JUSTIN HOUMAN MD
MEN'S HEALTH
TOWER UROLOGY

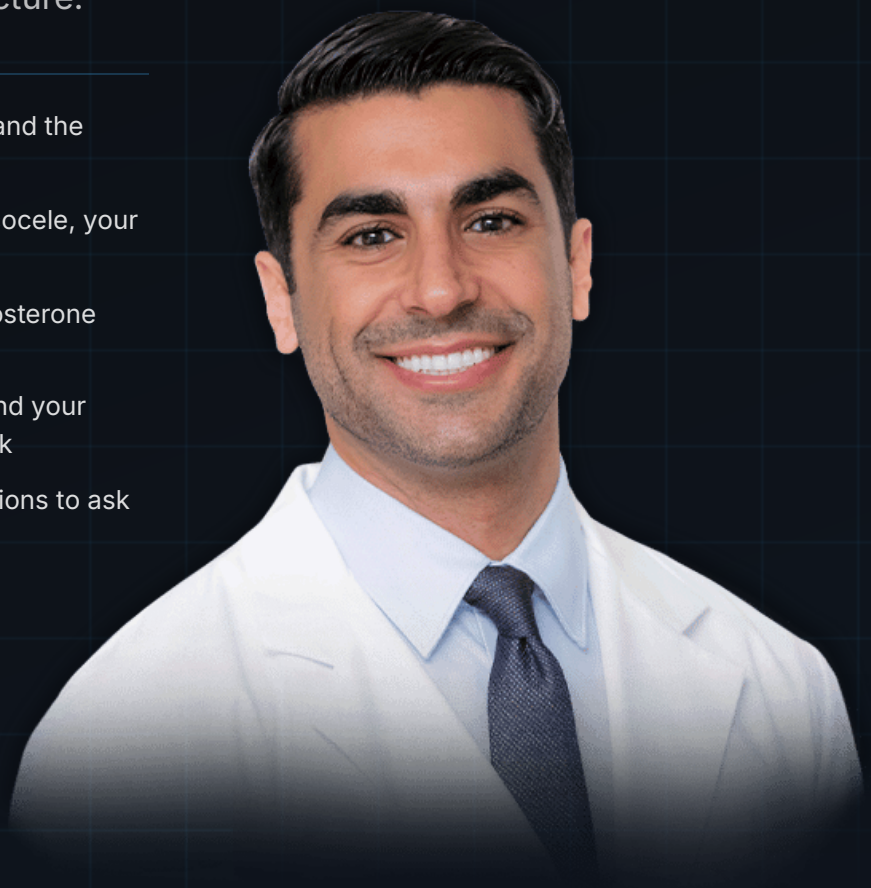
FREE GUIDE

LOW TESTOSTERONE AND TRT

Low testosterone is more than one number.

Somebody may be feeling great at 350, but another person needs to be at 550 or 600 in order to feel good. The number is just a part of the picture.

- How to get tested: before 10 a.m., twice, and the numbers to ask for
- What to rule out first: sleep apnea, a varicocele, your lifestyle
- The medications that raise your own testosterone without shutting down fertility
- What TRT does to your own production and your sperm count, and how fertility comes back
- Is TRT safe, what I monitor, and the questions to ask before you start



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01 START HERE

Is low normal testosterone actually normal?

Patients ask me this all the time. The testosterone range that we look at is anywhere from 300 to 1,000. If you fall into any of those numbers, you could consider yourself in the normal range. But different men require different levels of testosterone.

Somebody may be feeling great at 350, but another person needs to be at 550 or 600 in order to feel good. For me, I may need to be in the 500, 600 range, whereas an NFL player is going to be in the 700 to 800 range.

So if you're in the 300s or the low 400s and you're experiencing symptoms of low testosterone, you want to consider treating, just because of the fact that you're in the low normal range. More importantly, you want to treat the symptoms.

> THE SHORT VERSION
> **The number is just a part of the picture. You want to treat the number partially, but more importantly, you want to treat the symptoms.**

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02 WHY IT'S SO COMMON

Testosterone starts to decline at 30.

Our testosterone levels start to decline starting at the age of 30. We say one to two percent every year. On top of that, a 40-year-old today has testosterone levels about 30% lower than his father did when he was 40. In simple terms, it comes down to our lifestyle: more processed foods, more obesity, more stress, more blue light, more plastics, more microplastics.

Some guys have all the symptoms. Some guys have one.

- **Energy.** Low energy, not exercising the way you used to.
- **Sexual function.** Poor erections, or your sex drive is just not there.
- **Mood.** Anxiety, and more so depression. That could be a real warning sign.
- **Sleep.** A lot of sleep disruptions.
- **Your body.** Lean muscle mass and performance in the gym.
- **Your labs.** Low testosterone predisposes you to higher cholesterol and higher blood sugar.

If you're feeling that way, your mood's off, you're cranky, depressed, anxious, at the very least it's worth checking your testosterone levels to see if that can be the cause. Because if it is, there are many things we can do to correct it.

03 HOW TO GET TESTED

Test in the morning, and test it twice.

It's a simple blood test. But you never want to react just based on one reading.

1. **Before 10 a.m.**
   Your peak testosterone levels are in the morning, and as the day progresses they go down. Check it before 10 a.m. to get a good baseline of where you're at.

2. **Twice, a week or two apart.**
   Testosterone levels fluctuate with stress, poor sleep, less exercise, even the season. So you want two data points, at least seven days apart, ideally two weeks apart.

3. **Free testosterone, not just total.**
   Free testosterone is really the key number, because that's how much you're actually using. Many times a guy comes in with a normal total testosterone, but when you look at his free testosterone, it's low.

4. **SHBG.**
   Testosterone is bound to a protein called sex hormone binding globulin. The more of it you have, the lower your free testosterone. Obesity, liver disease and metabolic disorders raise it.

ONE LOW RESULT?

A single low result should be confirmed with a repeat test. If your levels come back low, repeat that test in a couple of weeks. We could always confirm it again with a second blood test.

What to ask for

When guys come to me, we do a whole blood panel and a physical exam. Save this list:

- [ ] Morning draw, before 10 a.m.
- [ ] A second draw, one to two weeks later
- [ ] Total and free testosterone
- [ ] SHBG
- [ ] LH and FSH, the pituitary hormones
- [ ] Estradiol, at least a 10 to 1 ratio
- [ ] TSH, the thyroid hormone
- [ ] Vitamin D
- [ ] A physical exam, including for a varicocele

WATCH ME EXPLAIN IT

Free vs total testosterone: what most men miss

Scan with your phone camera, or **tap here** to watch on YouTube.

04 RULE THIS OUT FIRST

Check your sleep first.

A lot of times patients will think that their chronic tiredness, waking up tired in the morning, has to do with low T. When in reality, it's their sleep apnea.

If the person sleeping next to you tells you they hear you choking, they hear you snoring, they hear you gasping for air numerous times throughout the week, you want to check to see if you have a sleep apnea issue.

SLEEP APNEA AND TESTOSTERONE

There are times where a guy who has sleep apnea also has low T. By addressing the sleep apnea and improving his sleep, we're able to improve his testosterone levels.

If we give testosterone replacement therapy to a guy who has sleep apnea, there are some situations where it makes the sleep apnea worse. So if you're told you're gasping for air, or you feel like you're choking at night, you want to address that before you address your low T symptoms.

Sleep matters even without apnea. There have been numerous studies comparing guys who get two hours less sleep with guys who get two hours more. Their testosterone levels are 150 to 200 points lower. Try to get at least seven hours.

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05 RULE THIS OUT FIRST

Ask whether you have a varicocele.

A varicocele is a cluster of veins above the testicle that drain blood from the testicle back to the body. If blood pools there, the testicle runs warmer, and that can affect its ability to produce healthy testosterone levels. Studies show that men with varicoceles tend to have lower testosterone levels.

A varicocelectomy can repair those varicoceles and raise testosterone levels on average. It doesn't work for everyone, and it won't turn low T levels into super high T levels, but it does improve testosterone levels. Fixing that varicocele could keep you from having to take a medication for the rest of your life, or even get on TRT.

> **Even if you're having low T, no one's going to really check you for a varicocele unless you go to certain doctors. It's a physical exam, and you've got to know what you're doing.**

06 RAISING IT ON YOUR OWN

Four reasons guys have low testosterone.

When a young guy has low testosterone, the first thing I look at is his lifestyle. I always try to break it down into four reasons.

1. **Diet.**
   Eat a complete, well-balanced diet of healthy fats, lean proteins and complex carbohydrates. Try to eat as much unprocessed food as possible.
2. **Sleep.**
   Sleep is a huge one. Try to get at least seven hours.
3. **Exercise.**
   You always want to do a combination of heavy weight lifting with cardio.
4. **Stress.**
   The same precursor hormone that goes to testosterone is also going towards cortisol, which is a stress hormone. Minimize your stress as much as possible. It's the hardest one.

> **If you could change those four things, that's probably the easiest way of raising your testosterone, or at least the longest lasting way of doing it. If you don't, then we could talk about medications.**

07 THREE MORE THAT LOWER IT

WEIGHT
Excess weight
Excess weight invariably lowers your testosterone levels. If you're overweight, the best thing to do is lose weight. If you could do it naturally, wonderful. If you need the help of a GLP-1, that's great.

ALCOHOL
Binge drinking
I'm talking four or five drinks in a given night, on a regular basis. That can severely lower your testosterone levels, as well as your sperm counts.

TRAINING
Too much cardio
There's a sweet spot. Marathon runners, those guys who do hardcore long-term cardio, they have low T levels. That chronic stress really decreases their testosterone, and that hurts their libido.

I try to keep it simple: what's good for your heart is good for your testicles.

08 RAISING YOUR OWN TESTOSTERONE

Medications that tell your testicles to make more.

If you want kids, there's a whole different way of treating low testosterone: medications that tell your testicles to produce more, good for testosterone and good for sperm count.

A PILL

Clomid (clomiphene)

It stimulates your brain to release the hormones that tell your testicles to make more. Easier to get, and a little bit cheaper.

A PILL

Enclomiphene

A different isomer of Clomid, and a newer compounded medication. It does the same thing: tells your testicles to produce more.

AN INJECTION

hCG

An injection every other day. Probably the best, but more expensive. We add it for guys who aren't responding to Clomid.

We use them off-label for men. For a young guy who's still interested in fertility and is in the 300 or 400 range, Clomid or enclomiphene is a wonderful option. These are all very, very safe.

The Clomid Challenge

For guys who want the gains in the gym, I'll put them on clomiphene or enclomiphene for three to nine months, a pill every other day, while they do those four things: eating right, sleeping, exercising, reducing their stress. If they keep doing them, they'll be able to maintain healthy testosterone levels off the medication.

09 ONE PATIENT'S STORY

Told his testosterone was normal at 311.

A 42-year-old guy, married with three kids, came in with low libido, sexual dysfunction and low energy. He was very moody with his wife and his kids, and even when he exercised, he couldn't feel the effects or lose the weight. A number of doctors had told him his testosterone was within the normal range: 311, where the normal range is 300 to 1,000.

Due to his wife's urging, he came in to see me. We checked again: 307. Given his age and his symptoms, we boosted his testosterone with medications telling his testicles to produce more. After three months, his energy is back, he's exercising daily, and the most important thing, his mood at home, has improved.

> **When it comes to managing testosterone, it's not about treating the number. It's about treating the symptoms.**

One patient's experience. Results vary from patient to patient.

10 TESTOSTERONE REPLACEMENT THERAPY

TRT: the options.

For the older guy who's past the age of fertility and is interested in testosterone replacement therapy, it's a great option. It really is a good option for many men who are suffering from low testosterone. We always want to do it in a safe fashion.

Form	How it's given	What I tell patients
Injections	Testosterone cypionate or enanthate, injected.	I try to tell most of my patients to do twice a week injections. It's much better twice a week. Smaller, more frequent doses keep levels steadier.
Gels and creams	Rubbed on the skin every day.	Easy to use. Let it dry and keep the skin covered, so it doesn't rub off on a partner or children.
Pellets	Long-acting pellets placed in the fat under the skin.	A quick in-office procedure, with no daily dosing.
Oral capsules	A pill, Kyzatrex for example.	The spike is about four hours after you take it, so that's when we check your level. Take it an hour, maybe two, before you have a drink.

We dose based on your physical size. If a guy is 160 pounds, his testosterone demands are going to be slightly lower than a guy who's 250 pounds. The key thing is that you're doing it at normal testosterone levels. You're not trying to shoot into bodybuilder type levels. And for guys on TRT whose testicles are shrinking, we can add hCG to help preserve their testicular size.

11 WHAT TRT DOES TO YOUR OWN PRODUCTION

HOW THE TESTICLES RESPOND

Your testicles do two things: they produce sperm, and they produce testosterone. Anytime you give the body testosterone from the outside world, whether it's creams, injections or pellets, the testicles get the signal that there's plenty of testosterone. **So they shut down. They stop producing testosterone, but more importantly, they stop producing sperm.**

If you want kids, now or later, that's the part to know before you start. The next page covers what happens to fertility, and how it comes back.

12 TRT AND FERTILITY

What TRT does to your sperm count.

If you're thinking about being on testosterone replacement therapy as a young man, just realize that it comes with some form of fertility consequences.

If you check a semen analysis on a guy who's been on TRT for four to six weeks, his sperm counts are going to be very, very low, if not essentially zero.

I can't tell you how many times in a given week a guy comes to me trying to have a kid, and I ask, are you on testosterone? He's been on it for five years, and no one ever told him his sperm counts go to zero. A lot of clinics provide TRT to young men without telling them the consequences.

DOES IT COME BACK?

It's a temporary shutdown in most cases. When I say temporary, anywhere from four to eight months, with some variation. It takes time, but it does come back.

13 COMING OFF TRT

How we get your sperm production back.

STEP 1
Taper the testosterone
We decrease the testosterone injections gradually.

STEP 2
Ramp up your own
At the same time, hCG, Clomid or enclomiphene tell the testicles to produce more.

STEP 3
Give it time
About three to six months. Sometimes three, sometimes seven or eight.

We have one published study on this that says almost 98% of men are able to produce sperm again. No one really feels as good on this regimen as on TRT, so those months can be rough.

ALREADY ON TRT AND PLANNING AHEAD?

Some guys stay on Clomid while they're on testosterone. It gives the testicles some activity, so when they come off, the time until they can produce sperm again is a lot shorter. What would typically be about six months, maybe we could get down to two to three months.

WATCH ME EXPLAIN IT

Enclomiphene vs TRT: raising testosterone, preserving fertility

Scan, or **tap here** to watch on YouTube.

14 SAFETY

Is TRT safe?

Testosterone replacement therapy is very safe. We have tons of data supporting how safe it is.

Newer studies looking at the effects of TRT on heart health show that testosterone replacement therapy doesn't raise the risk of heart attacks or stroke when compared to placebo. It did show a little bit more of something called atrial fibrillation, so it's still a medical decision that you have to have with your provider.

There are a lot of misconceptions about testosterone causing prostate cancer and causing strokes. It doesn't cause prostate cancer. It may unearth it, which is one reason we keep an eye on your PSA.

BEFORE YOU START

It does compromise fertility.

Something to be mindful of if you want kids, now or later. See the previous pages.

BEFORE YOU START

It can worsen sleep apnea.

In some situations TRT makes sleep apnea worse. Address the apnea first.

15 MONITORING

What I keep an eye on.

- [ ] **Your testosterone level.** You always want to measure blood levels, and make sure people aren't doing too much testosterone.
- [ ] **Estradiol.** We want it staying at a nice ratio to your testosterone.
- [ ] **PSA.** A marker for prostate cancer. We want to make sure we're trending it.
- [ ] **Red blood cell count.** In less common cases, testosterone raises your red blood cell count. If it's unmonitored, your blood can become very, very thick, and in incredibly rare cases you get heart attacks or strokes. So you do want to make sure you're doing blood work.

HOW OFTEN

At the start of treatment, I see patients back every two to three months, just to make sure we're on a good path. Once they've found a nice, stable regimen, we check blood work every six months, twice a year.

16 MYTHS

Three things guys ask me about testosterone.

EJACULATION

Does it lower your testosterone?

No. There's a spike around the time of ejaculation, then it quickly goes back to your baseline. No long-term benefit or downside either way. No Nut November is based on a study that was retracted.

VASECTOMY

Does it lower your testosterone?

No. A vasectomy has zero impact on your testosterone levels, your sexual function, your erections, any of that. And there's zero evidence of a vasectomy causing prostate cancer.

ALCOHOL

Can you drink on TRT?

Yes. Gels, injections and pellets don't really get impacted by alcohol. The oral testosterone pills can be: take them an hour, maybe two hours, before you have a drink.

17 BEFORE YOU START

Questions worth asking before you commit.

1. **Was my testosterone checked before 10 a.m., and confirmed with a second test?**
   You never want to react just based on one reading.
2. **Was my free testosterone checked?**
   It's really the key number, because that's how much you're actually using.
3. **Could my sleep, a varicocele or my lifestyle be causing this?**
   Fixing those could keep you from having to take a medication for the rest of your life.
4. **Do I want kids, now or later?**
   If so, there's a whole different way of treating low testosterone that keeps your sperm production going.
5. **What will you monitor, and how often?**
   Testosterone, estradiol, PSA, red blood cell count. Every two to three months at first, then every six.

Testosterone prescriptions have nearly tripled over the last couple of decades, and a lot of the time it's not being done necessarily well. Men aren't being checked with blood tests early on, and they're not being monitored. I custom tailor everything. Whether a guy is 20, 30 or 80, not every guy gets the same treatment plan, and not everyone gets testosterone replacement therapy.

ABOUT WHO WROTE THIS

I'm Dr. Justin Houman.

I'm a board-certified men's health urologist and assistant professor of urology at Cedars-Sinai Medical Center in Los Angeles. I practice at Tower Urology.

When I was in residency, very few urologists specialized in men's health. Men's health is really three buckets: sexual health, fertility health and hormonal health. These are the things that bring men to the doctor for the first time. Men won't tell you when they have high blood pressure, but they'll tell you when they can't get an erection.

A typical urology visit is no more than ten minutes. Patients are meant to be pushed through, not dug into to figure out what is actually going on. My practice is different. I like to figure out what the cause is, so it has better long-term outcomes. Being at Tower Urology at Cedars-Sinai, I have the background of an academic medical center, but with my own practice inside it I'm not on a corporate clock.

TRAINING

Fellowship-trained microsurgeon

Board-certified urologist with fellowship training in male reproductive medicine and microsurgery.

VOLUME

1,000+ varicocelectomies, 800+ implants

Microsurgery for fertility, pain and sexual health is a big part of my practice.

RECOGNITION

Super Doctors® Rising Stars℠

Selected for inclusion in 2027 Southern California Super Doctors® Rising Stars℠, Urology.

DESIGNATIONS

Centers of Excellence

Endo Xiaflex Center of Excellence (Peyronie's) and Boston Scientific AMS 700 Center of Excellence (penile implants).

VISITS IN PERSON OR BY VIDEO

You don't have to live in Los Angeles.

Telehealth is how a lot of my patients actually start. The first visit for a lot of patients, especially patients who are outside of Los Angeles, is a video call from home. We go through your symptoms, your history, and any labs or imaging you've had. Sometimes patients send those in beforehand. A lot of patients come to me for second opinions on results from other urologists, and we figure out what's missing, what hasn't been done. Many times an exam needs to be done in person before figuring out the next steps.

YOUR NEXT STEP

Early screening is smart.

If your mood's off, your energy's off, at the very least it's worth checking your testosterone levels to see if that can be the cause. Because if it is, there are many things we can do to correct it. We custom tailor everything towards your goals, your expectations and your current lifestyle.

REQUEST A VISIT

Book online

Scan, or tap here.
houmanmd.com/contact

CALL MY OFFICE

310-854-7822

Monday to Friday, 8:30am to 5pm
Tower Urology at Cedars-Sinai

Not in Los Angeles? If distance is what's stopping you from coming to see me, a video visit is a great alternative.

BEFORE YOU BOOK

I see patients Wednesday through Friday, and new-patient openings are limited each week.

One practical note so there are no surprises: I'm in-network with Medicare. Other insurance is out-of-network, and my office provides a superbill you can submit to your plan for reimbursement. My team will walk you through costs before you book anything.

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This guide is for education only and is not medical advice. Reading it does not create a doctor-patient relationship. Every patient is different; talk with a qualified physician before making medical decisions.