

Antaeus Labs Ultratest Introduces Geranylgeraniol (Now Discontinued)

written by Mike Roberto | September 19, 2018

*Note: This supplement is no longer available, but we're keeping the post up since it contains a great introduction to a new ingredient, **Geranylgeraniol**.*

You've seen PricePlow review testosterone boosters before to know our stance on them; the well-dosed ones work for at least *some* people and may be worth a shot if you're over thirty-five. For everyone else, they're often "feel-good" supplements that may enhance fertility, but actual testosterone is another task.



The "test" products on the market all pretty much rely on the same basic ingredients, thus making them rather unexciting to talk about...until now. **Antaeus Labs** is dropping a *novel* testosterone product named **Ultratest** that may just flip the testosterone-booster stereotype on its head.

The Premise: Being real with testosterone boosters

When it comes to testosterone boosting products, our long-time followers know our expectations. We want the product to raise testosterone *as best as natural interventions* can. For new readers, testosterone enhancers tend to work best in

older males, younger adults with **low testosterone by birth**, or those that have a **pathological cause of lower testosterone**, as evidenced by the research on the other products on the market. They're great at getting to a healthy range but won't get you to the heights of hormone production that become deleterious to your health – you'll have to go to your doctor or the "back alley" for that kind of thing.

Ultratest has something new. *Very new.*

Ultratest is a *novel* testosterone product – truly one of a kind on the market. The first thing that will grab your eye about Ultratest is its **liquid** form. While most test boosters have relied on capsule formulations, Antaeus Labs went with a liquid delivery mechanism for this product, and they're saying it's **tasteless**. This product mixes easily and goes well with milk-based drinks or even coffee. And most importantly, there's a new ingredient with some wild research we're interested in sharing.

As always, we're going to look at it through the same scrutiny we give to every testosterone boosting product we've reviewed. Let's hit the science to get started, but first, sign up for Antaeus news and deal alerts on PriceFlow.

Finally, let's get to it. Get ready to meet *Geranylgeraniol* and *Phytol*!

Antaeus Labs Ultratest Ingredients

- **Annatto Oil Extract – 22% Geranylgeraniol (690mg)**

Supplement Facts	
Serving Size: 1ml Servings Per Container: 30	
Amount Per Serving, DV	
Annatto oil extract standardized to 22% Geranylgeraniol	690mg*
Eurycoma Longifolia liquid extract	250mg*
Phytol	55mg*
Vitamin D	1000iu, 250%
Vitamin K2	2mg, 2450%
*Daily Value Not Established	

What are Geranylgeraniol and Phytol? Let's find out. Aggressive users have something *new* to try here!

Annatto oil extract is the main draw of Ultratest and the likely reason that Antaeus Labs went with liquid as Ultratest's base. The extract focuses on **geranylgeraniol**, a terpene that is *vital* to life as we know it. While it is found in most living things, it's usually present in trace amounts that make

extraction extremely difficult. We may have more on this ingredient coming soon, but we'll summarize the benefits for the purposes of this product analysis:

What is Geranylgeraniol?

Geranylgeraniol has been shown in *multiple* papers published by Japanese researchers to increase testosterone levels in animals to a remarkable extent. The best part is that the mechanism (described below) of improvement should work just as well in the human body.[1,2] In those studies you may also see it abbreviated as *GGOH*.

The mechanism: Protein Kinase A and increased cAMP Levels

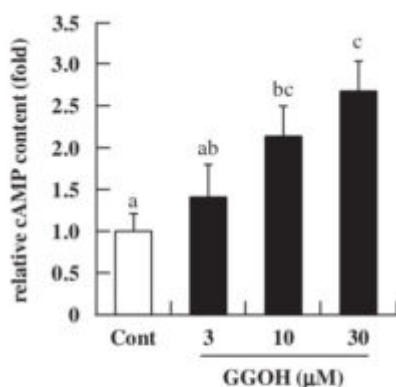


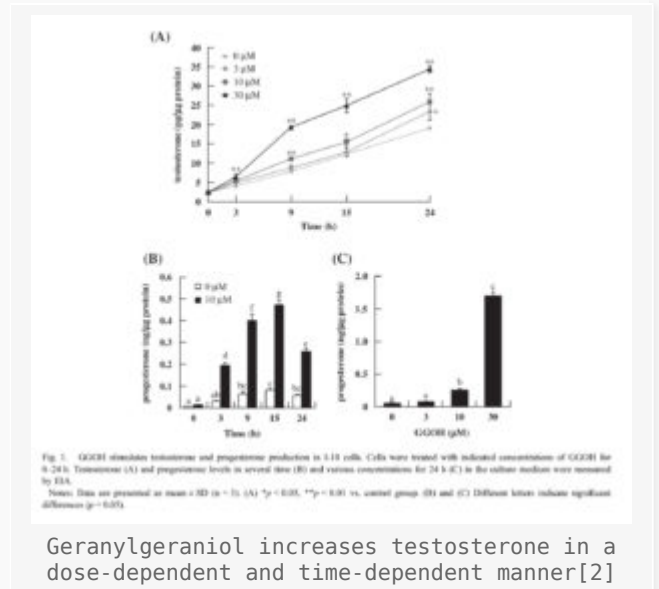
Fig. 4 GGOH stimulates intracellular cAMP levels in I-10 cells. Cells were treated with indicated concentrations of GGOH for 1.5 h, then collected and acetylated before measuring of cAMP levels in cell lysates by EIA. Notes: Data are presented as mean \pm SD ($n = 3$). Different letters indicate significant differences ($p < 0.05$).

Geranylgeraniol Boosts intracellular cAMP Levels[2]

You can compare geranylgeraniol to compare an ingredient we all know and somewhat love – Forskolin. These two have enough in common to compare and contrast the two ingredients. Forskolin is often used as a fat loss ingredient, but it's also been shown to increase testosterone. However, it's postulated that **geranylgeraniol succeeds where forskolin tends to fail** due to its *massive* oral bioavailability.

Both of these induce *protein kinase A* (PKA) activity and increase cAMP levels. Geranylgeraniol was found to regulate this pathway's signaling by activating adenylate cyclase *without* altering the bond of an enzyme that *disrupts* cAMP production known as phosphodiesterase.

This is all important because cAMP (also known as cyclic AMP or more technically, 3',5'-cyclic adenosine monophosphate) it's a compound that's needed to regulate a multitude of cellular actions. This includes, but is not limited to:



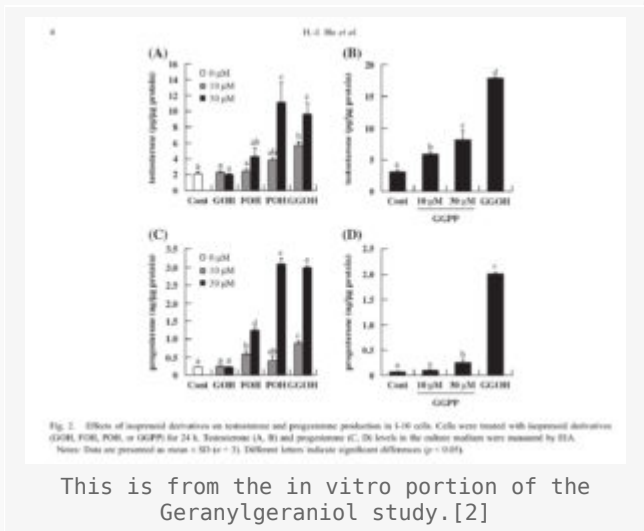
- Anabolic and anti-catabolic stimulation
- Fatty acid oxidation enhancement
- Increasing the body's basal metabolic rate (BMR)
- Boosted testosterone production
- Increased lean body mass.[3,4]

Exercise can also induce cAMP, but the body can eventually downregulate the process through negative feedback loops. Supplements like forskolin (and now geranylgeraniol) get around this – and they may actually *increase* the cAMP boost from exercise (ie we're thinking about pre workout dosing here)!

Time and Dose-Dependent

Back to the geranylgeraniol research, which was admittedly done in vitro, showed testosterone increases in a *dose-dependent* and *time-dependent* manner.[2] The more and longer it was dosed, the more testosterone was enhanced. The researchers showed that it was indeed a cAMP enhancement via activation of PKA with follow-on experiments using known controls, and their theories were confirmed.

Use Progesterone to our Advantage?



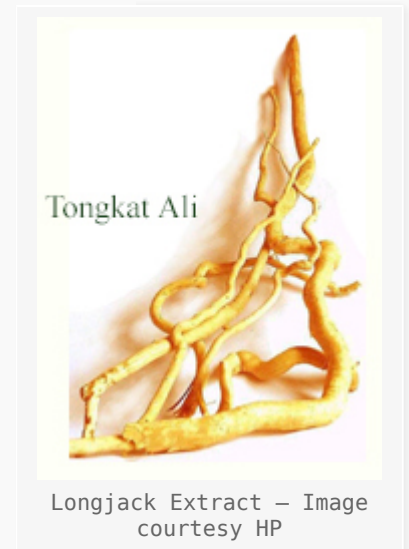
One point of concern to those that read the research is that alongside of the testosterone increase, *progesterone* was increased as well.[2] However, this can be taken *advantage* of thanks to a smart formulation – and that’s exactly what Antaeus Labs does with Ultratest. Reason being, the next ingredient (Longjack) *accelerates* the conversion of progesterone to testosterone via *4-androstenedione* – and the ingredient *after* that (Phytol) prevents conversion to estrogen!

The mechanism (*CYP17*) is discussed in the next section.

So what can you expect from supplementing high-geranylgeraniol Annatto Oil, then? While the science definitely shows improved testosterone levels in vitro, we’re hesitant to say “expect massive gains and for your arms to grow 3 inches overnight.” For now, we’re viewing Geranylgeraniol as something to watch out for, and regardless of muscle gains, we could expect it to increase several workout parameters.

It may be the revolution the testosterone booster corner of the market has been waiting for.

- **Eurycoma Longifolia – Liquid Extract (250mg)**



Longjack, also known as *Eurycoma Longifolia* and *Tongkat Ali*, is one of the more popular natural testosterone boosters. In our previous Longjack article, we wrote at great lengths about its benefits. However, those benefits should be extended due to synergy with the gerangerianol.

Longjack is known as an enhancer of male virility and sexual prowess,[5,6] but also may help boost both free and total testosterone levels for some males in a manner comparable to TRT.[7-9] At least one study has shown improved force production after supplementation as well, which makes it particularly appealing to athletes.[10]

Moving progesterone towards testosterone with CYP17

As discussed above, there is synergy between Geranylgeraniol and Longjack. While Geranylgeraniol increased testosterone, it also increased *progesterone*. Not to worry – this is actually right in line with Longjack’s primary mechanism!

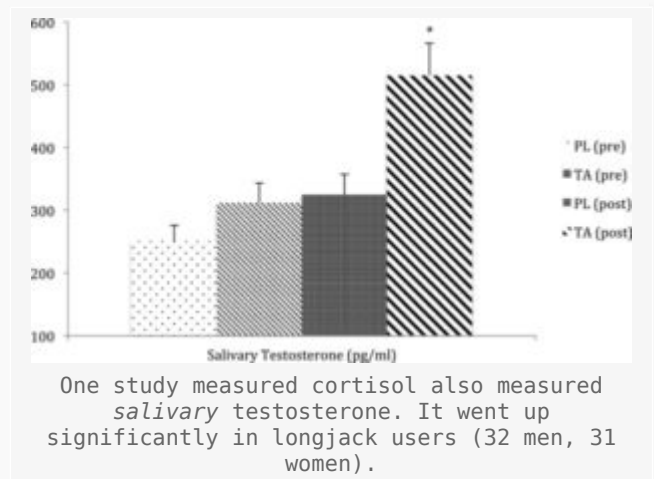
A review of in vitro studies in *The Aging Male* from Informa Healthcare showed the following:

*Harniza and Johari (University of Malaya) isolated the bioactive eurypeptide and tested its effect on the biosynthesis of various androgens. Eurypeptide significantly increased **CYP17** enzyme, suggesting that **more of the CYP17 enzyme is being produced to metabolise pregnenolone to yield more testosterone (180x) and progesterone (190x).***[11]

Similarly, page 37 of the Proceedings of the Asian Journal of Andrology states

the following:

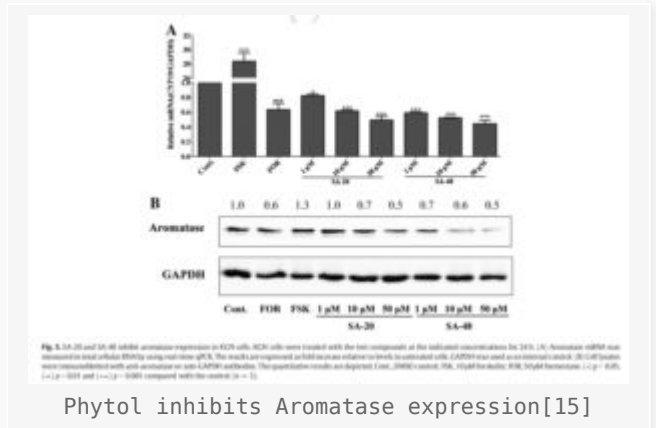
Dr Harniza and Dr Johari from the University of Malaya isolated the bioactive complex polypeptides from the standardized water-soluble extract, labeled as Eurypeptides and tested its effect on the biosynthesis of various androgens. The Eurypeptides works by activating the CYP17 (17 α -hydroxylase/17, 20 lyase) enzyme to enhance the metabolism of pregnenolone and 17-OH pregnenolone to yield more dehydroepiandrosterone (DHEA) as well as the metabolism of progesterone and 17-OH progesterone to 4-androstenedione. Excess DHEA is aromatized into testosterone to be utilized at target sites.[12]



Considering the fact that activation of CYP17 is often touted as e. longifolia's primary mechanism of action,[13,14] we're hopeful that this will be strong enough, but only your own personal blood testing will prove it, which is smart to do with *any* new testosterone enhancing ingredient.

• **Phyto1 (55mg)**

Phyto1 and Geranylgeraniol are very like structures. Both are oily liquids and are *very similar* chemically and biologically; you could even call them cousins! **Phyto1** is a unique alcohol found throughout the natural world, especially in plants. However, the average diet provides only **1mg of phyto1 per day!** Based on that fact alone, 55mg sounds like a massive supplemental dose.

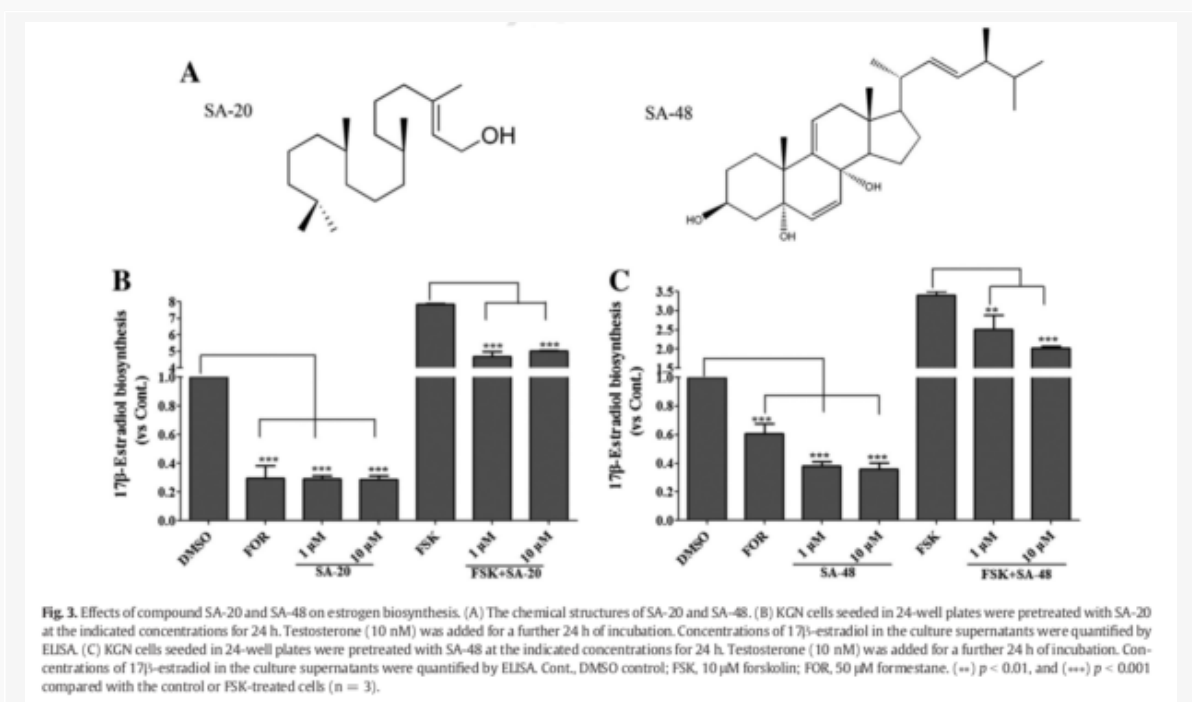


As for the benefits, phytol acts differently than its cousin Geranylgeraniol in that it acts primarily as a **natural aromatase inhibitor** (AI). Aromatase is the enzyme that converts androgens into estrogens, so *inhibiting* it keeps androgen levels higher. The current literature suggests that phytol is a force to be reckoned with when compared to other popular natural AIs,[15] and the industry has been looking for an alternative to arimistane.

Having an estrogen inhibitor involved in this formula is important so that we prevent the conversion to estrogenic components during the DHEA conversions.

In addition, phytol acts as a PPAR-alpha agonist.[16] PPAR-alpha, or *peroxisome proliferator-activated receptor*, is the common target of drugs designed to treat metabolic syndrome! These drugs are mainly used to lower triglycerides and blood glucose levels.

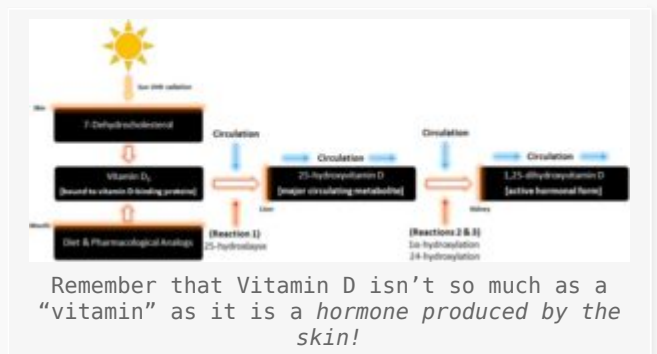
Therefore, phytol may hook you up with some *incredible* metabolic benefits in addition to its aromatase inhibition to pair with the Geranylgeraniol!



• Vitamin D and Vitamin K (1000IU / 2mg)

If you're deficient in vitamin D, supplementation is likely one of the best things you can do for your hormonal health. Since *most* Americans are not reaching an optimal intake per day,[17] there's a good chance that you should be supplementing.

When a deficiency in vitamin D is corrected, the benefits include: overall higher quality of life, enhanced cognition, heightened testosterone levels, and even reduced fat mass.[18-21] While 1,000IU is a far shot from the 5,000IU offered by some standalone D supplements– it's a nice boost! Take it where you can get it, especially if not in the sun a ton.



Meanwhile, it's always wise to take Vitamin D with a fat source. Luckily for us, we have an *oil-based product*, so if you're taking a "Dry Vitamin D" then we're willing to bet this will be more effective!

Vitamin K is more of a general health supplement. Most people don't get enough per day, so supplementation may improve your testosterone, bone health, and your cardiovascular well-being.[22]

As always, remember that Vitamin D isn't *really* a Vitamin – it's a *hormone* produced by the skin thanks to sunlight. But for the sake of simplicity, we all call it a necessary and beneficial vitamin that you can supplement – better if done with an oil like we have in Ultratest!

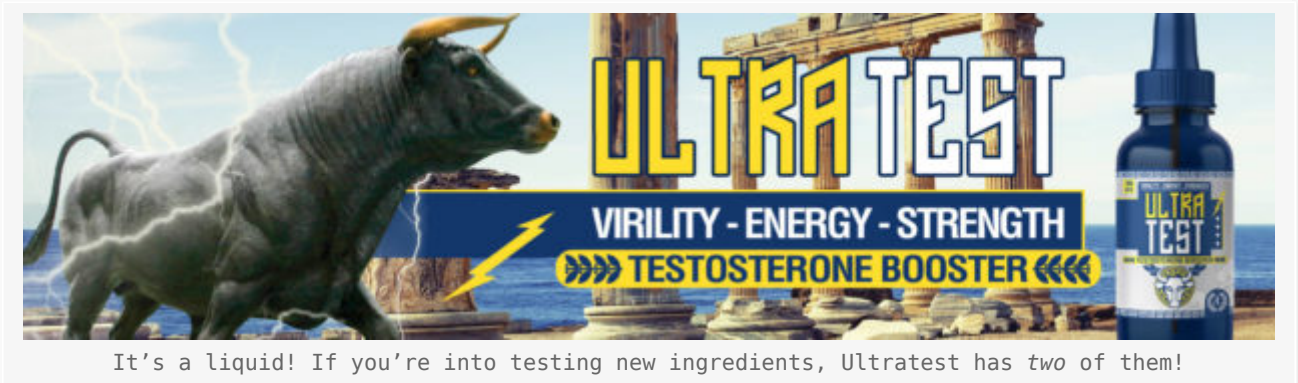
Dosing Instructions

First off, Antaeus Labs states that Ultratest is intended for men over 30 and/or for younger men who have already reached full maturity (typically we at PriceFlow find 23 years to be a safe age). Ultratest should definitely not be

used by anyone under 18.

Back to the dosage itself: remember, this is *not* a capsule product – it’s a liquid that’s meant to be taken orally! One serving once a day is all that’s needed. Some of our more aggressive, experienced, and “spendy” users may wish to take it twice per day.

Antaeus Labs claims that it’s mostly tasteless and is best mixed with milk-based beverages such as a protein shake or coffee with cream.



Ultratest timing

Antaeus Labs has two different timing strategies you can explore:

1. About forty minutes pre-workout (on non-workout days, take it at around the same time as you would on a workout day).
2. Before bed, since testosterone is secreted during sleep.

If twice-a-day dosing is used, then it’s optimal to try to achieve a 12-hour dosing strategy.

Up your cholesterol intake!

Many testosterone boosters work better if you increase your cholesterol consumption, as this may assist the process of testosterone biosynthesis. Cholesterol is the hormone “backbone” and if you’re attempting to up your hormonal output, it’s best not to bottleneck its abilities in any way.



With the carnivore diet's increasing popularity and keto diet showing improvements in testosterone, we're now seeing the diet world's pendulum swing away from testosterone-killing veganism, and that's a good thing since those animal fats may contribute to the increased testosterone levels.

Stacking with other products like Antaeus Labs Titan?

A while back we wrote about Antaeus Labs TITAN, which is a natural testosterone booster and anabolic based upon a new ingredient named tomatidine alongside shilajit. We are *huge* fans of this product, but it definitely seems to keep appetite *high*. So if your goal is to gain muscle, the Ultratest / TITAN stack makes sense, and that Shilajit may even augment Ultratest's testosterone-enhancing effects as it has some testosterone optimization on its own.

If you're looking to lose fat, or just want more energy, chase your dose of Ultratest with a preworkout drink before heading to the gym.

One note with respect to diet: You may want to increase your cholesterol consumption to kick-start the process of testosterone biosynthesis.

Conclusion: New ingredients, cool research, and cautious

optimism

We had *one* feeling after glancing at the research that led to Ultratest: **cautious optimism**. Anything that boosts cAMP is going to be of interest to “hormone hunters”, athletes, and physique conditioners, especially if it’s time- and dose-dependent like the ingredients in Ultratest.



Phytol and Geranylgeraniol are both *extremely* interesting to everyone on our team. Before we can flat out state that they’re the best testosterone-boosting innovations of the decade, we want to see some human trials. For now, we recommend giving Ultratest a try if you want to be a pioneer in this exciting new testosterone-laden territory. Or hell, give it a try if you’re not one of our more “conservative” supplementers and simply *hate* taking pills!

A liquid supplement that you can throw into your coffee is undoubtedly going to appeal to the massive market of people that are fed up with swallowing a *ton* of capsules every day... especially if it can translate to the epic man-boost you’ve been looking for.

Antaeus Labs *always* keeps us on our toes (TITAN is still worth talking about), and this year’s Ultratest is definitely no different.

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