work. A large share travels bound to a carrier protein called SHBG, which holds it inactive. What reaches your cells is the free fraction. Two men with the same total can have very different amounts actually working, which is why a single total number can

mislead. Some of your testosterone is also built from precursors like DHEA, part of why the picture is worth measuring rather than guessing.

The signal from above

Your testosterone production is driven by signals from the pituitary gland, called LH and FSH. When a level runs low, those signals help show whether the shortfall starts in the testicles or in the signal above them. That is a measurable difference, and it changes the plan.

> **A point on form.** The synthetic anabolic steroids used outside medical care do not behave like the testosterone your body makes. Many cannot convert and balance the way natural testosterone does, and they carry a different and heavier set of risks. The molecule and the source matter, not just the label.

What optimal looks like

A healthy young man produces testosterone in a steady daily rhythm, highest in the morning. That production level is a useful anchor for what an optimized adult range looks like, distinct from the wide reference band a lab calls normal.

HORMONE	HEALTHY YOUNG-ADULT PRODUCTION
Testosterone	About 7 milligrams a day in a healthy young man, roughly twenty to thirty times what a woman makes, and highest in the morning.
Dihydrotestosterone	A smaller amount, converted from testosterone in the skin, hair follicles, and prostate, where it acts as the more potent androgen.
Estradiol	A modest amount, converted from testosterone, and necessary for bone, libido, mood, and vascular health in men.

Normal is not the same as optimal

Optimal is not the highest number you can reach. It is where a healthy system runs and where symptoms resolve, read against you as an individual rather than against a population average. For men, testosterone therapy is a medical treatment for a measured, symptomatic deficiency, not a lifestyle supplement. When it is used, the aim is to restore a healthy range and hold it there, not to exceed it. Higher is not better, and overshooting creates its own problems.

Reading your hormonal signature

Because each hormone does a different job, a shortfall or an imbalance in one produces a different signature than another. These clusters are not a diagnosis. They are a way to read what your body may be signaling, and to know what is worth measuring.

A testosterone shortfall

Testosterone is the level most worth measuring directly. When it runs low, the signal is broad:

- Low sex drive and reduced sexual function
- Flat mood, low motivation, less drive and assertiveness
- Fatigue and low stamina, endurance that fades
- Muscle that is harder to build or hold, and reduced strength
- More body fat, especially around the middle
- Sleep that is less restful, and a lower sense of vitality

Too much conversion to estradiol

When too much testosterone converts to estradiol, the balance tips and the signal can read as:

- Tender or swollen breast tissue
- Fluid retention and a puffy quality
- Mood that feels off, with lower drive

Too much conversion to DHT

When conversion toward DHT runs high, the signal tends toward:

- Faster thinning of scalp hair
- More body hair
- Oilier skin

Recognizing more than one of these at once is common, because the hormones interact. Which one is actually driving your physiology is a measurable question, and the answer is what makes a precise plan possible.

The inputs you control

Hormone levels are not fixed. Several inputs move them, and for an optimizer these are the levers worth understanding before reaching for anything else.

Training load. Intense, prolonged physical demand can draw testosterone down. The dose and the recovery matter, and the right amount is individual.

Stress and nervous-system load. Sustained stress suppresses the pituitary signals that tell the body to make testosterone. Managing it is a direct hormonal input, not a soft one.

Body composition. Excess body fat raises the conversion of testosterone to estradiol, which tips the balance. It is one of the most movable inputs, and often the first one worth addressing.

Sleep. Much of your testosterone is made during sleep. Short or broken sleep lowers it, night after night.

Nutrition and alcohol. What you eat and drink shapes how much testosterone you make and how fast you clear it. Heavy alcohol works against you. The specifics are individual and best set against your own data rather than a generic rule.

Why levels shift over time

Testosterone declines gradually with age. The fall is on the order of about one percent a year from your thirties onward, and the protein that binds testosterone tends to rise at the same time, so the amount actually reaching your cells can fall faster than the total alone suggests.

None of this is failure. It is a predictable trajectory, and a measurable one. Knowing where you are on it, early and precisely, is what turns it from something that happens to you into something you can plan around.

What can be measured, and how deep

Testosterone and the hormones around it can be measured directly and tracked over time. This is the part most care skips, and it is where precision lives.

Testosterone takes more than one number. Total testosterone shows production. Free testosterone, and its ratio to SHBG, shows how much actually reaches your cells. Reading them together is what separates a real picture from a single misleading value.

DHT and estradiol show how you handle what you make. Because testosterone converts into both, reading them shows whether the balance is holding or tipping in one direction.

DHEA shows the raw material. It is one of the precursors your body builds testosterone from, so it rounds out the picture.

LH and FSH locate the cause. These pituitary signals help show whether a low level is coming from the testicles or from the signal above them, which points the plan in the right direction.

Safety markers are read from the start. A thorough workup also tracks the markers that therapy itself can move, your red blood cell count and your prostate markers among them, so that anything that needs watching is caught early rather than late.

Timing matters. Testosterone is best drawn in the early morning, when it runs highest, and confirmed on more than one occasion. A single draw, taken at the wrong time, can read low when it is not. A thorough workup gets this right, and a routine one often misses it.

Read against optimal physiology rather than a disease-based reference range, and tracked over time rather than caught in a single draw, these markers move from a vague normal to an accurate read of how your system is actually running.

How optimization actually works

If testing shows a gap worth closing, the goal is simple to state. Bring what is low back toward a healthy range, using the form closest to what your body makes, and confirm it with follow-up.

It takes time, and that is normal. Finding the right plan is not one prescription. It is a cycle of measure, adjust, and measure again. Expect the first few months to be about dialing in, with the clearest results building over six months to a year. Hormones move slowly, and a careful plan respects that.

A word on the worry about the heart

Many men have heard that testosterone is hard on the heart. That worry traces to warnings raised in the 2010s. A large trial reported in 2023 looked again at the question in men with diagnosed low testosterone, and found no increase in major cardiac events over the course of the study. Regulators have since revised the older warning.

This is reassurance for properly selected men, not a free pass. Testosterone can raise the red blood cell count and the blood pressure in some men. That is exactly why a careful plan measures these from the start and watches them over time, rather than assuming.

None of this settles your individual case. It is the reason to measure deeply and decide on your own data, in a real conversation with a physician, rather than on a headline.

The principles behind a plan

A few principles shape every plan, whatever the specifics turn out to be.

Anchored to a real deficiency. Testosterone therapy is a medical treatment for a measured, symptomatic deficiency, not a lifestyle add-on. The starting point is a confirmed picture, drawn more than once, not a single number or a hunch.

Bioidentical, by preference. The default is testosterone identical in structure to what your body already makes, not the synthetic anabolic steroids used outside medical care.

Restored toward a healthy range, not beyond it. The aim is to bring a low level back to where a healthy system runs, then hold it there. Higher is not better, and overshooting brings its own problems.

Balanced, not just raised. Because testosterone becomes DHT and estradiol, a good plan watches the balance among the three, not the testosterone number alone. Estradiol in particular is something men need, not something to drive to the floor.

Route and rhythm matter. How a hormone enters the body changes how it acts, and the right approach is individual. The specifics are set in a consult, not in a guide.

Fertility is part of the conversation. Testosterone taken from outside the body lowers the body's own production and can reduce fertility, sometimes for a while after stopping. For a man who may want children, that changes the plan, and there are ways to work around it. It is a conversation to have before starting, not after.

Application and monitoring are real work. Where and how a hormone is applied changes how much reaches you, and on-treatment monitoring keeps the plan safe over time. Both are coachable, and both matter.

Testosterone therapy has real contraindications and individual risks, and it is not right for everyone. The right plan depends on your history, your goals, and your labs. That is the work of a clinical relationship, which is why this guide describes the principles rather than prescribing a regimen.

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My focus is reading your biology against what optimal looks like, not just what is average, and giving you the time and the data to make an informed decision about your own health.

The next step

If you want to know where your testosterone actually stands, the work starts with measuring deeply and reading the results against what optimal looks like for you.

A free Precision Call is where we scope that. You bring your goals and your questions. I bring the testing, the interpretation, and the time to walk you through what the data means so you can decide your direction with full information.

Book a free Precision Call **Website**

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This guide is general education, not a diagnosis or a promise of outcomes. Your biology is individual, and it deserves to be measured and interpreted as such.