TESTOSTERONE INJECTIONS COMPLETE GUIDE

https://www.secretsofbodybuilding.org/

The information and images in this document are for entertainment and educational purposes. None of the listed information is to be used as advice for any medical procedure.

By reading, accepting, and continuing to view this information, you acknowledge that this information is to be used for entertainment purposes only and does not represent nor replace the advice of a doctor.

Thank You for downloading our Testosterone Injections Guide.

We have included the most frequently asked questions. However, if you need any assistance, please contact us at sobodybuilding@gmail.com.

https://www.secretsofbodybuilding.org/

How to Inject Testosterone

If you are new to testosterone, this FAQ should answer your injection questions. We will start from the very beginning…….

1cc = 1ml

Gauge: The smaller the gauge, the thicker the needle. An 18g is much thicker than a 22g

Length: Generally 1.5" or 1" for our purposes

What is an intramuscular (IM) injection?

A technique to deliver a medication into muscle tissue for its eventual absorption into the systemic circulation. Steroids, both oil and water-based, are administered this way.

What is a subcutaneous (sub-q) injection?

A technique to deliver a medication into the soft tissue (fat) immediately underlying the skin. Insulin, HCG, and HGH are typically administered this way.

What is aspiration?

To aspirate is to withdraw fluid with a syringe. More specifically, after inserting the needle, pulling back on the plunger of the syringe for a few seconds to see if the needle is in a blood vessel. Rarely this will be the case and a bit of blood will fill the syringe. If this happens the needle should be removed, replaced with a new one, and another injection site should be used. And yes, if there is a little blood in your syringe, it is ok to inject it along with your steroid once you have found a different spot…….it's your own blood isn't it?

When aspirating, nothing should come back into the syringe if you are in the right spot. Pulling back on the plunger will create a vacuum in your syringe. The oil cannot expand to fill that space, but any air bubbles in your syringe will. You may notice the tiny bubbles getting bigger and bigger as you pull back. They will return to normal size as you release the plunger. If the air bubbles do not disappear upon releasing the plunger, you have an air leak most likely caused by the needle not being screwed onto the syringe tightly enough, although on very rare occasions, the syringe or needle itself can be defective. Either way, purge the air bubbles out, put a new needle on and try it again.

Do I really need to aspirate?
Those who inject without aspirating are taking unnecessary chances. Sweating, nausea, dizziness, severe coughing, breathing difficulties, anaphylactic shock, coma or death can all result from not aspirating. Most of the time, steroid users experience dizziness and coughing fits when they inject into a blood vessel. But you need to be aware of the dangers of neglecting this simple technique that should take about 3-5 seconds of your time.

What exactly is an abscess?
Abscesses occur when an area of tissue becomes infected and the body is able to "wall off" the infection and

keep it from spreading. White blood cells migrate through the walls of the blood vessels into the area of the infection and collect within the damaged tissue. During this process, pus forms (an accumulation of fluid, living and dead white blood cells, dead tissue, and bacteria or other foreign invaders or materials).

Abscesses can form in almost every part of the body and may be caused by bacteria, parasites, or foreign materials. Most of the time, it is caused by unsanitary injection techniques. On very rare occasions, it can be caused by foreign particles your gear (a greater chance of this occurs when using/making a homebrew). The abscesses that we are concerned about are usually reddish, raised, and painful.

How do they treat an abscess?
Antibiotics are often given to aid the cure of an abscess but the real cure is generally surgical. A doctor would open the thing up and allow the pus to drain, then the body would take care of the infection. Some have even gone so far as to "drain" their own abscesses by inserting a needle/syringe into the abscessed area and drawing out the accumulated pus, although this is not recommended.

Can I reuse the same needle?
Yes, but only if you are an idiot or cannot obtain anymore needles. There really is no need to explain why you shouldn't re-use a needle. Common sense should kick in here, but the bottom line of re-using needles is an INCREASED CHANCE OF INFECTION. If you have trouble obtaining needles in your area, try finding a different way of getting them. The hassle of finding a source is negligible compared to the hassle of the abscess in your ass that would most-likely require a doctor and a scalpel. There are methods to "sterilize" a needle for re-use, but I will not delve into them. If you are still considering re-using a needle, re-read the above two questions.

Can I inject with the same needle I draw with?
Yes, but it is preferable to switch the needle out with a new one. The needle dulls significantly when pushed into the rubber stopper of your vial or scraped along the bottom of your amp. You may not notice the difference if you inject into your glute, but try injecting into an area that has more nerve endings such as a delt or bicep and you will notice immediately.

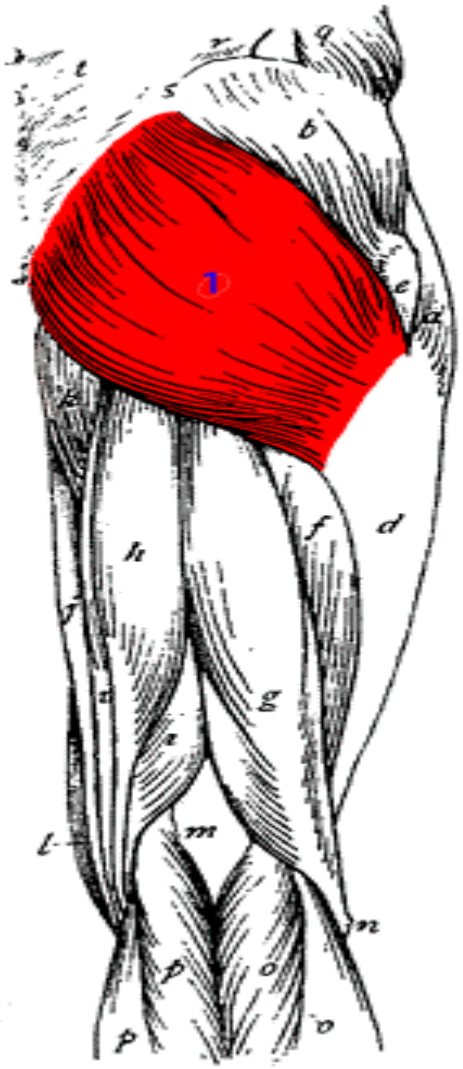
Does it matter if I push the needle in fast or slow?
I would recommend slowly, but this is personal preference. A lot of people will tell you to jab the needle in quickly. These people usually stop that practice after the first time they hit a nerve going in at full speed (usually quad shots). By going in slowly, you'll have more time to react if you hit a nerve.

Where exactly do I inject?
A picture is worth a thousand words.

Here we will include the most common areas. However you can see a full list of injection sites at www.spotinjections.com

GLUTE

This is the most common for TRT users. We always recommend alternating side from left to right each week.



Preinjection

Penetration

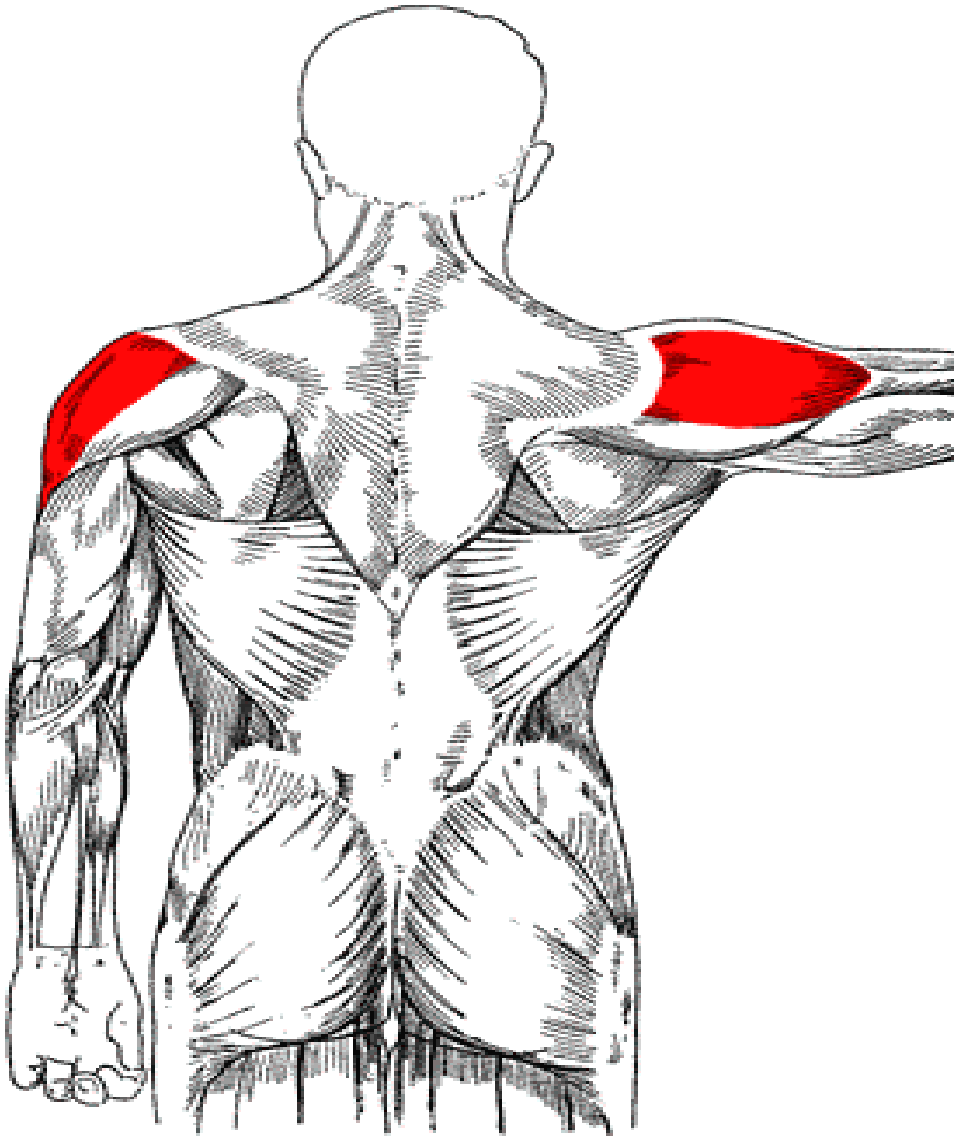
Aspiration

Injection

DELT

This is the 2nd most common for TRT users. We always recommend alternating side from left to right each week.

Muscle Map - Delt



Preinjection

Penetration

Aspiration

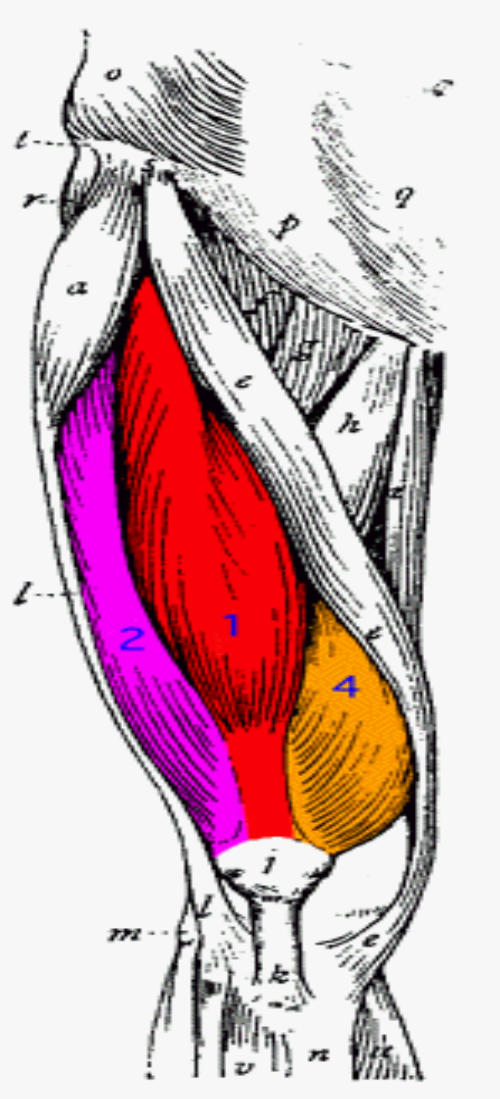
Injection

https://www.secretsofbodybuilding.org/

THIGH

This is the 3nd most common for TRT users. We always recommend alternating side from left to right each week.

Muscle Map - Thigh



https://www.secretsofbodybuilding.org/

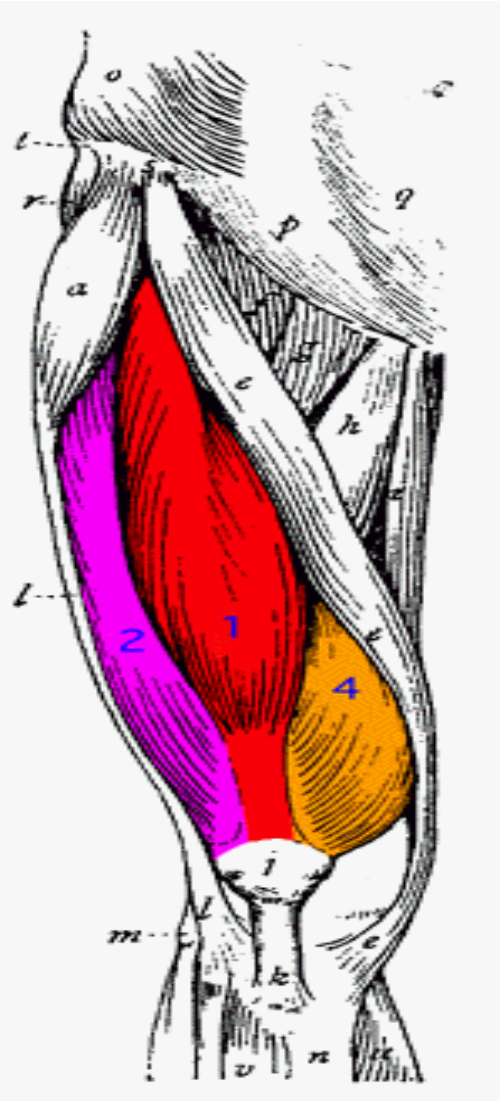
Preinjection

Penetration

Aspiration

Injection

Muscle Map - Thigh



https://www.secretsofbodybuilding.org/

Preinjection

https://www.secretsofbodybuilding.org/

Penetration

https://www.secretsofbodybuilding.org/

Aspiration

https://www.secretsofbodybuilding.org/

Injection

https://www.secretsofbodybuilding.org/

What gauge needles should I use?
For drawing – 20g, 21g

18g needles are too big and they will eat up your stoppers in a hurry. A bigger hole means an increased chance of letting some little nasties into your sterile vial. Sometimes, the 18g will take out little chunks of rubber that fall nicely into your vial. That is not something you want. Imagine injecting that tiny piece of rubber into your muscle. I'll bet the doctor would have lots of fun digging into your muscle trying to find it and mutilating your muscle in the process…..for injecting – 22g, 23g, 25g – for oil-based steroids, 27g, 29g – for insulin, HCG, HGH, and some water-based steroids. 21g-25g for some lower quality types of winny or suspension, higher quality versions can use a smaller needle generally.

22g and 23g are fine for glutes and quads. 25g is preferred for the smaller muscles such as delts, biceps, triceps, etc.

What length needles should I use?
Most people can get by with a 1" needle, but if you have a higher percentage of body fat or are just plain big you should use a 1.5" needle to insure that you get deep into the muscle. You should only use a 1.5" needle for glutes, or if you have huge quads. For smaller muscle groups, 1" is the most common, although some people like to use a 5/8".

How many ccs can I shoot in one place?
It depends on how big you are. A general guideline is 1cc for delts, 2cc for quads, and up to 3ccs for glutes. Some do more, some do less……it all depends. After a cycle or two, you will know what your body can handle. If you are injecting into other muscles such as biceps, triceps, or calves, it's best to start off with a small volume and work your way up.

Can I pre-load my syringes?
If at all possible, leave it in the vial or amp. If you need to pre-load, just keep in mind that the syringe must be stored safely. Nothing sucks more than having the plunger pushed in accidentally and losing some of your gear.

Which is the best brand of needle?
Terumo, B-D, and Monoject are the primary manufacturers of needles/syringes. Both Terumo and B-D have an ultra-thin wall design (the wall of the needle is thinner, so more fluid can pass through the same gauge of needle). From personal experience as well as opinions from many other steroid users, Terumo seems to be the sharpest.

Common "FREAK OUTS"
I can't get all the tiny air bubbles out of my syringe….

As long as you tap it and get most of the air out, you will be fine. A little air intramuscularly won't hurt you. According to the USH2 by Dan Ducaine, it supposedly takes about 10ccs of air injected into a blood vessel to kill you. I wonder how the hell they figured that one out.

- I saw blood in the syringe after I pulled out….

You passed through a blood vessel and a little bit of blood entered the syringe on the way out. No biggie.

- I pulled the needle out and blood dripped/squirted out….

You passed through a blood vessel. Apply a little pressure with your alcohol swab. You'll live.

- I pulled the needle out and oil was dribbling out….

You injected too much in one place or you didn't inject deep enough. No biggie. Try injecting slower or leaving the needle in you for 30 seconds after you have injected it all. This should give the oil some time to dissipate so very little, if any, should dribble out.

- I injected into my quad, and my leg was twitching….

You grazed a nerve. Usually it's a good idea to pull out and try another spot.

- I don't think I injected deep enough….

If you think you injected into a layer of fat, don't worry. It will just take longer for the steroid to dissipate than it would if you had injected into the muscle. Eventually it will be absorbed. Don't let anyone tell you that you wasted it because that is not true.

- I want to mix two different steroids and combine them into one syringe. How do I do this?

Let's say you want 1cc of deca and 1cc of test. First, draw 1cc of air and inject into your vial of deca. Withdraw 1cc of deca and pull the needle out. With the needle pointing up, draw 1cc of air into your syringe (your plunger will be at the 2cc mark – 1cc of deca in it and 1cc of air you just drew into it). With the needle pointing up, inject that 1cc of air into your vial of test. Withdraw 1cc of test. You now have 1cc of deca and 1cc of test in the same syringe. Don't forget to change the needle before you inject.

Instructions for first-timers…..

Step 1
Wash your hands.

Step 2
Wipe the top of the vial of medication for injection with an alcohol swab.

Step 3
Remove the needle guard from the needle and syringe, saving the needle guard. Be sure you are using a proper syringe for intramuscular injections. Pull back on the syringe plunger to draw up an amount of air

equal to the amount of medication that your doctor has prescribed for injection. For example, if you want to inject 2ccs of oil, then pull back 2ccs of air.

Step 4
Holding the vial of medication in an upright position, insert the needle straight through the center of the rubber stopper in the vial. Then push the plunger to discharge all the air into the vial.

Step 5
With the needle in the vial, turn the vial upside down and hold it in one hand. The tip of the needle should be in the solution. Using your free hand, pull the plunger back in a slow, continuous motion until you have drawn into the syringe the amount of medication that your doctor has prescribed.

Step 6
If air bubbles have formed in the syringe, dislodge them by gently tapping the syringe with your free hand while continuing to hold the syringe and vial in the inverted position. Bubbles should rise to the top of the syringe, and then you can push them back into the vial by moving the plunger. Double check to make sure you have the correct amount of medication in the syringe. If necessary, draw more solution into the syringe.

Step 7
Remove the needle from the vial. With the needle pointing upwards, pull back on the plunger until all oil from the needle has been pulled back into the syringe. Unscrew needle from syringe and replace with a brand new, preferably smaller needle. Replace needle guard.

Step 8
Prepare the injection site by cleaning the area with an alcohol swab. To do this start at the center, apply pressure, and cleanse in a circular motion working outward. Do not retrace your steps.

Step 9
Wait a few seconds until the alcohol has dried. This reduces the sting. Remove the needle guard from the needle and syringe. With the needle pointing upwards, tap the syringe to dislodge the air bubbles and push the air out of the needle until you see a tiny drop of oil start to form at the tip. Hold the syringe as you would a pencil.

Step 10
Holding the syringe at a right angle (perpendicular) to the prepared injection site and insert the needle.

Step 11
When the needle is in place, slowly pull back on the plunger to see if any blood flows into the syringe. If some blood does enter the syringe (a rare occurrence), remove the needle, replace the needle with a new one, find another area to inject. Repeat Step 8.

Step 12
If no blood enters the syringe, slowly inject the medication by gently pushing the plunger until the syringe is empty.

Step 13
Remove the needle quickly. Apply pressure to the injection site with your alcohol swab. You're done. Massage the area. . Now go do the most important parts – eat, train, and rest!

Blood in the Syringe When Aspirating

IF THIS HAPPENS FIRST THINGS FIRST

DON'T FREAK OUT!

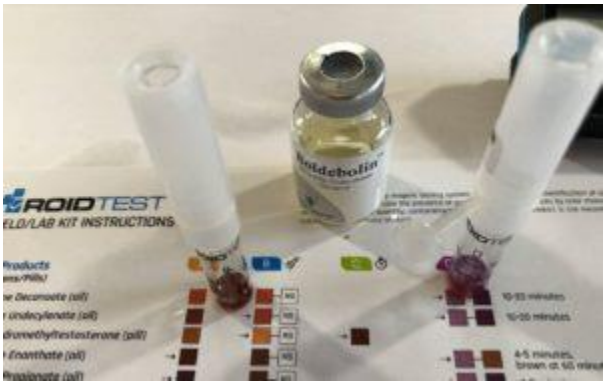
1. **Pull out the syringe.**
2. **Re level off just like you would when you are about to inject.**
3. **Clean a new area.**
4. **Re inject and aspirate.**
5. **Make sure you are getting the bubbles (air) in the syringe tube like you would normally when you aspirate.**
6. **Re inject the solution and your blood.**

It's fine, it's your own blood, no need to worry.

FOR A FULL IN DEPTH VIDEO WITH EXPLANATION PLEASE GO TO

https://www.secretsofbodybuilding.org/2018/01/25/blood-syringe-aspirating/

Why You Should Test Your Oil



I'm like most of you, I didn't test my oil for decades. There also wasn't any decent products for me to do so.

The labs were for the most point on the level (most of it was from American labs), and you could tell what you were on was real. After I started doing blood work I knew for sure it was real.

Now things are different.

The amount of counterfeits out there have skyrocketed, even in the last few years.

You literally have no idea unless you have a long history with a lab that you have anything at all.

Since I have started testing my gear with Roidtest, I have a better understanding of a lab / brand and if I can trust what they are selling.

What I have started doing is picking a few out randomly, and testing those compounds (I'm not testing every single vial)

THE PROBLEM IS MUCH DEEPER THAN THAT UNFORTUNATELY

I'm not saying this to scare anyone, but I know from firsthand experience this is what's going on.

For those of you that don't know the process, it goes like this.

The raw powders that the UGLs (underground labs) order, come from other countries around the world.

To get these items into the respective countries and pass customs they will need to cleverly hide or disguise the products.

So let's take a look

UGL orders from their provider LAB from somewhere in the world.

The LAB sends the raw powder to the UGL.

The UGL takes raw powder and makes the injectable or oral compound.

This is where things get confusing.

To get the powders past customs, these LABS that sell the product to the UGL put the powders in bags with graphics from who knows what on the outside of the bag.

If the UGL orders Test Cyp, it doesn't come in a bag that says 100grams of Test Cyp on it.

It's usually disguised in a way that usually is only known by the LAB, not the UGL.

This is what I mean.

Let's say the LAB sends out a bag of Test Cyp 100grams and tells the UGL that the bag will say in the ingredients line "glutamine" **I'm just using this as an example.**

Now let's say the UGL gets the product and it says **glutamine 99.9%**

It looks right to the UGL, and they make the injectable compound out of the powder.

They test the compound with Roidtest or another Gear testing product **(this almost never happens)** and its positive for Test Prop.

Or even less of a chance happening the UGL sends it to a lab to be tested. (I'm talking about smaller operations)

They (UGL) calls up / or emails the LAB that sent the powder and the lab says, please tell me what's on the label.

The UGL says **"it says glutamine"**

The LAB says what does it say **99.9%** or **99.8%?**

The UGL says it says **99.9%**

The lab then tells them it's not Test Cyp its Test Prop.

99.8% means Test Cyp

99.9% means Test Prop.

They (the LAB) screwed up.

This is one of 100s of examples I could share.

It happens all the time and the UGLs might not even be aware that they are selling Prop to people buying Cyp.

Ok so you may think, what's the big deal I bought test either way?

Well Prop is a different protocol than Cyp, as well as many other examples of the wrong compound being bought by the customer (you) and it's not necessarily the **UGLs** fault. Well it is because they didn't test the compound, but they took the **LABS** word for what they said was coming in.

This is a very real issue. I've seen it time and time again where the **LAB** is at fault but it falls on the **UGL**, then it falls on the **re-seller.**

Most **UGLs** will do batches and send them off to labs to be tested so they can apply to have their compounds be sold in various markets on the internet.

But don't be fooled into thinking they are sending every batch to the lab to be tested.

HERE IS AN EXAMPLE OF WHAT I'M TALKING ABOUT

FOR FULL VIDEO PLEASE VISIT- https://www.secretsofbodybuilding.org/2019/06/18/testing-steroids-bought-online/

Most of the re-sellers on the internet are basically drop shippers.

They aren't going in the back to fill your order then send it to you.

They are placing an order with their provider then they send it to you.

This is where the re-seller and its vendors can become heroes or zeros.

If the UGL is failing it falls on the re-seller because of complaints by the customer.

NOT ALL RE-SELLERS ARE BUYING FROM THE MANUFACTURER.

This is why I've stated I've had the best success and consistency with Dragon Pharma from this source.

I'll test some of those other labs but I like to stick with what's been solid and consistent.

I also will test a few from every order to make sure we are still in line.

Now let's say you buy Dragon Pharma from another re-seller, that may not be the same thing as I'm getting.

Just because you're buying Dragon Pharma from XYZ re-seller that may not be the same.

Trust your re-seller to know who the good and bad providers are.

If a lab is crap, move on.

If the re-seller has something else to offer, it may be a good time to check out another UGL off the site or switch to another re-seller altogether.

Bottom line…TEST YOUR OIL. It will save you time, and in the long run, money.

Testosterone and Understanding Blood Tests

THIS ARTICLE WAS ORIGIONALLY FOR STEROID USERS BUT THE SAME PRICIPALS APPLY WHEN READING YOUR BLOOD PANELS.

When people ask me about starting steroids/cycling, I always tell them to **get blood work done.**

Unfortunately this is met with a lot of resistance, and some people just don't see the value in doing this.

This is what I've learned over the years through trial and error, good individual knowledge, and reading…a ton of reading.

Most people understand that steroids come with risks. This is why it's so important to get a base, or starting point of where you are BEFORE you begin. Then you can find out if you have healthy blood levels, see where they are at your starting point, and see if you have any warning signs BEFORE you begin so you can address them correctly.

Then we have something to compare it to when we do our later comparison. It is far easier to see what the cycle is doing to your body when re testing blood work during the cycle.

The last Blood work will be done post cycle, again to test and monitor health and regeneration of normal blood levels.

******Some people are using Roid test kits, See our new Video Series HERE**

That is a great option to test a Lab (UGL) out of the gate. That being said, I have always gone on feel and blood work. I go on the reputation of a brand, then I monitor my results and my blood work. You will be able to see differentials in your blood results and monitor that instead of trying to test every vial.

https://www.secretsofbodybuilding.org/

What I do think is that some of the vials may be / are "off dose" or incorrectly dosed. Some may be higher, some may be lower. I'm personally not going to test every vial. Once I'm using a brand (lab) for some period of time I'm certainly not going to test everything. I just continue to go off my blood test results and how I'm feeling, my progress etc. If I feel like the brand (lab) is not performing, I switch. It's that simple.*****

WHAT AM I LOOKING FOR IN A BLOOD WORK PANEL?

PRE CYCLE

This is where we start first to make sure there are no preexisting health conditions that will make the matter worse by use of substances. This also gives us a base to compare our on cycle / off cycle results.

*Below Is **THE MINIMUM** Results We Will Want To Check And See Results For:*

- Hormone (Steroid)
- Lipids (Standard Full Set)
- Full Liver Panel
- Blood
- Kidney
- Electrolytes, Minerals, and Glucose
- Prostate

ON CYCLE

This testing is usually conducted **3 to 4 weeks** after the steroid cycle has started.
It will be with these tests that most reflect the changes made by the steroid cycle.
It is important to note any adverse side effects and take into account that if used over time how that will impact overall health.
*Below Is **THE MINIMUM** Results We Will Want To Check And See Results For:*

- Lipids (Standard Full Set)
- Full Liver Panel (if taking hepatotoxic steroids)
- Blood
- Kidney
- Electrolytes, Minerals, and Glucose

POST CYCLE

The Post Cycle Test will determine if your male steroid hormone has returned to pre cycle levels. There will always be some variation on this test and an exact match will be almost impossible. It is also recommended to look at the LH and FSH pituitary in the case of the blood coming back low, it is easier to determine the cause. High LH/FSH and low testosterone (primary hypogonadism) may simply indicate that your testicles have not yet fully restored their mass. Alternatively, low LH/FSH can indicate secondary hypogonadism, which is often cause to initiate corrective therapy with an endocrinologist. Other general indicators of health are also conducted here including lipids, liver, blood, kidney, electrolytes, minerals, glucose, and prostate.
*Below Is **THE MINIMUM** Results We Will Want To Check And See Results For:*

- Hormone (Steroid, LH/FSH)
- Lipids (Standard Full Set)
- Full Liver Panel (if taking hepatotoxic steroids)
- Blood

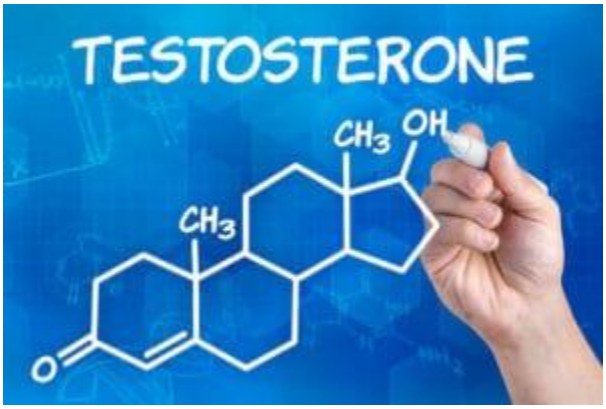
- Electrolytes, Minerals, and Glucose
- Prostate

CREDIT** **– Below is an abbreviated version of William Llewellyns ANABOLICS 9th ed.**

There are many versions of this book available. I highly recommend you picking yourself up a copy. If you are dedicated enough to start using Anabolics, then you should be dedicated enough to read a book about what you are about to do.

Blood Work Categories

Hormone



Steroid (male)

Test Name

Testosterone, Total
Reference Range – 241 – 827 ng/dl

Testosterone, Free
Reference Range – 8.7 – 25.1 pg/ml

Estradiol
Reference Range – 10-53 pg/ml

LH/FSH Panel (male)

Test Name

LH
Reference Range – 2.5 – 9.8 IU/L

FSH
Reference Range – 1.2 – 5.0 IU/L

Steroid (male)

Test Name

Testosterone, Total
Reference Range – 241 – 827 ng/dl

Testosterone, Free
Reference Range – 8.7 – 25.1 pg/ml

Estradiol
Reference Range – 10-53 pg/ml

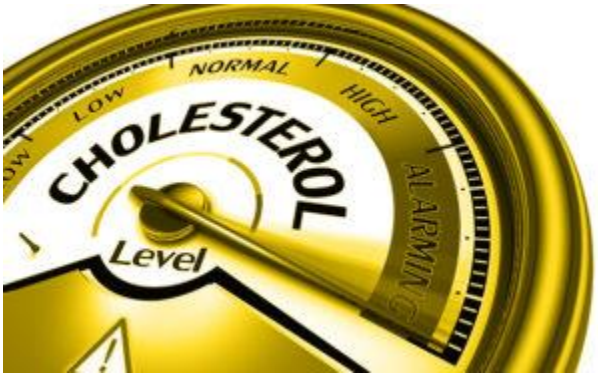
Steroid: This testing will look at both total and free testosterone. The former measurement is used by physicians to identify the androgen level and determine if there is a need for therapy. The latter measure actually represents the fraction of bioavailable (immediately active) testosterone in the body, and is consequently regarded as more important for assessing the present state of androgenicity. Estradiol is the principle active form of estrogen in the body, and has roles both in potential side effects (gynecomastia, water/fat retention) and hormone balance. This is the estrogen marker most often recommended during hormone profiling.

LH/FSH Panel: Luteinizing hormone (LH) and follicle stimulating hormone (FSH) are responsible for stimulating testosterone production and spermatogenesis in the testes. These measures are most relevant when evaluating the cause and potential treatment options for hypogonadism, not the short-term health impact of anabolic-steroid use. The short-term suppression of LH/FSH is expected with anabolic/androgenic steroid administration.

Thyroid: It is regarded as important to get a baseline measure of thyroid activity, usually once per year. Follow up tests during and after steroid use may be an expense some view as unnecessary. Anabolic/androgenic steroid use is unlikely to permanently affect thyroid function, but may slightly elevate thyroid levels during therapy. A misdiagnosis of hyperthyroidism (overactive thyroid) is sometimes made in light of these elevated numbers. The effect of anabolic/androgenic steroid use on thyroid levels should be taken into account before treatment for hyperthyroid is ordered.

Continued on next page…

Lipids (Cardiovascular)



Anabolic/androgenic steroids can have strong adverse effects on lipids. The abuse of anabolic/androgenic steroids (particularly long-term abuse) can, likewise, increase the risk for developing cardiovascular disease as assessed by these variables. Mitigating these risks with the careful examination of the lipid profile is regarded as one of the most fundamental of all steroid-related blood tests. While far from comprehensive with regard to assessing total heart disease risk, a full panel examining the variables below (and comparing them to your baseline values) can provide a good snapshot of the cardiovascular impact of anabolic/androgenic steroid use. It is important to measure your blood lipids only after 12 hours of fasting, as food intake can skew the outcome of some measures (particularly triglycerides).

Standard Full Set

Test Name **Reference Range**

Triglycerides
Reference Range – 0 – 149 mg/dl

Cholesterol, Total
Reference Range – 100 – 199 mg/dl

HDL Cholesterol
Reference Range – >40 mg/dl

VLDL Cholesterol
Reference Range – 5 – 40 mg/dl

LDL Cholesterol
Reference Range – <100 mg/dl

LDL/HDL Ratio
Reference Range – <3.6 mg/dl

Continued on next page…

LDL/HDL Ratio Risk Assessment

1/2 Average Risk
Men 1.0 **Women 1.5**

Average Risk
Men 3.6 **Women 3.2**

2x Average Risk
Men 6.3 **Women 5.0**

3x Average Risk
Men 8.0 **Women 6.1**

Additional Testing

Test Name

C-reactive Protein
Reference Range – <5 mg/dl

Homocysteine (0-30 years)
Reference Range – 4.6 – 8.1 umol/L

Men (30-59)
Reference Range – 6.3 – 11.2 umol/L

Women (30-59)
Reference Range – 4.5 – 7.9 umol/L

>59 years
Reference Range – 5.8 – 11.9 umol/L

Apo Ratio Testing

Apolipoproteins

apoB/apoA-1 Ratio

Reference Range – **Men <.9** **Women <.8**

Apo Ratio Risk Assessment

Low Risk
Men <.7 **Women <.6**

Average Risk
Men .7 – .9 **Women .6 – .8**

High Risk
Men >.9 **Women >.8**

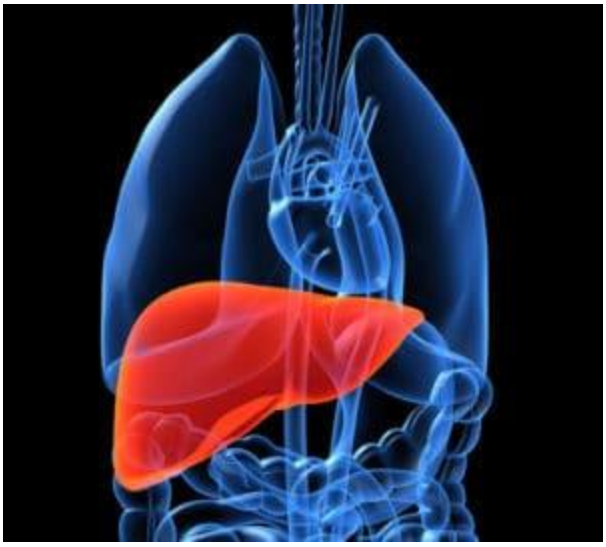
Continued on next page…

Standard Full Set: This is a standard full lipid panel examination. Ideally, all values should be kept within the normal ranges at all times during steroid therapy. Note that the LDL/HDL ratio is regarded as the most important measure of the serum lipid tests, as it reflects the ongoing balance between plaque deposition (LDL) and removal (HDL) in the arteries. The LDL/HDL ratio is used to more closely assess heart disease risk in individuals that have elevated LDL or total cholesterol levels.

Additional Testing: (-reactive protein and homocysteine are two additional markers that are important to examining cardiovascular health. (-reactive protein is a key indicator of inflammation in the body, and homocysteine is involved in blood clotting and LDL cholesterol oxidation. It is also advisable to include these two variables in your cardiovascular testing schedule.

Apo Ratio: Apolipoprotein ratio testing is also recommended. Although not commonly used in general medical practice, apolipoprotein testing is increasingly regarded as a more accurate predictor of cardiovascular disease risk than cholesterol testing. Apolipoprotein B (apoB) is found in all LDL particles, and is responsible for attaching these lipoproteins to the artery walls. Apolipoprotein A-I (apoA-1) is found mainly in HDL particles, and is responsible for initiating beneficial reverse cholesterol transport. ApoA-1 enables the HDL particles to pull cholesterol from the artery walls and transport them back to the liver. The ratio of apoB to apoA-I, therefore, appears to reflect a much truer measure of the balance of potentially atherogenic and antiatherogenic particles in the blood. A ratio above .9 is generally regarded as indicative of increased cardiovascular disease risk. Lower ratios reflect reduced cardiovascular disease risk assessments.

Liver Function



Test Name

Albumin
Reference Range – 3. 5 – 5.5 g/dL

Globulin
Reference Range – 1.5 – 4.5 g/dL

Total Protein
Reference Range – 6.0 – 8.5 g/dL

Bilirubin
Reference Range – 0.1 – 1.2 mg/dL

GGT (Gamma GT)

Reference Range – 50 IU/L

ALP (Alkaline Phosphatase)
Reference Range – 25 – 100 IU/L

AST (SGOT)
Reference Range – 0 – 40 IU/L

ALT (SGPT)
Reference Range – 0 – 55 IU/L

A full liver panel is important to assessing hepatic strain. The two markers of liver stress most commonly elevated in abusers of anabolic/androgenic steroids are the enzymes alanine aminotransferase (ALT) and aspartate aminotransferase (AST). ALT and AST are necessary to amino acid metabolism in the liver, and will leak into the bloodstream as the liver becomes inflamed or damaged.

These two enzymes are generally regarded as important indicators of early steroid-induced liver toxicity. There have been cases in which substantial liver damage has occurred without substantial elevations in ALT and AST, however, so a more detailed examination of liver enzyme values is always advised.

Alkaline phosphatase (ALP) and gamma-glutamyltranspeptidase (GGT) are known as cholestatic liver enzymes, which mean they diminish or stop the flow of bile (a greenish fluid that aids digestion and is produced in the liver).

ALP and GGT are important markers of liver health during steroid use, and should be included in regular blood testing. Elevations in ALP and GGT can indicate bile duct obstruction (intrahepatic cholestasis), which refers to a condition where the liver can no longer properly transport and metabolize bile.

Intrahepatic cholestasis is a potentially very serious manifestation of steroid-induced liver toxicity, so elevations in ALP and GGl should not be disregarded. Mild elevations in ALT and AST may be caused by muscle damage (exercise) and not steroid-induced liver toxicity.

A comparison to baseline levels will be important in determining the cause. If the only factor that has changed is the addition of a hepatotoxic anabolic steroid (training is otherwise steady), the drug is likely to blame. It is important to remember that ALP and GGT are not always elevated with early liver strain. Therefore, the elevation of any hepatic markers above the reference range (even if only ALT and AST) can indicate liver toxicity, and should be cause to discontinue the offending steroids and reassess risk.

Continued on next page…

Muscle Enzyme

Test Name

Creatine Kinase
Reference Range – 38-174 u/L

The creatine kinase (CK) enzyme is used as a marker of muscle breakdown, kidney damage, and heart damage. High levels usually indicate heart attack or other organ trauma. This enzyme can also become elevated with exercise that breaks down muscle tissue, especially intense endurance or resistance training.

Elevated CK levels caused by high intensity training are often mistaken for organ damage. It is important to further examine other markers of kidney and heart heath before such a determination is made. Note that creatine kinase levels may also be useful in determining if liver strain or heavy training is the cause of mild elevations in liver enzymes ALT and AST. Slight increases in ALT and AST caused by muscle damage will usually coincide with elevated CK and normal ALP and GGT levels.

Continued on next page…

Blood

Test Name

WBC
Reference Range – 4 – 11 – K/MCL

RBC
Reference Range – 81 – 103 – FL

Platelet Count
Reference Range – 130 – 400 – K/MCL

Hemoglobin
Reference Range – 13 – 17 – g/dL

Hematocrit
Reference Range – 40.7 – 50.3 (men) – %

Reference Range – 40.7 – 50.3 (women) – %

A full blood count is one of the most commonly run blood tests, and can give you a good snapshot of overall health in many regards. A full blood cell test will give you a measure of white cell count (responsible for fighting infection), platelet count (vital to blood clotting and healing), and red blood cell count (responsible for carrying oxygen). Red and white cell counts will be further subdivided into various individual measurements, often referred to as a differential cell count. Hemoglobin is the specific carrier of gases in red cells, and hematocrit is a measure of the percentage of red blood cells in the total blood volume. Due to their effects on erythropoiesis, anabolic steroids tend to increase red blood cell count, hematocrit, and hemoglobin concentrations. While this may increase oxygen-carrying (aerobic) capacity, as the concentration of red blood cells increases so does the thickness of the blood. Elevated hematocrit can increase the risk of heart attack or stroke.

Continued on next page…

Kidney

Test Name

Uric acid
Reference Range – 3.0 – 7.0 – mg/dL

Creatinine
Reference Range – .5 – 1.5 – mg/dL

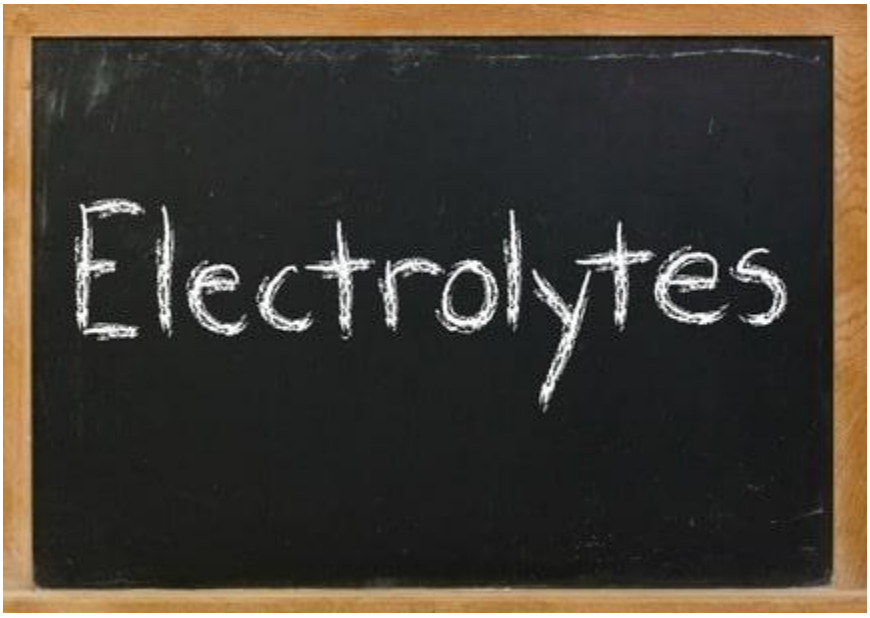
BUN
Reference Range – 5 – 26 – mg/dL

BUN/creatinine
Reference Range – 8 – 27

This panel of tests looks at three primary waste products filtered and excreted through the kidneys, urea, uric acid, and I creatinine. Problems here can indicate serious underlying problems with kidney function. Note that Blood Urea Nitrogen : (BUN) is often elevated with excess protein consumption, and is used by many physicians as an indicator that too much , protein is being consumed for optimal metabolism. The high consumption of meat or creatine supplementation can also elevate creatinine levels, diminishing the value of blood creatinine testing as a marker of kidney health. Electrolyte, mineral, and fasting glucose testing is important to further assessing kidney health, and is advised in addition to the above kidney markers. A quick urine screen for pH, specific gravity, and the presence of sugar, blood, and ketones is also available at most physicians' offices, and is generally advised alongside blood work when possible.

Continued on next page…

Electrolytes, Minerals, and Glucose



Test Name

Sodium
Reference Range – 136 – 146 – mEq/L

Potassium
Reference Range – 3.6 – 5.2 – mEq/L

Chloride
Reference Range – 98 – 109 – mEq/L

Bicarbonate (carbon dioxide)
Reference Range – 21 – 30 – mEq/L

Phosphorous
Reference Range – 2.5 – 4.5 – mg/dL

Calcium
Reference Range – 8.5 – 10.5 – mg/dL

Iron
Reference Range – 35 – 185 – mcg/dL

Glucose (fasting)
Reference Range – 70 – 110 – mg/dL

Electrolyte levels are examined to help detect problems with the fluid and electrolyte balance. Abnormal values may reflect something as small as sodium or potassium deficiency, or a more serious condition such as kidney disease. A variety of other health issues may also become apparent by looking at both electrolyte and mineral levels, giving them somewhat broad prognostic value. Fasting glucose is also examined to determine if the individual may be hypoglycemic (low blood sugar) or hyperglycemic (high blood sugar). Problems with fasting glucose may reflect potentially serious health condition including metabolic syndrome, diabetes, pancreatic disease, liver disease, kidney failure, or acute stress.

Prostate

Test Name

PSA,serum
Reference Range – 0.0 – 4.0 – ng/mL

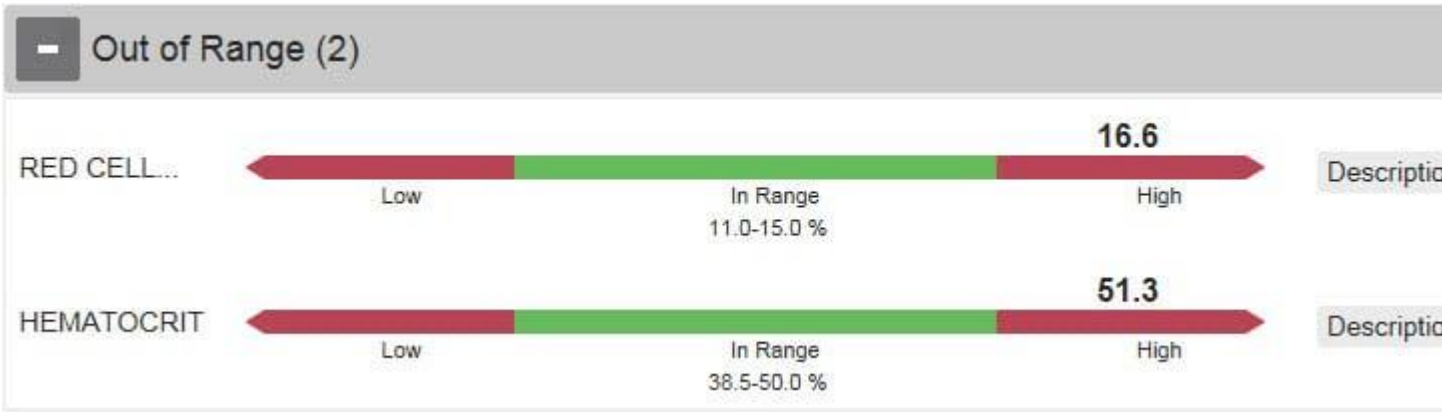
Prostate-specific antigen (PSA) is a protein produced by cells in the prostate gland. Its levels can become elevated in cases of benign prostate hypertrophy or prostate cancer. While it remains unknown if elevating the level of androgens in the body with anabolic/androgenic steroids can increase the risk of prostate cancer, it is known that I this disease can be progressed by elevated hormone (androgen and estrogen) levels. The PSA test is regarded as an important diagnostic tool for screening individual prostate cancer risk. If PSA levels are elevated, most will advise against using anabolic/androgenic steroids.

Thick Blood and Testosterone

THIS ARTICLE WAS ORIGIONALLY FOR STEROID USERS BUT THE SAME PRICIPALS APPLY WHEN READING YOUR BLOOD PANELS.

Thick blood and testosterone

Just wanted to update you guys. It's been long overdue. Below is the screen capture from my blood tests.



I had a drop about a little over a point. That's what you can expect from the blood donation.

FOR FULL VIDEO PLEASE VISIT- https://www.secretsofbodybuilding.org/2018/01/30/thick-blood-and-testosterone/

Continued on next page…

Thick blood and testosterone – The last few blood tests I've had Thick blood come back in the test results. I was able to temporary fix this but during my cycle my mid cycle test came back thick again (My Hemoglobin results 18.1) .

This is obviously an issue so I'll be going over the next step in getting this taken care of.

The obvious reasons for thick blood being an issue is blood clotting and heart attack risk. This isn't "normal" per say but it is a **very common side effect of using things like AAS and being on TRT.** This is why it is so important to get blood work done and monitor yourself. These are things **you will NOT feel**. This is why it is so important even If you feel great and look amazing on the outside there may be things going on on the inside you aren't aware of that could be detrimental to your health.

Below are natural things you can do to keep things like thick blood at bay.

1. **Drink LOTS of water!** I'm at a min of a gal per day. While I'm on cycle I try my hardest to get no less than 1.5 gal per day. Do this and you'll be half way there.
2. **Take Omega-3 supplements**. The dose usually recommended to prevent stroke and coronary disease is 1,000 mg daily of DHA and EPA.
3. **B vitamins.** Numerous studies have shown that regular intake of folic acid and other B vitamins can reduce the risk for ischemic stroke by about one-fifth. Low levels of these vitamins can lead to abnormally high levels of homocysteine, which damage blood vessels. If you have elevated levels of homocysteine, use a formula designated on the label as a homocysteine formula that includes folic acid and vitamins B-6 and B-12.

4. **Vitamin E.** Vitamin E is a natural blood thinner. Dose: 1,200 international units (IU) to 2,000 IU daily of a vitamin E supplement. Look for a brand that says “mixed vitamin E” or lists all eight tocopherols and tocotrienols on the label.
5. **Coated Aspirin.** While this will not “fix” thick blood issues, it is a blood thinner and reduce blood thickness, however this will not change your hemoglobin number results. Daily does approx. 300mg

Blood donation for regulating thick blood

The following are steps you can take to regulate thick blood issues that step beyond regular supplementation, water, and food adjustments.

When you have adjusted everything you need to and still get thick blood, **DONATE IT!**

This is a **very common** practice, and TRT patients can and do donate as often as every 4 weeks.

This can be highly beneficial to **ANYONE** even if you are **NOT** a user of AAS or Testosterone.

https://www.secretsofbodybuilding.org/

We all know those people that have panic attacks about their oil change in their car, talking about how their car won't perform the same way or even break down, however never eat healthy, exercise, drink much fluid or any water, just soda and total junk, and countless other bad habits.

YOUR BLOOD IS YOUR OIL. CHANGE IT!!!

This is big. In my personal opinion everyone that can, should utilize this free service. Especially for us older guys. We have old oil pumping through our veins and it's important to get rid of it and replenish yourself.

THICK BLOOD, WHAT AM I LOOKING FOR?

When you are having your blood tested ***especially for TRT and AAS*** users, the blood issue that is most common is **high hemoglobin**.

Normal ranges of hemoglobin will range from

MEN: 13.5 to 17.5 grams per deciliter (g/dl)
WOMEN: 12.1 to 15.5 grams per deciliter (g/dl)

High ranges will be is the ranges of hemoglobin will range

It's not uncommon to have **high ranges** from **18 to 26**
THIS IS HIGH BUT NOT UNCOMMON. OBVIOUSLY THE 26 IS IN THE HIGH DANGER ZONE CATEGORY. THESE HIGH RISK PATIENTS TYPICALLY DONATE EVERY 4 WEEKS

Continued on next page…

DONATING BLOOD. WHAT TO EXPECT.

I'd highly recommend to actually speak to a representative if this is your first time donating blood.

You will want to explain to them that you use testosterone.

This is generally what they will categorize you under.

- **Whole Blood Donation** (If you use testosterone or AAS this will be your only option. This simply means you are donating the blood not filtering it.)
- **Category TT** – meaning testosterone user. It is important to let them know you are a user of testosterone. This prevents accidental donation to a pregnant women. Blood donation to a pregnant woman may have adverse effects on her child. Please be honest even if you are using as a self-prescribed (non script) user.

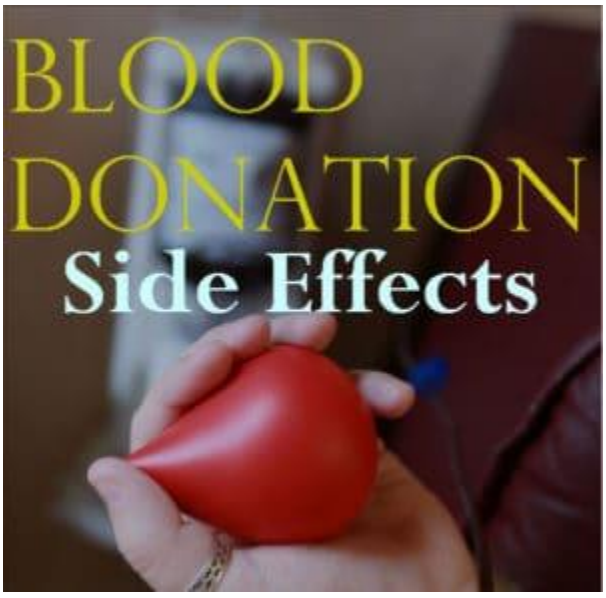
PRE APPOINTMENT TASKS.

After you set up your appointment they will send you pre appointment PDF information for you to read. **READ IT. IT'S EASY. COMMON YOU GUYS….**

You'll most likely be asked to not fill out your history questionnaire till the **DAY OF THE APPOINTMENT.**

If this is your first time you'll only need your ID and paperwork you filled out. *This will have an electronic signature and they **WILL** know if you filled it out previously so if you have done that, they will just make you fill it out again so just follow the rules.* After you have donated the first time, you'll be given a donor number or donor card. You'll need to bring both for future appointments.

EAT LOTS AND LOTS OF FOOD AND DRINK TONS OF WATER PRE APPOINTMENT!



Not to scare anyone but you may have a bad reaction to the donation if you have not had adequate food and water. I personally had a bad reaction this past time even though I had had 3 meals already BUT they were very lean meals. **BIG MISTAKE**.

I highly recommend if you have a cheat day save it for your donation day and **eat BIG**. You'll thank me later. That being said there were at least 9 other people in the room donating and no one else had a bad reaction at all.

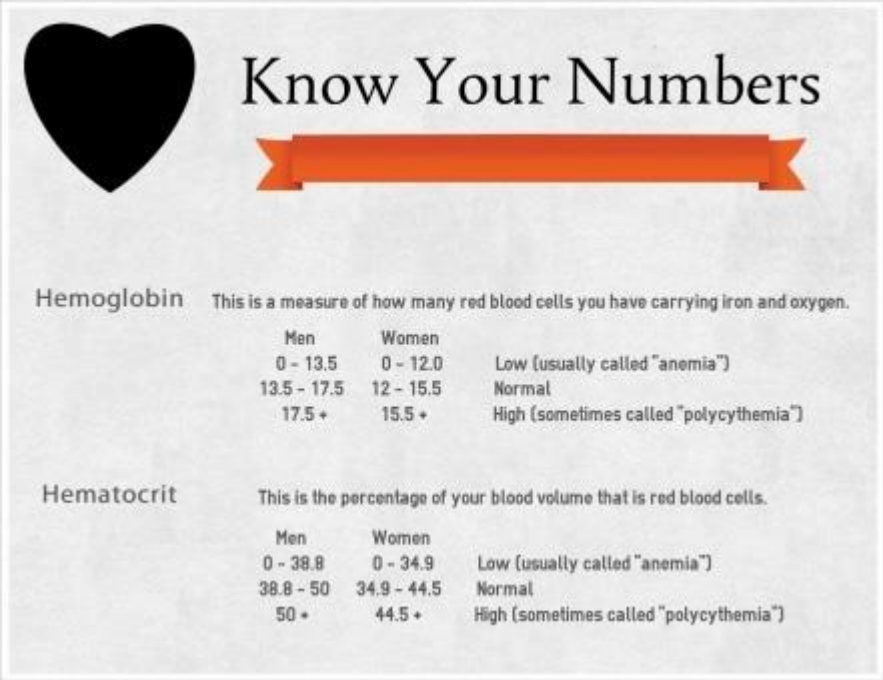
You will lose about a gram of sodium when donating so eat tons of salted peanuts, fries, burgers, whatever. I have heard people say that you shouldn't eat fatty foods pre appointment, **HOWEVER** after my last visit they did confirm that is wrong information that I should have eaten as much junk as possible pre appointment. Just a heads up.

WHAT WILL HAPPEN ONCE I ARRIVE AT MY APPOINTMENT?

- Once you arrive you will need to check in.
- Have your paperwork with the printed off scanner bar code so they can scan it and see when you filled out your history. IF you did this on your phone they can scan the phone as well.
- You will have a one on one with a nurse and they will ask you questions pertaining to your history, check your paperwork, and go over questions about the blood donation.
- They will take your blood pressure. (Please do not have a bunch of coffee or energy drinks prior to your appointment. They cannot and will not let you donate with elevated blood pressure)
- They will take a sample of blood (much like a diabetes test). This is to test your hemoglobin numbers.
- If all things are go, they will take you to the floor for you blood donation.
- The actual sit time while donating is approx. 10 to 15min.
- After the donation is complete. They will ask you to stay while they monitor you for 15min. this is only to make sure you do not have a negative reaction after donation.

https://www.secretsofbodybuilding.org/

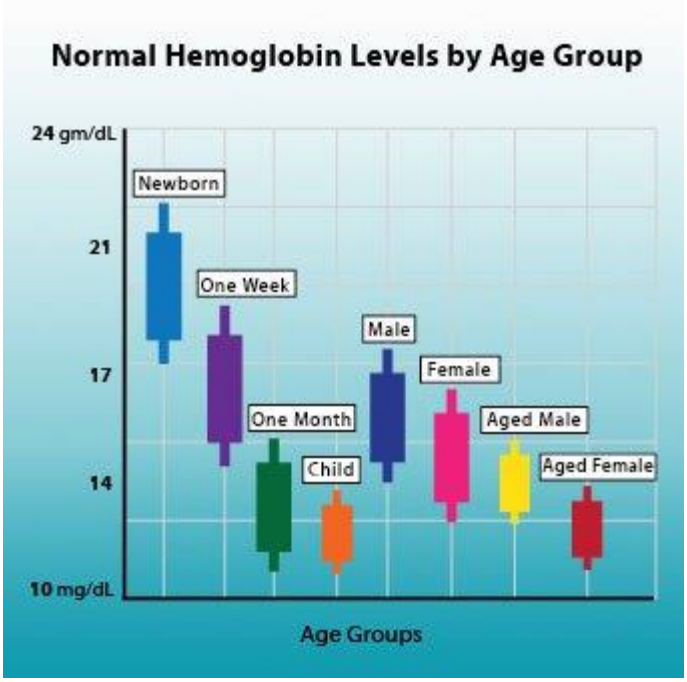
- During you monitoring post donation time they will give you juice, cookies etc. to get you blood sugar back up.
- Appointments last approx. 1 hour from arrival, pre testing, donation, and post donation 15min monitoring.



HOW WILL THIS IMPACT MY HEMOGLOBIN NUMBERS?

You can expect a significant drop of about 1 to 1.5. Over time if you are doing everything else to stay healthy (Lots of water etc.) and you continue donations, you can float your hemoglobin numbers at very healthy levels of 13 or even below as reported by the nurse staff.

Continued on next page…



HOW LONG WILL THIS IMPACT MY HEMOGLOBIN NUMBERS?

Unfortunately with TRT users this is not a onetime fix. As you monitor your blood work you *may or will* see your hemoglobin numbers rise again. You will need to continue to do what you can naturally with food, supplements, and lots of water, AND continue to donate your blood. This will keep your numbers at reasonable levels.

https://www.secretsofbodybuilding.org/

HOW OFTEN SHOULD I DONATE?

Depending on your situation there are a few options.

If you are “self medicated” your option is maximum every 8 weeks (Free Service).

If you have a doctor script for testosterone this will depend on your doctor. If your doctor thinks it necessary he or she may write you a script for therapeutic blood donation as often as every 4 weeks. There usually is a fee attached to this process so if you can get away with it and keep your health and numbers in check you can opt for the every 8 to 10 week donation (Free Service)

WRAP UP

At the end of the day the things we put into our bodies affect us in ways we can necessarily see on the outside. It’s important to keep on top of and monitor the most important thing we have, our bodies. We can get a different car, a different place to live, different electronics, yet so many people are pre occupied with maintaining those less important tasks while ignoring the biggest gift they have every been given, **The most complex machine in the world, their own human body.**

And one more thing. This isn’t just about an “oil change” unless you have a unique situation **THEY CAN USE YOUR BLOOD TO HELP SOMEONE ELSE**. So do something good for you, and someone else … and **GIVE BLOOD!**

Crystallized Test Vial

If you have already used the vial you don't need to prep the vial.

If it is a new vial (capped) use a needle to pierce the stopper and remove the needle.

1. Simply get yourself a pot.
2. Fill the pot up with water that comes up to half way on your vial.
3. Turn on heat to medium (do not let it boil).
4. Let it heat for 5min.
5. Swirl the vial for 20 to 30 seconds.
6. Turn off heat on stove and let the vial sit in the water and let it cool down to room temperature.
7. This may take 20 to 30 min.
8. You can swirl the vial a few more times during this process.
9. After cool down period remove your vial and inspect it.
10. Place your vial in a towel to dry and let it sit.
11. It should be useable at this point.

FOR FULL VIDEO PLEASE VISIT- https://www.secretsofbodybuilding.org/2018/01/24/crystallized-test-vial/

Reliable places to buy Syringes and Needles

Below are our top picks for Vials, Syringes and Needles. Enjoy

For Vials, Syringes and Needles

https://www.secretsofbodybuilding.org/

Reliable places to buy Testosterone

Our top recommendation is voted Top 5 In The World by their customers for reliability, cost, and consistency.

-Click on image OR site link-

https://www.secretsofbodybuilding.org/1-aas-source/

USE DISCOUNT CODE: T20 FOR 20% OFF PURCHASE

https://www.secretsofbodybuilding.org/

Buying Testosterone With Bitcoin

See A Full Video Walkthrough

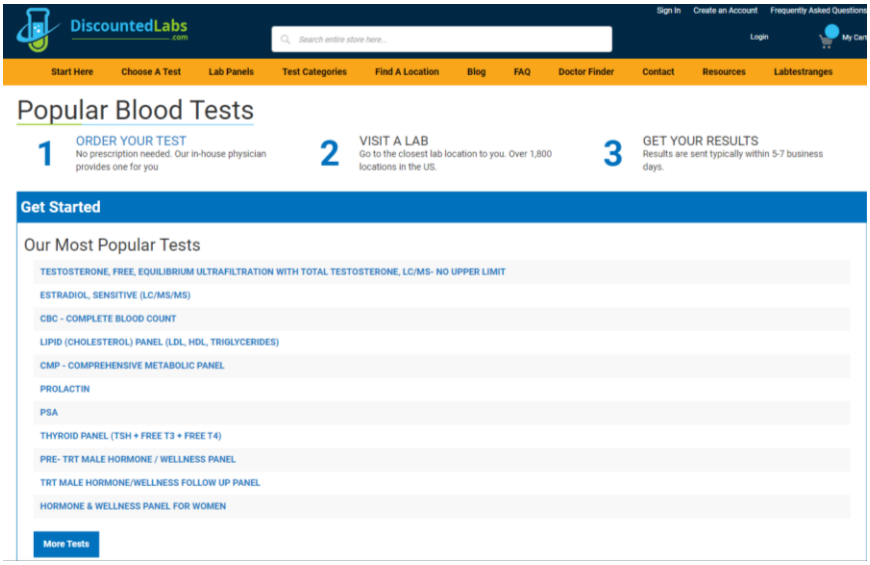
HERE-

https://www.secretsofbodybuilding.org/2019/03/29/how-to-pay-with-bitcoin/

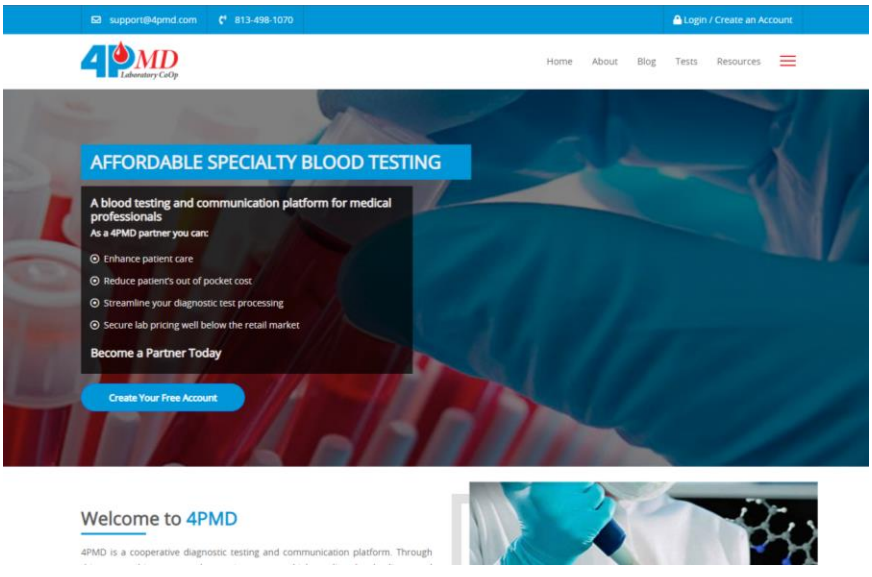
Private Labs for Blood Work

Here are links to private labs for blood work if you are interested.

https://www.discountedlabs.com/



https://www.4pmd.com/



https://www.secretsofbodybuilding.org/

Thank You for downloading this guide.

For any questions please reach out to SOBodybuilding@gmail.com

And visit us at https://www.secretsofbodybuilding.org/ for more content.