

The "Average Joe" Guide To
Homemade
Supplement
Secrets



For ANY Fitness Goal!

by The "Muscle Nerd" Jeff Anderson

www.HomemadeSupplements.com

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Legal Stuff To Cover My @\$\$...

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Introduction

There I stood, staring frustrated in front of my bathroom mirror, once again trying to flex my scrawny toothpick of an [arm](#) in hopes of seeing SOME signs of progress for all of my hard work at the gym. My hopes dashed once again, I left the house for my monthly trek to the local grocery store and bought the bodybuilding magazine that had the largest “mutant” pro bodybuilder I could find on the front cover.

Running home into my bedroom as excited as a 13-year-old boy who just found his mom’s *Victoria’s Secret* catalog in the mailbox, I thumbed through it, desperately searching for something (hell ANYTHING!) that would give me some clue as to what I was doing wrong with my [weight](#) training. I breezed past every single article giving me the same old advice...“eat this much protein”...“do this bench press for this many reps”...yeah, yeah, yeah...blah, blah, blah...bought that supplement...didn’t work...bought that one...didn’t work...didn’t buy that one...” You get the picture.

And then I saw it!

It was a small ad in the back of the classified section that read:

Tired of trying to flex toothpick arms
in front of your bathroom mirror?

We have the natural anabolic
compounds that will finally help you
achieve massive amounts of muscle
with no side effects.

Legal Steroids!

Call now ### - ### - #####

It was as if the ad were speaking directly to ME! And here was the best part...the number to call was actually located in MY home town!

I immediately picked up the phone and dialed. I spoke to a guy who answered the phone. He seemed cool enough...so I stuttered with excitement as I told him about my frustration with not being able to build as much muscle as I wanted to.

I told him that I saw his ad and, ironically, I noticed that I lived in the same city as him, and I asked him where his company was located.

I couldn't believe it when he told me. He was only 3 BLOCKS AWAY!

When I told him I was right around the corner, he was as surprised as I was...and then he asked me to "come on over" and he would "hook me up" with some serious supplements that would finally do the trick!

I jumped in my car and drove straight to the address he gave me. Expecting to arrive at a small manufacturing building or [business](#) park, I was more than a little shocked when I pulled up to a SINGLE [STORY](#) HOUSE in my residential neighborhood. I sat there scratching my [head](#), trying to determine if I had heard him correctly or maybe I jotted down the wrong number in my haste to take him up on his personal invitation before it was retracted.

Confused, I walked up and rang the doorbell and was soon greeted by a ripped giant, still in his workout clothes, and wearing a telephone headset on his head. He motioned to me to come in as he was talking with (undoubtedly) another frustrated hardgainer on the other end of the line desperately searching for the same solution I was. I listened intently as I walked into the living room of the "supplement company" and took a seat on the couch he motioned me over to.

I listened intently as he "made the sale" to the other guy on the line and jotted down his order and credit [card](#) number.

"The total will be \$113.56. Will that be MasterCard or Visa?"

Wow, I thought. I hope I'm able to walk out of here holding on to more of last week's paycheck that THAT guy!

When he finished his [sale](#) and had hung up, he extended a cheerful hand and greeted me with a big smile and said, "C'mon Jeff...follow me!"

I walked behind him to a small room connected to the living room and found a large [table](#) on which there were small bins, some cardboard boxes with pictures of cows on it, some funnels, and a strange metal machine.

"Welcome to my 'production facility'!" he said.

"This is it?" I replied in shock.

"Yep...that's all it takes!" he said, beaming proudly over his work.

He then proceeded to take me on the “Grand Tour” of the inside of his own sports supplement manufacturing, [marketing](#) and distribution center...all located within the 100 square foot room we stood in!

He explained that he was a competitive bodybuilder (no one famous), and that there was a LOT of money to be made in marketing supplements to the hungry masses since he could charge as much as he wanted to regardless of what was actually in the bottles he was shipping out.

I think he could see the hesitation in my [eyes](#) because he quickly added, “don’t worry...I have the good stuff over here. I told you I’d hook you up, didn’t I?”

In the end, I left with a \$57 bottle of pills (encapsulated with that strange metal [machine](#) on the [table](#) from bulk ingredients, no doubt intended for [horses](#) or cows or something), and you know what? I made gains!

And...I had made a friend that would go on to teach me the most valuable in secrets of supplementation unknown to the masses that were frothing at the mouth to buy the next latest and greatest mass building, ab revealing, testosterone boosting compounds as fast as these “companies” could get the package in the mail!

In fact, in the weeks and months that followed, I continued to go over to my new “friend’s” house to broaden my [knowledge](#) of the “secrets” of supplementation...

I watched him go from his “mass building” phase right up into his pre-contest “dieting” phase, all the while, popping pill after pill that would bring him closer and closer to the [body](#) that would draw stares of awe on stage.

And all of these supplements were created just 20 feet away in a makeshift production facility!

I learned what worked...what didn’t...how to make the supplements...how he tested the supplements...how he MARKETED the supplements...

And you know what?

It made me sick!

No, not PHYSICALLY sick...but ETHICALLY sick! And quite frankly...
MORALLY OUTRAGED!

Sure, I learned about HOW to supplement correctly as well as how to make my OWN powerful compounds using raw ingredients that were readily available

either [online](#), at my local [health](#) food store, or in many cases...at the local GROCERY!

But even MORE importantly, I left with my eyes wide open to the world BEHIND the forbidden curtain of secrecy that cleverly guards the tactics and [marketing](#) strategies used by supplement companies, both LARGE and SMALL, to pry open the wallets of well-intentioned, frustrated fitness enthusiasts intent on building muscle, burning [fat](#), increasing their [sex](#) drive, or optimizing their sports performance.

In fact, my “education” in the secrets within the supplement industry has carried on since that eye-opening day some 11 years ago...and led me to research how to tell the “good” companies from the “bad”...the “real” supplements from the “scams”...and most importantly, how to make winning compounds of my own that rival those of even the largest supplement manufacturers, saving me THOUSANDS of dollars in the process.

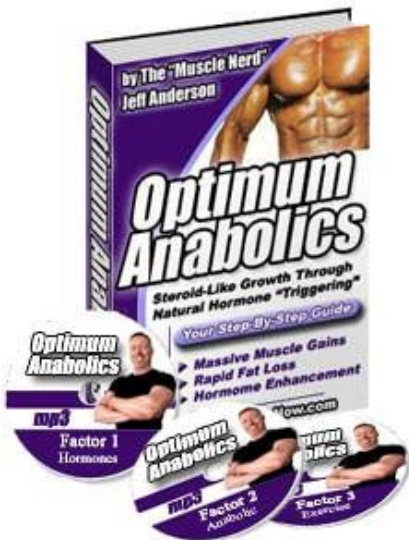
And now it’s finally time to bring all of my discoveries, tips, tricks, tactics, and yes, personal recipes, to YOU and help you build your own powerful home-based “supplement manufacturing facility” focused on crafting your own “perfect body.”

But first, a little bit about me...

Who Is The "Muscle Nerd"?

Short of bringing my "pocket-protector" to the gym, the nickname given to by my sadistically cruel gym buddies is actually probably well deserved.

Best known for my natural bodybuilding program phenomenon "Optimum Anabolics" (www.optimum-anabolics.com), I was the geeky guy at the gym who would always be seen sitting on the [weight](#) bench, hunched over my handy little notepad, scribbling down every last detail of my workout and results to be able to scientifically analyze what WORKS...and what was a complete waste of time when it came to building muscle while burning [fat](#).



Laugh if you must...but it was these notes that lead to one of the most remarkable discoveries in natural bodybuilding and my ultimate step-by-step roadmap to amazing muscle growth that I detailed in Optimum Anabolics and soon became the program of choice for everyone from skinny teenagers to overweight "50-somethings" looking to FINALLY achieving the body of their dreams.

And now, even some pro bodybuilders are using the "natural hormone triggering" process I discovered as an alternative to steroids in their own program...and it works!

But enough of the egotistical pat on my own back ;-)...

Let's get into the MEAT of why you purchased this program to begin with, shall we?

So let me start off by saying that although it may seem like the purpose of this program is to expose the tips, tricks and tactics used by the supplement companies to pawn off sometimes outright FRAUDULENT, tubs of worthless goo...I am NOT an "enemy" of sports supplements.

In fact...I'm a HUGE fan of supplements!

I use a host of natural bodybuilding supplements in my own training, and over the years I've discovered which ones work for me, and which one's don't work for me. Like I said...my nickname the "Muscle Nerd," is well-deserved.

I've spent hundreds, if not THOUSANDS, of hours recording my own test results, training patterns and every other aspect of my training program, as well as staying current on the very latest research, breakthroughs and blunders within the supplement industry.

I've developed relationships over the years with manufacturers, marketers, suppliers, distribution centers, professional bodybuilders, and yes, even a few supplement companies.

So what I'm about to share with you will open up your [eyes](#) to what REALLY happens behind the curtain of secrecy. And believe me...I'm taking a BIG risk and jeopardizing some pretty strong relationships with friends of mine just in writing this manifesto.

But the truth must be told...and tell it I will!

And as your guide and teacher through this behind-the-scenes expose, you'll see me pop my head in from time to time just to add a few extra little opinions...

A Word From The "Muscle Nerd"...

"See? This is my happy little face!



After completing this book, I read it back through from the beginning and found several points that I felt needed...well, a little 'extra emphasis.' (OK, I also like to hear myself talk!)

So from time to time throughout this book, I'll jump in just to add my 'two cents'. Just think of me as your PERSONAL GUIDE to finally learning the secrets to saving a TON of money by becoming your own personal 'supplement manufacturer'!

And to get you started, I have my first little "homework assignment" for you! But first...one obligatory shameless plug..."



"...you should just hear the compliments friends, family, and now even WOMEN are saying about my 'NEW BODY'!"

Hello Jeff...this is Daniel!

I really want to thank you for your awesome program, your expert advice...and most of all these amazing results!

You should just hear the compliments friends, family, and even WOMEN are now saying about my "new body"!

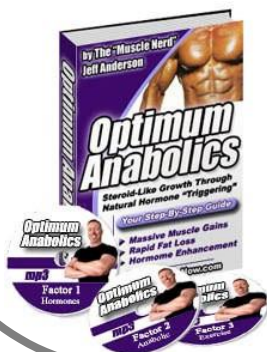
*Thanks to your program I have really opened my [eyes](#) to what works and what doesn't. By focusing on your "**8 Anabolic Factors**", my training is now more productive in less time! Your program is simple to follow and delivers powerful information.*

Optimum Anabolics ROCKS!!!

For everyone hesitating about getting this program, it should be a no brainer. If you're willing to put in the effort, the OA program will PUMP UP YOUR MUSCLES!"

Happy [Muscle](#) Building ,

~ Dan ~



Discover The Program That Transformed Dan From An "Average Guy"...

...Into The ENVY Of All His Friends!

www.Optimum-Anabolics.com

Chapter 1

Supplement “Suckers” 101

Ok, here’s your first homework assignment...

Head on over to your local book store and pull down any major bodybuilding magazine from the shelves and begin flipping through the pages.

What do you see?

Well, if the one you chose is anything like the random muscle mag I yanked down, then here’s what you found (this is a REAL life actual example)...

- The Table of Contents didn’t even show up until page 35...AFTER 34 straight pages of supplement ads,
- 14 Features and Reports related to, yep...you guessed it—SPORTS SUPPLEMENTS...
- ...and 175 TOTAL PAGES of SUPPLEMENT ADS nestled snugly in between mountainous, ripped bodybuilders!

In fact, throughout most muscle magazines you’ll find images of massive, lean, great looking pro- and wanna-be-pro-bodybuilders gracing the pages, holding up the very latest “breakthrough” natural supplement that helped them build the physique you’re now slobbering over.

What’s the message here?

The message is that if you want to look like the men and women you see before you, the “secret” lies in “better living through pharmaceutical enhancement,” otherwise known as [sports](#) supplementation.

Forget the fact that the “perfect specimens” that grace the pages of every [muscle](#) rag have so many anabolic steroids pumping through their veins that their blood is more toxic than a Chernobyl fishing hole, and that their perfect bodies had practically NOTHING to do with the supplement they may (or may NOT) have taken in the process. This is often overlooked anyway.

Yes, it’s no secret...supplements sell...and they sell VERY well!

And is it any wonder?

Frustrated gym rats everywhere are struggling to gain just an ounce of lean muscle. Men and women are huffing and puffing like rabbits on Viagra on treadmills throughout the world's [health](#) facilities in an attempt to chisel down those sagging bellies and [hips](#) that have slowly crept up on them one Big Mac at a time.

We live in a society hell-bent on INSTANT GRATIFICATION!

We want 18-inch pythons NOW!

We want to crack a walnut on our washboard [abs](#) YESTERDAY!

And supplement ads convince us that all of these achievements are possible. They give us HOPE that we can become someone other than who we are now...more like the buff, hairless guys and scantily clad women that were obviously able to become bigger, stronger, leaner, better looking, and more popular using the supplement they're proudly holding up with a big smile and a dark tan.

I mean, what would YOU rather do...

Bust your ass 5 days a week going to the gym in a seemingly futile attempt to change your body composition?

Or pop a [magic](#) pill that promises you will gain "20 lbs of massive muscle in the next 6 weeks"?

Yeah...ME TOO!

Ad headlines like that are enough to send bodybuilders running to their nearest GNC to stock up on whatever supplement is being touted as the very latest cutting edge compound...and the supplement manufacturers are laughing all the way to the bank, their pockets stuffed with the hard-earned cash from well-intentioned gym buffs like us.

But that's NOT to say that the pocket-picking [profit](#) margins aren't NECESSARY for many of these companies...

Last I checked, a full page ad (the most popular supplement ad size) in a popular fitness magazine costs up to \$10,620 per PAGE!

And some of these companies are advertising over SEVERAL pages!

In fact, in my sample magazine from earlier, ONE company took up 37 PAGES of ads alone...including the VERY costly BACK COVER!

Now, even with a hefty “bulk advertising” discount, that’s STILL got to be close to a QUARTER OF A MILLION DOLLARS for advertising in just ONE MAGAZINE! And this same manufacturer [advertises](#) in ALL of the fitness magazines.

It’s this kind of “shock and awe” exposure that has made them the number one supplement company in the [business](#) and is the reason why just a small bottle of their pills can cost you almost \$100 to get the “privilege” to buy in hopes that it will make you look like the steroid-injecting pro they’ve used to promote their products in their ads!

A Word From The “Muscle Nerd”...



“Look, I know everyone has to make a dollar. But in the world of ‘Supplement Companies Gone Wild’, it’s just not right that innocent men and women are silently being scammed out of their hard-earned [money](#)...sometimes by small fly-by-night manufacturers and marketers...and most of the time even by some of the biggest names in the sports supplement world.

But now it’s time to set the record straight!

Yes, I’ll make a “Muscle Nerd” out of you yet.”

The goal of this manual is to help you implement a supplement plan that will support your goals, help you make an educated decision on what will work for YOU and save you hundreds, if not THOUSANDS of dollars by showing you how to build your own home-based mini-lab and pump out high quality sports and [diet](#) supplements that are as good or even BETTER than expensive name brand products.

So let’s get started, shall we?

And the best place to start is always at the beginning so let’s first take a look at whether or not supplements are really WORTH you spending half your paycheck on...

Chapter 2

Sports Supplements...Are They Worth It?!

Now it may seem that I'm a bit too critical of sports supplements and the companies that produce them. But please, don't get me wrong. Not all supplement companies are thieves, and not all use the same sort of back-alley advertising gimmicks I'm about to expose you to.

I'm not saying that many of these supplements that are being [produced](#) and marketed DON'T work as they're promised. MANY of them actually DO!

However, while it's unfortunate, there are a few (well, ok...MORE than a few!) scam artists that have trashed the good name of an entire industry because of their underhanded production and marketing strategies. In truth, many supplements DO work, and work VERY WELL if implemented INTELLIGENTLY and with an OBJECTIVE approach (bordering on "scientific").

You see, fueled by the competitive nature of professional sports and Olympic excellence for national pride, private agencies, wealthy [universities](#) and even government agencies across the globe have spent billions upon billions of dollars researching human bio-chemistry in search of scientific breakthroughs in prolonging life, manipulating genetics and hormones, and yes...crafting the perfect man/woman/athlete/soldier, etc.

The result has indeed been several "revolutionary breakthroughs" in natural supplementation (and some "not-so-natural") that can in fact have a dramatic effect on how you can gain muscle, burn [fat](#), slow the aging process, increase sex drive, become stronger, and so on.

A Word From The "Muscle Nerd"...



"Yes, the truth is, we've succeeded! The pages of any muscle mag will show proof positive that we're now able to completely wipe out any genetic limitations on the ability to grow massive amounts of muscle through the use of anabolic steroids.

But the question posed WASN'T "do supplements work?"...it was "ARE THEY WORTH IT?"

And the answer to that question is much more elusive!

Let's begin with a history lesson..."

Consider this...

"Bodybuilding" training methods can be traced as far back as the 8th Century when the Greeks and Romans had already begun to realize the importance and beauty of having a well-sculpted and muscular physique.

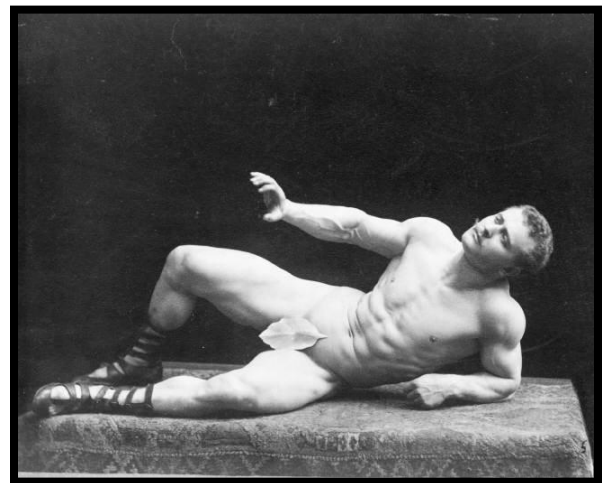
In fact, the Spartans actually forced their males to enter athletic [school](#) at the age of seven to begin bulking up!

Self-discipline and optimal [health](#) were highly praised in their society. But did they have sports supplements during these times in which to help them get ripped? Absolutely not! Unfortunately, bodybuilders have overlooked the history of their [sport](#).

This tradition of what is often referred to as "natural bodybuilding" was still prevalent in the 19th Century thanks to Eugen Sandow who was a pioneering bodybuilder of the Victorian era.

The bodybuilding successes of the Greeks and Romans were not lost on Sandow. As a boy he admired both cultures' statues and mythical heroes. At the age of nineteen he literally had the body of a Greek god, and all WITHOUT the help of supplements.

Sandow was so strict about his lifting and [diet](#) regimen that he actually measured Greek and



Eugen Sandow
"The Father Of Modern Bodybuilding"

Roman marble artwork, and developed his physique to meet those exact proportions. This accomplishment led to him being credited as the “Father of Modern Bodybuilding” because he was the first bodybuilder to ever develop his muscles to a pre-determined size.

Sandow had many great achievements during the course of his life, all of them done without the help of supplements. Sandow authored books about bodybuilding and he established the first health [clubs](#), which in turn, made exercise trendy among all people.

Now the lesson is this...if Sandow could do this WITHOUT access to the internet and the local GNC more than a hundred years ago, then what has changed to make it more difficult for bodybuilders today to do the same?

The answer...NOTHING at all!

The bottom line is that a proper diet and exercise program is the foundation of any effective bodybuilding plan! Without it, not a single supplement in the world will do you a damn bit of good. But again...training and following a strict diet will ONLY take you so far and then you ARE faced with “genetic limitations.”

This is NO NEW NEWS to scrawny “hardgainers” everywhere who have been trying for what seems like FOREVER to pack on just a scrap of muscle to their [pencil](#)-thin frames...or even to the “chubby” person who was always told that he/she was simply “big boned” all her life.

Chances are that BOTH of these types of people (and EVERYONE in between!) have tried to change their [body's](#) genetics through a diet and/or exercise program at one point or another...perhaps SEVERAL times!

But it's ALSO likely that they've QUIT their program once their personal metabolism or “genetic limitations” took over and they saw their progress come to a screeching halt.

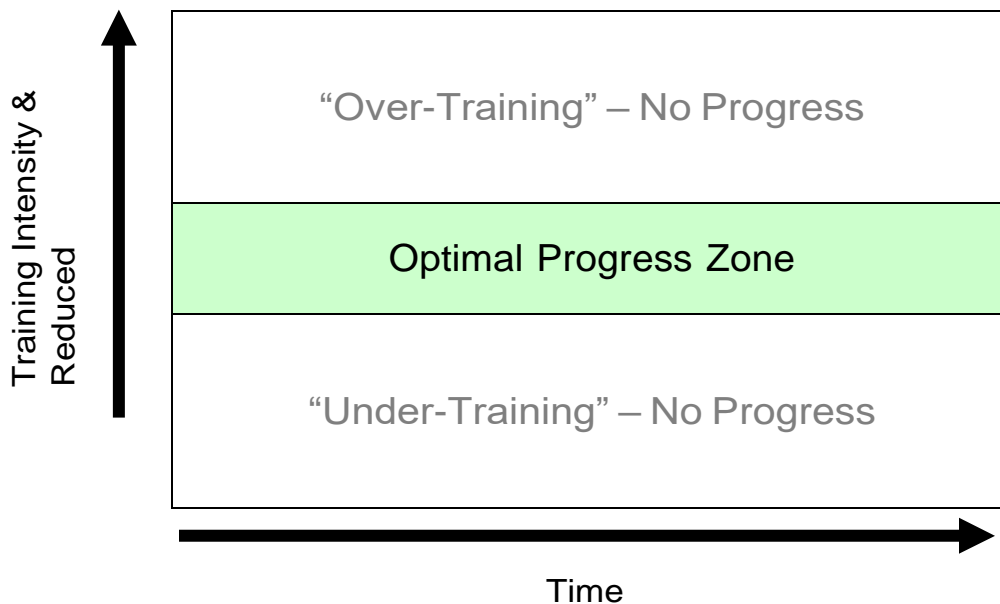
You see, for those individuals who do make gains with a healthy program of [diet](#) and exercise and then experience plateaus, supplementation CAN come in quite handy overcoming this hurdle in order to kick-start new growth or [fat](#) loss.

But the problem is that MOST men and women are completely unfamiliar with the TRUE role supplements can play in their overall fitness program and they end up missing the boat altogether.

So let's look at the REAL STEPS you need to take to fully understand how supplements can help you and increase your chances for success...

Below, you'll find a diagram that illustrates your potential to make progress within ANY bodybuilding, [fitness](#), or [fat](#) burning program.

“Average” Progress Map



The “Green Zone” (Optimal Progress) is that point where your body is at its peak proficiency at achieving your desired results, such as your [body](#) is in an anabolic (muscle-building) state or your are burning off the desired body fat.

The “Under-Training Zone” is the state that most non-exercising, “eat anything” average people wander around in most of the time. Their body perceives no “need” to change its composition at all and so no progress is made toward either building [muscle](#) or burning off fat.

And finally there is the “Over-Training Zone”. This is the point at which your body is either receiving TOO MUCH [stress](#) (i.e., the demands of your exercise program have exceeded your body’s ability to recover effectively) or TOO LITTLE “support” (i.e., not enough rest, your calories are too low or other diet deficiencies)

At any one point in your fitness program you are in ONE of these three zones...PERIOD!

Which one, depends upon how well you address the factors that correctly [balance](#) your body's demand for a change in body composition (more muscle and less [fat](#)) with the level of support you provide it.

A Word From The "Muscle Nerd"...



"Now most people starting out in a [fitness](#) program are really only hitting one or two of the essential elements that are required to meet their blindly following only one or two tips they received from either an article they read in a magazine, a friend, or even the local self-appointed "expert" down at the gym.

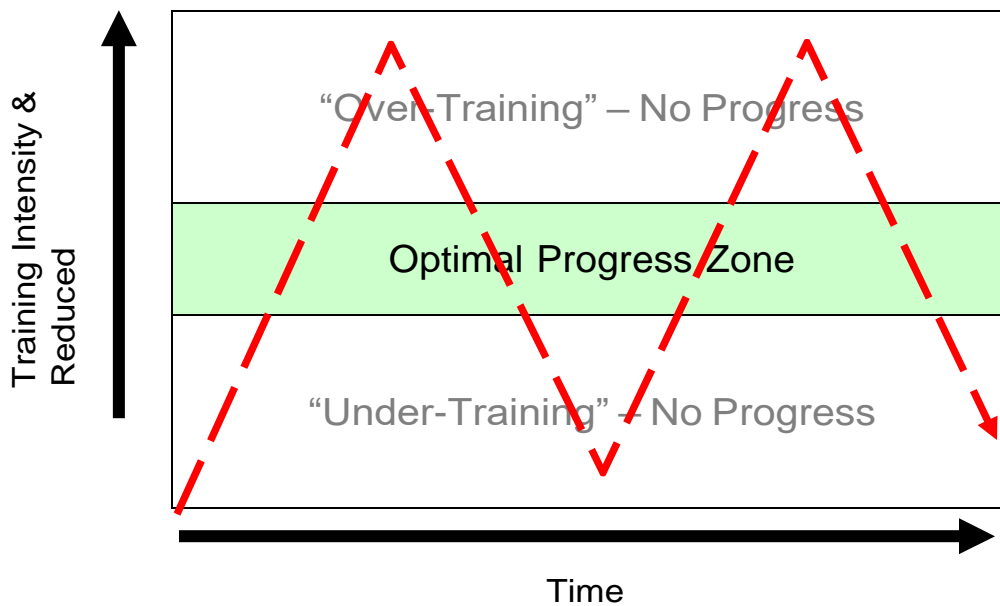
This is why in my natural bodybuilding program Optimum Anabolics, I focus in on the '8 Anabolic Factors' that are ABSOLUTELY NECESSARY if you EVER want to build muscle.

Miss any ONE of these critical components and you'll continue to be frustrated with your lack of gains.

You can actually pick up a sample copy of Optimum Anabolics by going to my [website](#) at... www.Optimum-Anabolics.com"

Now it doesn't matter if their goal is to build muscle, burn fat, or both, they usually follow the same "progress" sequence as everyone else who is just starting a program as is illustrated by the red dashed arrow in the diagram on the next page...

“Average” Progress Map



As we discussed earlier, nearly ANY program can bring you results when you first start out. Your body, in its need to adapt to the “[stress](#)” you unleash on it (through exercise or “diet”), will in turn improve in some capacity either building more muscle to handle the extra workload, or burning away some body [fat](#) in response to reduced calorie intake (sometimes both).

This is illustrated in the above diagram as you can see this “average” person following a [fitness](#) program go from being “Under-Trained” and then, as they force their body to “pick up the slack”, enter the “Optimum Progress Zone” and start to see an increase in muscle and/or a decrease in fat.

But what inevitably happens is that their body, as it has been programmed to do since the dawn of time, begins to become more “efficient” at dealing with your program and/or your diet program.

At this point, many people fall under the spell of the experts’ “no [pain](#), no gain” mentality and decide to push through their plateau by working even HARDER. In some cases this may be work, but in most, the reason for the “plateau” is either OVERTRAINING or lack of “SUPPORT”, meaning either their exercise program is already too intense, or they are not providing the right structural support factors (such as calories are reduced TOO much and improper rest) to help their body recover effectively and continue progress.

However, most people are fumbling blindly through the quicksand of information available on how to properly structure their program and end up quitting or taking some temporary time off.

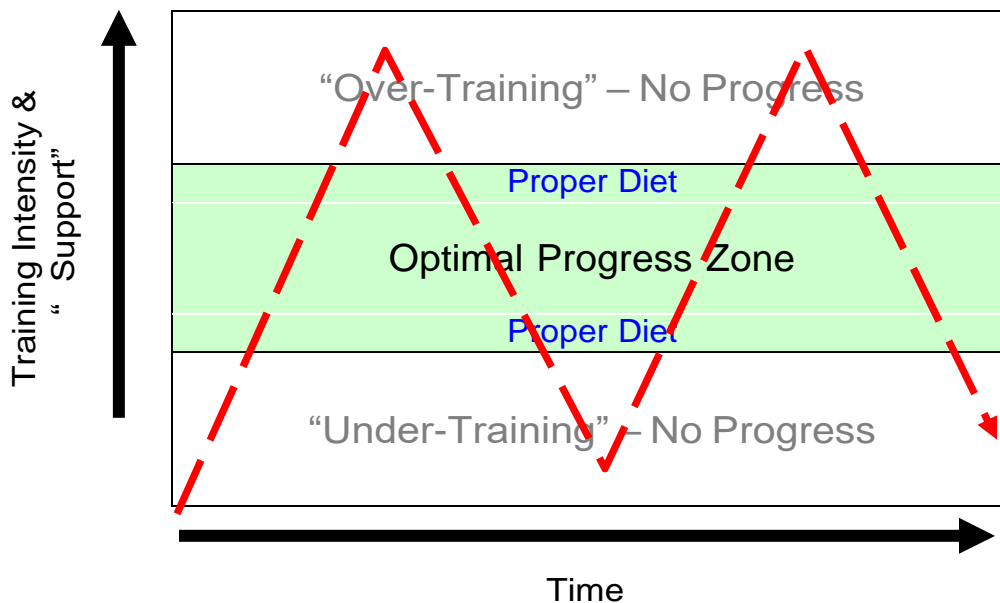
And miraculously, their body begins to respond again!

You see, once your [body](#) has a chance to “catch up” with the demands (in this case due to reduced intensity or increased “support”, then it will “rebound” for a while, once again bringing progress until it reaches the “equilibrium point” again where it doesn’t really need to work hard at it any more. In other words, you’re back in the UNDER-Training Zone and have to either increase the intensity again or provide your body with more “support”.

And so this vicious circle continues! Each time your body either becomes over “stressed” or Under-stressed, you basically zig-zag in and out of the Optimal Progress Zone, ending up gaining and losing, gaining and losing essentially spending as much time (or even MORE time) OUTSIDE of the zone that will continue to bring you consistent results.

But if you were paying attention, we’ve already covered some of the ways that you can avoid this frustrating time waster...

“Proper Diet” Progress Map



By far, ensuring that you’re following a PROPER [DIET](#) that is structured to provide you with the right number of calories and ratios of PROTEIN,

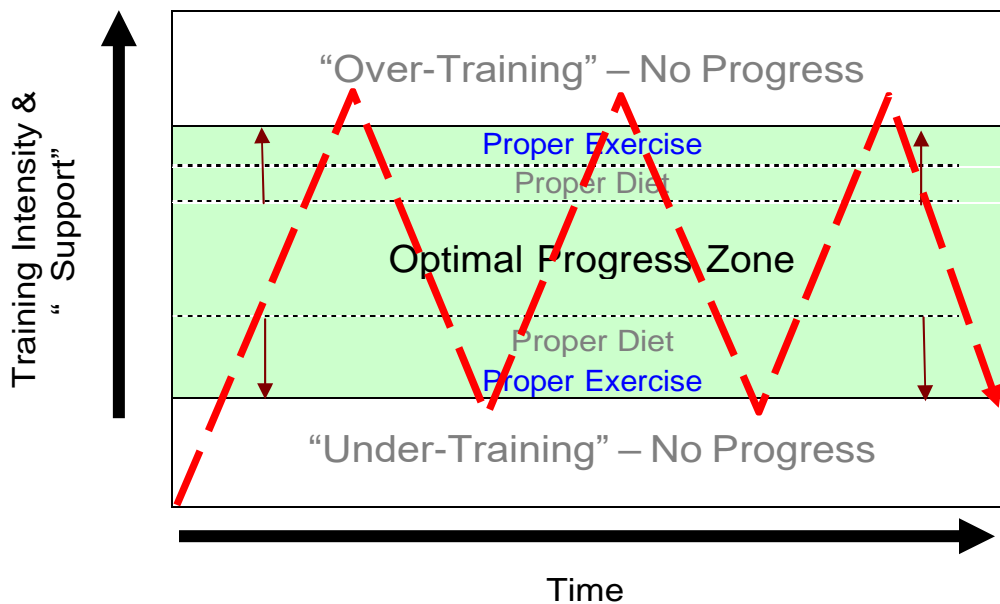
CARBOHYDRATES, and [FAT](#) would be the NUMBER ONE area to address to make sure that you're on track.

This subject is MUCH too intensive to go into here and is covered extensively in my other programs so there's no real need to address it here...but suffice it to say that with most of my clients, when they find that they're not meeting their goals, a few tweaks of how they have their diet set up usually brings them back on track and making progress again.

So, looking at the diagram at the top of the page, you can see that even if NOTHING is done to the exercise program itself, just making sure that your [diet](#) is in line with your goals AND you're following it like you're supposed to, greatly increases your "Optimal Training Zone" allowing you more "buffer" before you stop seeing progress, either through "Over-Training" or "Under-Training".

Now, let's take a look at how addressing your exercise program can help...

“Proper Exercise” Progress Map



Here we start to see a different pattern.

As is illustrated above, a proper exercise program should have shorter “cycles” of intensity that actually USE your body’s natural adaptive process to consistently make gains without those nagging training plateaus.

A Word From The “Muscle Nerd” ...



“I cover this in great detail in Factor 1 of the 8 Anabolic Factors covered within my 18 week natural bodybuilding program, [Optimum Anabolics](#).”

‘Intensity Cycling’ is one of the very BEST ways to ensure continuous muscle growth without those nagging plateaus.

The problem is, MOST guys are getting it completely WRONG and end up pushing themselves further and further into the ‘no progress’ zones as they fumble their way through the guesswork.

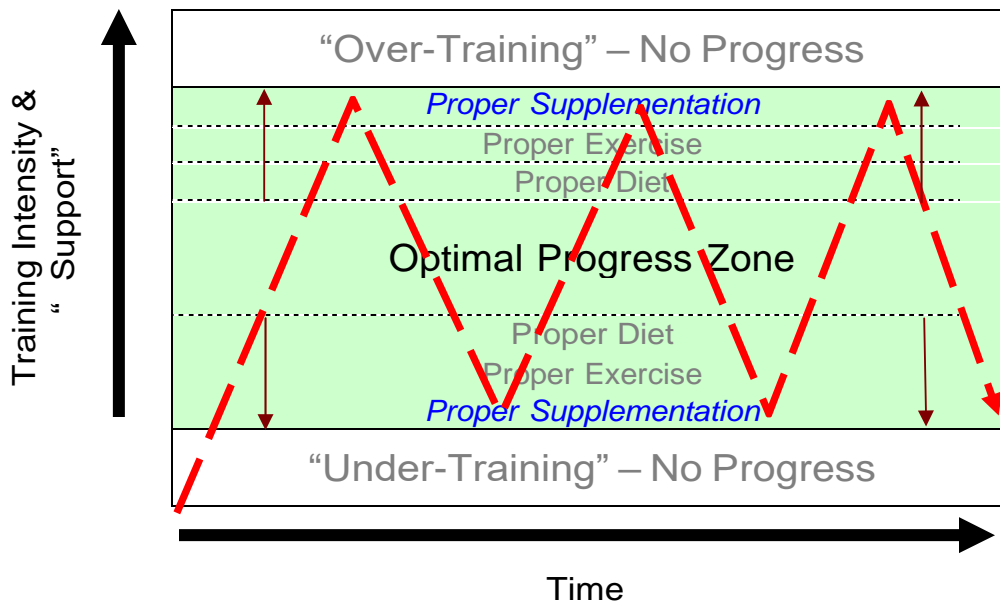
Since when did ‘guessing’ become a bodybuilding strategy?!

Optimum Anabolics takes you step-by-step through the whole process!”

The other thing you'll notice from the diagram is that cycling your exercise intensity not only makes sure that you're not over-training or under-training in the gym, but it also allows your body's support systems to maximize efficiency, pushing that buffer zone of the "Optimal Progress Zone" even wider, bringing you even MORE consistent gains!

But we're not done yet...

"Proper Supplementation" Progress Map



As I said before, I'm a BIG fan of supplementation...when it's done RIGHT...and this brings us to the TRUE ROLE supplements can play in any [fitness](#) program...

You see, without a proper [diet](#) and exercise program, supplements will be VERY limited in what they will do for you. But this is typically IGNORED by most men and women who are gobbling up pills by the handful thinking that supplements are the magic carpet ride to the body of their dreams.

In fact, I stopped counting the number of people who contacted me before starting one of my programs and said, "I've tried every supplement out there and the only option I see left is to start taking STEROIDS!".

Nonsense!

I'll be the first one to admit that living a healthy lifestyle is not always easy and getting to the point where you're "ripped and shredded" is a HUNDRED time harder! It takes a LOT of time, hard work, and dedication to reach your goals.

But consistent gains in both muscle-building and [fat](#)-burning are not only possible...but practically GUARANTEED with the right program structure and motivation to succeed.

But even then, you're going to be challenged at some point as you start stretching your "genetic limitations"...and THAT is where supplementation can come in quite handy!

With the proper supplement plan you can actually push that "Optimal Progress Zone" wider and wider as you learn just how to tweak your body's ability to...

- Provide you with MORE ENERGY for the gym
- RECOVER FASTER and stronger from every workout
- Support optimum cell function that creates the ultimate muscle-building/fat-burning environment
- Stimulates NATURAL hormone enhancement to increase growth (and even sexual libido!)
- And several other benefits!

But it still all comes back to the necessity of structuring a supplement plan that will filter out all of the marketing glitz and glamour designed to lure you into spending your hard-earned dough on a bucket of powder that is full of promises...and low on results!

But don't worry...I'm about to pull back the curtain and provide you with the elusive (and sometimes FRAUDULENT) tactics the supplement manufacturers and advertisers were hoping you would NEVER get hold of!

In fact, the entire supplement producing industry is completely FILLED with loopholes and opportunities that make marketing worthless goo a pretty easy trick.

And in order to understand just how they're able to manipulate the system (yes...LEGALLY!), you must first understand the playing field on which they operate, so let's take a look at how a supplement becomes a supplement...

Let's take a look at just how a supplement is "born" and how simple it is to manipulate the system and produce the next "cutting edge scientific formula" for consumers...

Chapter 3

Even YOU Could Launch A Multi-Million Dollar “Supplement Company” Out Of Your Living Room... In Your UNDERWEAR!

A Word From The “Muscle Nerd”...



“Now regulations regarding sports supplements differ from country to country so this may not reflect your own country’s standards and practices, but here in the United States, it’s really not too difficult to introduce a new “natural” [product](#).”

As already mentioned, any Joe Shmoe with a fair amount of knowledge about the human body and the ingredients that [boost](#) its performance and appearance can sit down and in a matter of just a few clicks of a mouse button, develop a “proprietary formula” for a supplement and sell it—even out of their own house!

And the federal government was aware of this over ten years ago when sales for nutritional supplements began to skyrocket and became widely popular with the American public. And we’re NOT just talking about athletes...more and more, individual consumers looking to promote a healthier lifestyle or carve out a fitness model physique were buying vitamins and wonder pills by the dump truck load!

So in their infinite wisdom, the government determined that, although many of these supplements were dependable for consumers, some weren’t...and in 1994, the Dietary [Supplement](#) Health and Education Act (DSHEA) was created.

The purpose of this law is to protect the American public from supplements that could be potentially harmful to consumers. Now it’s important to know that it IS in the best interests of supplement companies to study and be able to recite these guidelines in their [sleep](#) because products that don’t meet these guidelines are generally subject to the scrutiny of the [Food](#) and Drug Administration for approval.

If there’s one element out of sync with the DSHEA, it can GREATLY delay the arrival of a product to market...and that means an expensive wait on their “Return Of [Investment](#)” for design, development, testing, and production costs.

Here are the limited FDA rules that govern the creation of a new supplement (sorry for the “lawyer speak”, but it’s THEIR words):

1. The supplement must contain one or more of the following ingredients: a vitamin, mineral, [herb](#) or other botanical, an amino acid, a dietary substance used to supplement the diet by increasing the total daily intake, or a concentrate, metabolite, constituent, extract or combination of these ingredients. (You’ll notice that this guideline doesn’t require that a supplement consists of ALL of these ingredients—more on that later.)
2. The supplement can be ingested in the form of a pill, tablet or liquid. (The exception here is if the supplement is meant to REPLACE a meal or [diet](#).)
3. The supplement must be labeled a “dietary supplement” on its packaging.

As you may have already noticed, these guidelines leave a LOT of wiggle room for interpretation and manipulation and there ARE loopholes that smart supplement companies have learned to navigate in producing a product, as worthless as it may be, and still get it streamlined through the approval process in accordance with structured guidelines.

In addition to the guidelines mentioned above, supplement companies must also [meet](#) certain PACKAGE LABELING REQUIREMENTS. Aspects that MUST be visible on supplement packaging include:

- The term “dietary supplement” must be present
- The quantity of each ingredient must be listed, or if it is a combination supplement, the quantity of all dietary ingredients in the blend must be listed.
- Lastly, the label must also list the amount of calories, calories from fat, total fat, saturated fat, cholesterol, sodium, carbohydrates, fiber, sugars, protein, vitamins, and minerals in the supplement.

In addition to these regulations, the government also regulates the CLAIMS that supplement companies make about their products (though not as often as they should).

Supplement companies, under the law, are allowed to make 3 TYPES OF CLAIMS:

- “Nutrient-Content Claims”
- “Health Claims”
- “Structure-Function Claims”

Let’s look at each one more closely...

“Nutrient-Content Claims”

Nutrient-content claims are those which are allowed when a supplement has a HIGHER than usual amount of a certain nutrient; for example, “high in calcium,” or “an excellent source of fiber”.

These claims are legal as long as the product actually HAS a high amount of the nutrient or there is scientific demonstration that proves a supplement is indeed “an excellent source of” whatever nutrient they are claiming is beneficial.

“Health Claims”

Claims that a supplement is beneficial for a specified health benefit can be made as long as an authoritative scientific group (for example, the National Academy of Sciences) has approved it. Currently the FDA allows claim in relation to 7 relationships:

You’re probably already familiar with several of them. These include...

- calcium and a reduced risk of osteoporosis (a condition of lowered [bone mass](#))
- sodium and an increased risk of hypertension (high blood pressure)
- dietary saturated fat and cholesterol and an increased risk of coronary heart disease
- dietary [fat](#) and an increased risk of cancer
- fiber-containing grain products, fruits, and vegetables and a reduced risk of cancer
- fruits, vegetables, and grain products that contain fiber, particularly soluble fiber, and a reduced risk of coronary heart disease
- fruits and vegetables and a reduced risk of [cancer](#).

“Structure-Function Claims”

Lastly, “structure-function” claims are those that describe the role of a nutrient or dietary ingredient intended to affect the structure or function in humans such as “Vitamin E to support a healthy heart,” or “fiber to maintain regularity.”

In order to make these representations though, there must be scientific data to support the claim. However, as will be seen later, companies have found a loophole for this law as well.

In addition, structure-function claims cannot claim to cure diseases. For example, the company can't say “will cure cancer.” This may [sound](#) like an unnecessary provision to you, but consider this... the law wouldn't exist if it hadn't been tried before...and consumers taken to the cleaners based upon the false claims!

Ok, so now you're probably thinking that if these laws exist to keep supplement companies from scamming the public, then why does it still happen so frequently today?

The answer is very simple...

The DSHEA is ONLY a law...and laws are only as good as the governing agency that enforces them, right?

Well, in this case, the duty falls to the Federal [Food](#) and Drug Administration (FDA).

The way in which the FDA regulates supplements, compared to other [products](#) (i.e., prescription and over-the-counter drugs) differs greatly. And unfortunately, the regulation of the supplement industry is NOT a high priority for the FDA as, like most government agencies, they are overworked and understaffed!

Essentially, this means that supplement companies get to avoid the rigorous scrutiny that most drugs go through BEFORE being allowed to reach the market. In fact, in most cases the supplement companies don't even have to REGISTER their supplements with the FDA!

In MANY cases, these companies simply test there product just enough to make sure it won't have any detrimental “short-term health effects” on its users...but RARELY is a supplement even tested to see if it is TRULY as effective as the subsequent marketing ad will claim it is!

In fact, the actual production of the supplement itself often escapes enough internal or external scrutiny to ensure that it even CONTAINS the actual ingredients people are buying!

Consider this...

In 2001, the UCLA's Sports Medicine Division conducted research on twelve brands of retail, over-the-counter sports supplements containing the prohormone androstenedione, claiming to have anabolic properties...in other words, their purpose was to simulate steroid-like results to build [muscle](#).

To us “in the know” within the industry, the results were of little surprise...

- ALL 12 PRODUCTS were mislabeled!
- One brand contained 10 mg of PURE TESOSTERONE (a controlled steroid NOT meant for over-the-counter sale)!
- One brand contained 77% MORE andro than was stated on its label (a VERY DANGEROUS misprint)!
- 11 out of the 12 contained LESS than the amount of active ingredients listed on the label!

As you can now see, even the “trusted” information on most supplement labels has the potential of not only being misleading...but completely FALSE!

So when WILL the FDA step in and get involved?

The only time the FDA will actually get involved in this industry is when a supplement has proven to be dangerous to the [health](#) of users. Typically only after someone has died or been seriously injured—after it is too late—will they focus on a supplement and discover its dangerous nature or misrepresentation of benefits or safety to the people who used it.

With so many supplements on the market and such an easy path to introduce new products to the market, the FDA has tasked the supplement companies themselves with providing information about the safety of their products.

In fact, companies are REQUIRED to report to the FDA if they receive feedback from customers of potential adverse effects from intake of their supplements. As you can probably guess, if you're a supplement company who has spent thousands to [MILLIONS](#) of dollars on marketing your supplements and are faced with a complete recall and end to production of a supplement that is making you

oodles of money, you think twice about how much information you offer to the Department that can shut down a big money-maker...IF you report it at all!

Probably the most widely known example of when “enough” became “enough” for the FDA was the ban on the popular [weight](#) loss supplement “ephedra”

By the year 2000, the media was wild for stories about how fat we were becoming as a society with new reports surfacing DAILY about our levels of obesity and reliance on fast foods and unhealthy diets.

There is always money to be made in despair and suffering and the cry for help from the overweight masses combined with our [desire](#) for “fast and easy results” was all that was needed for the supplement companies to begin the marketing campaigns...even before proper testing had been accomplished.

Ephedra was an herbal supplement (also known as Chinese Ma-Huang) that had been used very successfully with competitive athletes when combined with caffeine as this combination was VERY effective at stimulating [fat](#) loss while increasing [energy](#).

It didn't take long for supplement industry to find a way to communicate these same benefits to the [panic](#)-stricken public who were frothing at the mouth for ANY [solution](#) at all that could finally blast off the [love](#) handles.

However, as both ephedra had caffeine were stimulants, the combination of the two had the potential of creating a very potent adrenal cocktail if not used correctly...and COULD pose a health risk.

As the use of supplements containing Ephedra spread, so did the increase in deaths and health problems among consumers who were using the supplement.

In 2002, scientific studies reported that close to 1,000 people had either died or suffered some kind of detrimental effect from using Ephedra. Specifically, close to 50 people suffered from a stroke or other heart related problem, while more than 10 had died a sudden and mysterious death. Still others were reporting more minor side effects, such as abdominal [pain](#), insomnia, dizziness, depression, and mania, just to name a few.

In fact, one of the largest producers of [diet](#) supplements containing ephedra had reported all the way up to 2002 that they had NEVER received ONE SINGLE report from their customers that their product was unsafe.

When the FDA finally responded, it was found out that the company had actually received OVER 13,000 REPORTS over a 5-year period of adverse reactions to

their products, including 40 seizures, 24 strokes, 20 heart attacks...and 3 DEATHS!

And we're only talking about ONE COMPANY!

By 2003, the number of people who had been killed or sickened by Ephedra had reached over 1,500. Keep in [mind](#) also, that these are only the cases that were "documented" in the United States. The numbers are believed to be even larger than that around the world.

The increase in the supplement's use and in medical problems (and deaths!) caught the eye of the mainstream media, and suddenly Ephedra supplements were not as highly touted as they had been. This provided just the right political conditions for the FDA to finally step in and bring down the hammer and, for a federal agency, surprisingly quick too.

In response to accumulating evidence of adverse effects and deaths related to ephedra, the FDA banned the [sale](#) of ANY supplements containing the now black-listed supplement in April of 2004.

Now regardless of which side of the fence you stand on as to whether ephedra actually poses a health risk or not, the point is that it took nearly 30 years for the FDA to step in and ban it from the market despite initial consumer and medical feedback that there was the slightest potential that the supplement may pose a public health risk.

The lesson here is that when it comes to ensuring that the supplements you're looking to incorporate into your health, fitness, sport, or other training regimen are safe, you CAN'T count on the government to be your watch [dog](#)!

The responsibility is YOURS and you MUST take a proactive role when deciding on which supplements to take.

Yes, it's true that SOME supplements may actually pose a health risk. But it's MUCH more common to find those that are simply scams and provide NO health risks...and NO REAL BENEFITS either!

Now, that being said, there ARE supplements that do make good on the promises and have benefited thousands of bodybuilders, athletes, [weight](#)-loss enthusiasts, weigh-gain seekers, etc...you just need to know how to find them by navigating the landmines that the sneakiest of supplement companies leave behind in order to lure you into wasting your [money](#)!

And that's where we're headed next!

In fact, it's time to take you into the back rooms of the supplement companies' production and [marketing](#) "war rooms" and pull back the curtain to expose some of the deceptive practices that I, and probably YOU, have fallen prey to in the past.

The following chapter will look at the ways in which these companies exploit the loopholes of the federal regulations, as well as the [methods](#) they employ to get people to buy their products.

I'll also give you some tips on how to avoid falling for these tricks and how to make smart decisions on which supplements to buy.

Chapter 4

Sports Supplements Marketing Secrets...EXPOSED!

A Word From The "Muscle Nerd"...



"Ok, before we get started, I need to offer you a 'word of warning'..."

You may have already said to yourself...

'Yeah, yeah...I get it! Supplement companies use marketing hype to sell their supplements. I can just skip on over to the "recipes" section and start blasting out my own potions!'

Lemme tell ya...that would be a BIG MISTAKE!

Knowing that advertisements are created in a way to get you to buy is NOT the lesson here. That's old news.

What IS important is that you understand HOW these companies pull the wool over consumers' [eyes](#) so you will develop an impenetrable force field around your wallet because certain elements of their [advertising](#) will reach out and grab you by the throat, sending up red flags that calling the 1-800 order number would lead to a big waste of money!

In other words...

Do NOT skip this next section thinking you 'already know supplement companies are deceptive! This is the MOST IMPORTANT section in the book and reading every word will ensure that you are well-equipped with the knowledge needed to avoid falling victim to these tactics ever again!"

While it should be no surprise that some supplement companies are better at **MARKETING** than actually producing supplements that work, the fact is that even armed with this basic understanding, consumers **STILL** are more than willing to have the [money](#) sucked out of their wallets with the promise of a quick solution to their fitness frustrations.

Despite 99% of supplement users agreeing that MOST of the supplements they've purchased had limited, if ANY, real effect on their [muscle](#) gains or [fat](#) losses, [sales](#) continue to soar and these same consumers admit that they continue to try the latest and greatest new "discovery" in the hopes that THIS will be the one supplement that will FINALLY work!

The lesson here?

It doesn't matter how SMART you think you are...good advertising copy could sell hot pink tube tops to a church choir group...on the way IN to the congregation!

NO ONE (including myself) has a bulletproof force field against fraudulent claims because deep down inside we just know that new discoveries are being made all the time and it's possible that the supplement CAN actually stand up to the claims.

But while you MAY have a basic education in deceptive [marketing](#) practices used by supplement companies...I'm about to hand you your MASTER'S DEGREE and provide you with the "insider" knowledge that will make sure you are NEVER fooled again!

Here are the "[Top 10 Deceptive Marketing Strategies](#)" used by supplement manufacturers...

A Word From The "Muscle Nerd"...



"Oh, and since I'm already running the risk of upsetting a lot of people, many of the explanations below will include fictitious names and products.

We wouldn't want to make any *enemies* now would we?"

Deceptive Marketing Strategy #10: "Third Party Research"

Let's use a "dummy" supplement company we'll call "Muscles, Inc.". And let's say that Muscles, Inc. has developed a supplement that will help speed up your metabolism and burn fat through a natural form of Methox-Crypto-X (a dummy supplement made by a dummy company).

This natural form of Methoxy-Crypto-X that Muscles, Inc. has created has been tested by the company and been found to be inferior in quality and not work all that well. However, the PURE form of MCX has plenty of scientific research which proves that it can speed up the metabolism and help burn [fat](#) if taken at mega doses.

Now, [Muscles](#), Inc. has spent a great deal of time and energy into developing this product and they really want it to sell.

Well, it would be a waste to not still try and make a [profit](#) from Methoxy-Crypto-X so Muscles, Inc. takes the research that was done on the pure form of the compound and passes it off as its own. Included with their commercials are phrases, such as “Our scientific research has proven Crypto 100% effective.”

Visitors to their [website](#) can read the results themselves; however, unless they're well educated in the field of scientific jargon, they may not have a clue what they're looking at.

If no scientific studies exist for a supplement company to rip off, they have another option. This option has gained popularity over the last few years, and just happens to be one of those loopholes I talked about in the last chapter.

This option is dangerous, and becoming even more so because more and more supplement companies are climbing on to the bandwagon. What some companies are doing is hiring a person or company which is unconnected from them to write brochures and press releases that promote the benefits of their supplements, whether they are true or completely false.

This material then gets passed on to the sales people and store where the supplement companies sell their products, where the material is then used by stores and their employees to help sell the products.

Now your probably thinking, “How is it that they can get away with promoting completely false material? After all, the DSHEA made it illegal to do such a thing.”

Yes, it did. However, it made it illegal for the supplement companies to do it, not for other people; thus, the loophole. By hiring a company that is unaffiliated with them to write their [promotional](#) material and disseminate it, the supplement company is avoiding breaking the law themselves.

Deceptive Marketing Strategy #9: "Special Delivery Mechanisms"

"Special Delivery" [methods](#) of "super supplement-transportation" include such techniques as "Liquid Delivery" or "Effervescence" to attempt to somehow create a red-carpet path directly to where we need the supplements to go.

"Liquid delivery" quite simply may just mean that the capsules contain any type of oil (mainly [cooking](#) oils like sesame or canola) or in some cases, more beneficial ingredients like conjugated linoleic acid (CLA) or fish oil.

But as far as the ability for these ingredients to somehow be more readily absorbed simply because they're in a "liquid" state...well...hmmm...didn't we all learn in high [school](#) biology class that our food gets dropped smack dab into our stomach right after swallowing...which is filled with digestive [juices](#) that are, well...LIQUID?

Our stomach acids and digestive system don't discriminate. They will churn up and break down pretty much anything we throw at it so trying to disguise a supplement as "super-charged" because it can somehow throw on a "bullet proof" coating or special delivery mechanism doesn't mean it's shooting into your bloodstream at breakneck speed.

Now there ARE ways to better prime the body to assimilate certain nutrients and supplements better...but sticking it in cooking oil or making it "bubbly" ISN'T going to do it.

Deceptive Marketing Strategy #8: "Customer Testimonials"

Just because someone says it's so, does not mean it is actually true. Supplement companies egregiously fill their ads up with testimonials by people who claim to have used a product and had great success.

"I lost 10 pound in 10 days!"

"I lost three inches off my waist in one week!"

But here's how this deception REALLY plays out...

A friend of mine (I'll call here Lisa) is an actress and model. She spends a lot of time in the gym and has a "smoking hot" body that most women would kill for.

One day her agent calls her up and says that he may have a fun project that she would be perfect for...

He tells her that a supplement company is looking for a fit, gorgeous model who would be willing to give up their current diet and exercise program for a short time in order to “bulk up” here waistline and then get back on her training regimen while popping their pills.

“And here’s the best part...” Lisa’s agent says.

“They’ll pay you \$10,000 for the gig!”

“Hmmm...” thinks Lisa, “10,000 smackers to drink beer and eat nachos while I do nothing but watch Oprah re-runs? Where do I sign?!”

So Lisa spent a good month and a half in her pajamas, renting movies and going on a fast food binge in order to pack on a good 15 extra pounds...enough for a good “before” picture at the studio with pasty white [skin](#), a frustrated sad look on her face, and “morning hair”!

Then (though it was difficult to make the switch), she was back in the gym and eating cans of tuna and drinking water like a fish to magically erase the extra flab she had put on, all the while popping a few meager pills supplied by her “employer”, the supplement company and following the advice of her personal [trainer](#).

In the end, she quickly lost the [weight](#), shot in to the studio for a quick spray tan and an “after” photo...and a few months later she was posted in the fitness magazine with her amazing makeover crediting the miracle pills that had “changed her life”!

A Word From The “Muscle Nerd” ...



“Of course there was a little, barely readable, disclaimer in fine print down at the very bottom of the page that read,

‘Results may vary. Used in conjunction with a well balanced diet and exercise program.’

More on this in a bit...”

Other companies, rather than pay people to lie, will actually use testimonials from people who really have used their supplement...but then use PAID MODELS or

even STOCK PHOTOGRAPHY as added images next to the testimonial allowing YOU to assume that it came from the model him or herself!

And what about the validity of the claim itself?

If I write to a company and tell them that I gained 30 lbs of muscle using their supplement, then they can legally use that testimonial any way they wish without questioning the accuracy of my claim.

Unless you've been living under a rock the last ten years, you know that nobody can lose that much [weight](#) or pack on that much muscle without eating a healthy [diet](#) and exercising regularly—NOBODY!

Did the supplement actually contribute to the [fat](#) loss or [muscle](#) gain that the testimonial claims?

Maybe.

But what shape were the subjects in BEFORE they began training (and using the supplement) and to what degree did the supplement contribute to the changes vs. the changes to diet and exercise program?

If that question can't be answered, then the testimonial is practically worthless!

And finally, we have the industry favorite...

Pay a steroid-pumping pro bodybuilder gobs of money to hold up your "natural" supplement and claim that it allowed them to achieve the hulk-like, shredded proportions that grace the full page ad.

This is outright the most deceptive practice of all...and the most widely used!

You see, just like many sports (outside of pro competitive ones such as [football](#), basketball, and [baseball](#)), pro bodybuilders really don't make all that much money from the actual contests they compete in. Certainly not enough to make a fair living AND support a grocery shopping list that could feed an Overeaters Anonymous convention.

They make their money through sponsoring supplement companies who pay for their training, [food](#), steroids (?), and of course, supply the natural supplements they produce.

Who can REALLY blame the pro's who fall into the sponsorship trap?

I mean, as unethical as it is to allow their name to be used for promoting products they don't necessarily have faith in, EVERYONE has to make a living and pro bodybuilding is a VERY expensive sport to compete in!

A Word From The "Muscle Nerd"...



"Many find it hard to take on regular 9-5 jobs and STILL have enough time and resources left over to dedicate themselves to the disciplined lifestyle that this [sport](#) requires.

Hell, former Mr. Olympia, Ronnie Coleman, was a beat POLICE OFFICER and despite long hours chasing down bad guys (I feel sorry for the bad guys!), he STILL had to find time to train and follow a strict contest diet while trying to avoid the hypnotizing tractor beam of the local Dunkin' Donuts!"

But when it comes to using testimonials for advertising, the law is pretty clear (though not always followed).

If a testimonial is being given by a person who has been PAID to give it, it must be made clear in the advertisement. Some supplement companies might have "Paid Endorser" at the bottom of the ad or say something like MY favorite, "Individuals shown have been 'remunerated'." Webster refers to that as "PAID". I had to look that one up!

Also, this disclaimer is usually so tiny and may even be blurred or blend in with the background that it is virtually invisible to the casual reader and never even be read. And of course, some companies ignore the law and don't include this information at all.

The law also applies to testimonials that are given by people who achieved results using a supplement but did so in conjunction with exercise and [diet](#). This MUST be made clear in the ad, but again...PLACEMENT of this information is not dictated and is likely to either pop up in small letters at the bottom of the page or in many cases...completely omitted on purpose.

Thus, a good rule of thumb here is to never believe the claims made in an advertisement. Does this mean that all advertisements are false and misleading? No. It just means that you should always make sure and get a second opinion about a product from sources with no financial connection to a supplement before making a purchase. We'll discuss this more in the next chapter.

Deceptive Marketing Strategy #7: "Deceptive Word Use"

Deceptive word use is used by all companies in their advertising in order to get people to buy their products. However, it just happens to be more dangerous when it comes to supplements.

Here are some common words that are used to mislead people into buying supplements:

Example: "Helps" promote muscle growth!

Translation: A lot of stuff helps...such as the remote control, toilet paper and the jock strap. Big deal, so your product "helps." Just because it claims to, doesn't mean it does. Unfortunately, some disappointed hardgainer will see an ad, and hear or see these words and head to his nearest GNC to give away his money.

Example: "Virtually" increases metabolism!

Translation: When my son says, "I'm virtually finished with cleaning my room," it means that he's not finished. "Virtually" means the same as "almost." So if you replace virtually in the sentence above you get: I'm almost finished with cleaning my room. Thus, when a supplement claims to "virtually increase your metabolism," it is the same as saying it can "almost increase your metabolism." Essentially, the product can't!

Example: "New and Improved" formula to help you reach your mass gaining [goals!](#)

Translation: Most kitchen and bathroom cleaners are new and improved. And you know what else? While you can buy the new and improved product, you can also buy the original product. I always wonder that if the new and improved product is supposed to be better, then why in the hell can you still buy the original product?

You have to apply this logic a little differently when considering supplements. Is their supplement new? Maybe. Of course, the market is so flooded with supplements it's almost impossible to create something that is solely "new" and unheard of in the industry.

Is the supplement improved? Again, maybe, but maybe not. Again, you have to be aware of this when you encounter advertisements. And as already mentioned, in the following chapter I'm going to provide you with tips and guidelines to avoid falling prey to this type of advertising ploy.

Example #4: “Works Wonders” for reducing muscle fatigue!

Translation: I should have trademarked these two words years ago. I’d be rich! Again, this type of phrase is successful at pulling the [money](#) from the pocket of the hardcore bodybuilder. You know, the type of person that seems to have no job and just workout all day, everyday. Just about every gym has one, and rest assured, they’ve tried a product that “works wonders for reducing muscle fatigue.” Don’t believe the hype. If a product truly worked wonders you’d see it talked about within the mainstream media.

Example #5: “Advanced Formula” to help you burn [fat](#) FAST!

Translation: If you think about it for just a moment, the term “advanced formula” doesn’t make any sense. The word “advanced” is so general that it could describe anything. Unless there is legitimate third party research that has proven a product has an “advanced formula” which is successful and better than any other similar supplements on the market, don’t believe the hype.

Example #6: “Revolutionary” ingredients to improve your muscle gains!

Translation: As far as I can tell, the last revolution to take place in [America](#) was in Texas. Look, medical procedures are revolutionary, a self cleaning toilet is revolutionary, but until someone invents a supplement that will make you bulk up while you sit on the couch, the term “revolutionary” is nothing more than an advertising ploy that has been used to death. Don’t fall for it!

Marketing experts call this practice of advertising, “puffery.” The phrases above have several things in common...they are all exaggerations, opinions and generalities, but most importantly, they don’t include ANY SPECIFIC FACTS!

Deceptive Marketing Strategy #6: “Outrageous Claims”

If someone were to invent a legitimate pill that would allow us to live forever and then create an advertisement that said, “Guaranteed to let you live forever,” people would flock to the store in droves.

Now perhaps YOU know that a pill can’t make you live forever, so you’re most likely thinking that there’s absolutely NO WAY someone could fall for such a ridiculous marketing ploy, right?

Wrong!

It's WELL KNOWN in the [marketing](#) industry that there are COUNTLESS people wandering the shallow end of the gene pool that will fall for ANY claim you put in print (especially if it's backed up with charts, graphs, and cartoons).

Want proof?

Next time you're waiting in line at the grocery store, pick up one of the tabloid newspapers that you can't help but notice. You know, the one's with headlines that say something like...

“Woman Baffles Scientists As She Eats Her Own Head”

“Bat Boy Gives Birth To Girl Who Is Half Pig – Half Can Opener”

“Invaders From Mars Are Running Our Government”

(Ok, I'm not so sure about this last one sometimes, but let's move on...)

Now pick it up and turn all the way to the back of the newspaper where the classified section is and see what is being sold...

What do you see?

Here are some actual items that I've seen for sale and they are in practically EVERY issue...

- A “Magic Amulet” that guarantees you will attract the man of your [dreams](#)
- A “Pyramid Pendant” that harnesses the [power](#) of the Pharaohs and will bring you good luck for eternity
- “How To” manuals for ancient rituals that will allow you to curse your neighbors, make you irresistible, and guess what...LIVE FOREVER!

Get the picture? People will buy ANYTHING if it promises them some sort of supernatural results and believe me...the kind of muscle gains and fat loss that are promised in many of the ads you see really ARE “supernatural”!

And so some fraudulent supplement companies will resort to luring you in with tabloid-like promises such as these...

“Takes up to five inches off your waist in five days!”

“Doubles the size of your chest in two weeks!”

“Will make you look like your 20 again!”

Yes, these are mostly exaggerations I've added myself to make a point, but here's ANOTHER observation to make my point...

These statements aren't even CLOSE to some of the REAL ads I found while doing my research! The only reason I didn't print the actual ads I've seen is that I don't need any letters from attorneys inviting me to court for defamation of character!

Suffice it to say that several supplement companies are making claims that are physically IMPOSSIBLE to accomplish!

Although it may seem like common sense, it's important to be aware that if it sounds too good to be true...it typically is.

Deceptive Marketing Strategy #5: “Visual & Psychological Manipulation”

Ok, we've already reviewed the visual hypnosis that takes place when professional models and bodybuilders are used to lure you into believing that YOU TOO could look like them if you'd just call in your credit [card](#) to the 1-800 number at the bottom of the page.

But there are even SNEAKIER tricks at play that you may not even realize!

Let me explain by giving you TWO of my absolute FAVORITE [marketing](#) practices to pick on...

First, we have the “Steroid Association” images.

You've seen them, but you may not have understood the scam that was being laid out.

In essence, whenever we've purchased some sort of prescription [medicine](#) (NOT over-the-counter) at a drug store, the packaging is pretty uneventful.

You know...plain white box...some “medical” terminology like, “Tetra-Oxy-Benzadrone” or something like that. But no flashy colors or marketing material are needed because YOU are not making the choice of whether you need it or not. It’s your DOCTOR who diagnoses your condition and then prescribes the appropriate drug to make you well.

Well, over time, we’ve come to associate this type of packaging with “drugs”, right?

Well, have you ever seen a full page ad in a muscle mag that has a long (usually small print) article-based format along with an image of...yep, you guessed it...a plain white box with black lettering for some “barely legal” supplement with a “medical” name?

The natural assumption for the reader is that this is NOT your ordinary, run of the mill bogus supplement. Oh no...this MUST be a powerful “legal drug” that will give you amazing results without the steroid-like side effects you’ve always been concerned with!

You see, consumers have grown so accustomed to fancy packaging and marketing glitz and glamour that a few companies have begun to take advantage of the “reverse psychology” tactic and offering something that LOOKS different...so it must BE different than the other supplements you’ve bought and were disappointed in.

“GOTCHA!”

And finally, here’s another VERY effective marketing tactic that gets my “A+++” rating for creativity...the “scientific cartoon”!

Basically, this refers to a dramatized representation of how the supplement will benefit your body.

For example, it may show a computer-drawn image of your muscle fibers under “normal” operating conditions...a real “ho-hum” environment where not a lot is happening.

But just look at the drawing right NEXT to it! THIS is what your muscle fibers CAN look like IF you use “our supplement”!

THIS “cartoon” image of the expected results depicts a hotbed of activity happening where before, your muscle fibers were practically snoring away, dreaming of the anabolic environment that only Company X’s “miracle supplement” could offer. The cells are THICKER...the fibers are

GIGANTIC...and there are more hormones passing through the veins than the back row of a drive-in theater!

Deceptive Marketing Strategy #4: "Pricing Perception"

What if you had a spare \$50 bill in your pocket and I showed you two bottles of pills and told you that BOTH of them were clinically proven to stimulate [muscle](#) growth and enhance natural hormone production, except for one difference...

Bottle A will cost you \$5 and Bottle B will cost you \$50...which do YOU think will be MORE EFFECTIVE at providing you with REAL muscle?

Most of you would probably choose the \$50 bottle simply because we've all become conditioned to believe that you get what you pay for. That's why a Lexus doesn't cost the same as a Volkswagen, right?

Same principle goes for supplement marketing. By charging you MORE money, it allows the companies to justify the ads that say this is a new breakthrough that is very expensive to develop and produce...when in fact, it could mainly be made of nothing more than sugar, protein powder, and a sprinkling of a few herbs.

Deceptive Marketing Strategy #3: "The Phony Review"

I have to give this [marketing](#) tactic some [credit](#) for creativity...

These very long "article-like" ads offer you a seemingly objective review of the top supplements in a given category (such as "fat burners"). PRODUCT A is "ok", Product B is a little better, but just wait until you see PRODUCT C!

Product C is clearly the ONLY logical choice because it has proven to provide benefits that Products A & B simply can't cough up.

I mean sure, if you want "ok" results, then A & B will be, well..."ok". But do you REALLY only want "ok" results?

Of course NOT!

Oh, and by the way...the supplement "review" was written by the producers of "Product C" if you haven't guessed.

Deceptive Marketing Strategy #2: "The Ingredient Sprinkle"

This is a ploy used by supplement companies to help give support to the weak claims made on their product's label. For example, let's say Muscles, Inc. has created a supplement that is supposed to promote muscle growth and shorten recovery time between workouts.

However, they don't truly have any interest in helping customers achieve these results. What they really want to achieve is making the most money possible while keeping production costs down.

Since many of the truly effective supplement ingredients are ALSO the most expensive, it's easy to create a formula that is MAINLY cheap "filler" ingredients (such as protein powder, powdered milk, or even SUGAR) and then add a SMALL "SPRINKLE" of one or more truly powerful ingredients that will allow them to [advertise](#) that THIS is what makes their product so effective.

In reality, that small amount of ingredient(s) isn't enough to build up the biceps on a small lab rat, let alone the suckered "hardgainer" that just shelled out 80 bucks for a bucket of complete crap!

And now for the #1 Deceptive [Marketing](#) Strategy used by supplement companies to lure you into their web...

Deceptive Marketing Strategy #1: "The Scientific Name Game"

Now this is by far my favorite marketing strategy to pick on and it actually comes in a couple of forms...

First, supplement companies know that anytime you can create a product name that has an "X" in it or a "-17", you've got a WINNER!

There's just something about saying a word with an "X" in it that makes you FEEL the testosterone surge, you know?

And throw a "X-word" and a "-17" in the same sentence and make sure operators are standing by because the orders are going to flooding the lines!

But here's the absolute BEST (aka – WORST!) deceptive strategy that is the CORE of misleading marketing tricks in this industry...

What if I offered you a bottle of “Alpha-Methylguanidino Acetic Acid” and offered you ABSOLUTE SCIENTIFIC PROOF from HUNDREDS of legitimate research studies that shows this product will...

- [Boost](#) your workout performance
- Allow you to lift MORE [WEIGHT](#) for MORE REPS
- Decrease fatigue
- Increase the actual SIZE of your muscle cells providing you with BIGGER, FULLER MUSCLES
- Maximize protein synthesis
- Minimize protein breakdown, and even...
- Accelerate FAT LOSS

How much would YOU pay for GUARANTEED RESULTS such as any of those above?

Now, normally I would sell this for \$100 a bottle and it's worth it if I can promise you all of these incredible benefits that you will actually SEE IN THE MIRROR within just 7 DAYS, isn't it?

But I'm going to give it to you for not \$80 a bottle...not \$60 a bottle...not even \$50 A BOTTLE!

What if I told you I would let you have this incredible muscle-building, fat-burning breakthrough for just \$39 A BOTTLE?!

Deal?

Oh wait...would it change your [mind](#) at all if I told you that “Alpha-Methylguanidino Acetic Acid” is really just ONE of the scientific names for plain old “Creatine Monohydrate” and you could pick up a one month supply for about \$3.00?

Sucks, doesn't it?!

Supplement labels are littered with vitamins, minerals, worthless herbs, plants, roots, bark and even SPICES that have been given their medical or scientific name because it “sounds” drug-like.

And ANYTHING “drug-like” has to be effective, right?

A quick search within a medical dictionary or online medical database will reveal the true identity of most of these terms...so do your homework BEFORE you buy!

A Word From The "Muscle Nerd"...



"Hey, even the Muscle Nerd falls for this trap now and then..."

5 months ago, I purchased a new "testosterone booster" from a reputable company for \$43 a bottle. The only ingredient they told me about over the phone sounded scientific enough though I couldn't find it in any of my research documents or [online](#).

When I received the bottle and finally was able to research the true ingredients, I discovered that what they had sent me was a bottle full of capsules containing nothing more than BLACK TEA!

Now, if it were true that black tea could 'skyrocket' testosterone levels, I think all the men in China would look a lot more like Arnold himself, don't you?!"

So what are you to gather from everything I've shared with you so far?

That supplement companies are the "bad guys" and their supplements are all scams?

No...I don't believe that or I wouldn't be testing them out myself.

But unfortunately, if you really want to venture into the area of supplementation, you have to go in first ASSUMING that the company you're about to order that "fat furnace in a bottle" from is pumping outand that goes from backroom independent manufacturers to the LARGEST of marketing monsters.

When it comes to getting my pockets picked with the promise of the latest cutting edge 'pharmaceutical advancement', it's best entered with a 'guilty until proven innocent' attitude!

So, how DO you tell the "good guys" from the "bad guys" when it comes to reputable supplements that WILL help you achieve your goals?

Well, now that we've discussed many of the popular [methods](#) untrustworthy supplement companies use to lure you into a 30-day supply of crap...let's look at some ways in which you can keep from being scammed ever again...

Chapter 5

The Good, The Bad, And The Ugly... And How To Tell The Difference!

You want to remember that your [health](#) is extremely important to keep in mind when searching for a credible bodybuilding supplement. We've already seen from past case-study how mislaid trust in the supplement industry has caused some people not only SERIOUS health problems...but in some cases, even DEATH!

A Word From The "Muscle Nerd"...



"I don't want to be overdramatic here, but the fact is that you ARE messing with some very fragile bodily functions!

When considering messing around in areas within the body that have natural protection mechanisms in place, do you REALLY want to trust some company you don't know that they have YOUR best interests in [mind](#) when designing, producing, and [MARKETING](#) a product they hope to drive [millions](#) of dollars into their pockets?

Of course not!"

You must remember however that the vast majority of supplement companies, even if they're producing substandard supplements when it comes to RESULTS, aren't bold enough to face multi-million dollar lawsuits from having people get sick from using their products.

However, an ounce of prevention goes a long way and you have to take the time to research a product to see if it's worth turning yourself into a human Guinea Pig BEFORE you pick up the phone to order.

And the following checklist will help make sure that you've done the proper research and are ready to make an educated decision on whether a specific supplement is for you or not...



Research The MANUFACTURER For Legitimacy

A reputable supplement company will use either an FDA licensed or “cGMP” (Current Good Manufacturing Processes) approved manufacturing company to distribute their products. To find out if this is the case, all you need to do is make a simple phone call to the supplement company or send an email and ask.

If you have difficulty finding contact information or get bounced around from one person to the next on the phone, or are refused that information, then assume the worst and don't buy the product. Any reputable company will stand firmly by its products and provide a means of communication in which to answer the concerns of customers and potential customers.

Oh, and if you should happen to call a company number and they answer it with a simple “Hello?” and you hear a television and a dog in the background...it's a pretty good bet it's a “back bedroom” manufacturing company set up in someone's house.

Hang up!



Look For ACTUAL RESEARCH To Back Up Claims

When it comes to claims of “scientific research” conducted on a company's supplements, make sure they come from CREDIBLE sources and actually address the supplement itself.

Often times, it's left for the consumer to assume that the claims made in an ad are actually based upon 3rd party scientific findings when in reality, it could all be based upon “internal” research and testing.

“Internal research” could be as simple as letting the staff take the supplement and add it to their supplement mix for a few weeks or months and provide feedback on their gains or losses (“hmmmm...should I tell the person who writes me a paycheck each week that this product sucks...or should I tell him my testosterone shot through the roof? Tough choice!”).

Other times, studies are done by third party research teams but are funded by the supplement companies themselves...and it's no secret to the researchers. This always presents the problem of influencing the outcome and interpretation

of the results of the testing (and trust me...it's LARGELY about the "interpretation"...not just the scientific measurements themselves!).

One other problem exists that is easy to overlook and assume is a credible testimony to a supplement's effectiveness...scientific references!

These are the little postscripts you'll see next to a claim for a "proven" benefit of a supplement and it looks something like this:

(Journal American Medical Association, 295:234-2243, 2006)

At first glance it looks like it's the scientific proof that the supplement does everything it says it does. After all, do YOU want to actually thumb through medical journals to go and check the references?

Me neither...but I do it! And you know what?

Oftentimes I find that the reference has very little to do with the MAIN INGREDIENTS of the product and more to do with one of the "SPRINKLE INGREDIENTS" that are added to allow them to claim that the product will help you achieve the same benefits.

Or...

The findings WERE attributed to the main ingredient, but the actual tests were done using MUCH greater quantities than that supplied by the recommended dosage on the label of the supplement you're buying. In fact, sometimes the amounts used in scientific research amounts to MEGA-DOSES of individual supplements!

What you're looking for is INDEPENDENT 3rd party research that is thorough and specific in type and quantity to the main ingredients in a supplement you're looking to buy.

Findings should also be based upon what is called "double-blind placebo-controlled [study](#)."

In these types of experiments, one group of subjects receives the "real thing"—the active substance being tested. The other half receives a placebo designed to appear, as much as possible, like the real thing.

None of the participants either of the groups know whether they are getting the real treatment or placebo (they are "blind"). Furthermore, the researchers administering the placebo and the real treatment are also kept in the dark about which group is receiving which treatment (making it a "double-blind" experiment).

A Word From The “Muscle Nerd”...



“This last part is important, because it prevents the researchers from unintentionally tipping off the study participants, or unconsciously biasing their evaluation of the results. ”

The purpose of this kind of study is to eliminate the “power of suggestion”. Yes, though it may surprise you, people given *placebo* (fake) treatments often report dramatic changes or improvements in their symptoms. However, if the people in the real treatment group show significantly better results than those in the placebo group, it provides a much stronger case that the compound actually works.

Companies should allow the findings of the research to be published and publicly accessible to anyone, no matter what the outcome of the research. Make sure that you don't fall for research that was conducted by the supplement company themselves. This is often referred to as in-house research. If you hear this mentioned by a supplement company, then it's best to assume that the findings were slanted toward helping the company overstate the benefits to coincide with the product's label.



Do Your OWN RESEARCH

Remember Biology and Chemistry “Lab Class” back in high school?

We all stood around tables dressed in nerdy lab coats and safety glasses holding beakers of God knows WHAT kind of potentially lethal chemical compounds.

Each lab experiment had a purpose, a procedure, and a result that we had to eventually write a report on to note our observations. How well we conducted our experiment and interpreted the results determined our “grade” and standing in the class

Well for some people...”lab class” never ended...

In research facilities and Universities all over the world, there are doctors, scientists and students who are trying to claw their way to a respectful position in

their field with the latest ground-breaking medical, performance, or nutritional discovery.

Just like in our lab class, when a study is completed, the researchers compile all of the information on the goal of the experiments, the procedures used, how results were measured, the actual measured results, and their interpretation of those results in relation to the goal of the experiments.

This documentation is important for researchers because it helps them continue to receive funding for their research (so the funding universities, agencies or alumni see that people are actually WORKING in the lab) but also so they can earn respect among other scientists in their field.

Well now, thanks to the wonders of the internet, we have a virtual ocean of information to tap into regarding scientific research conducted using supplementation as these findings are posted on credible information-based [websites](#).

You can simply visit one of several websites that allow you to “search” through all of their posted research and read the REAL evidence reported on supplementation.

This works in your favor in a couple of ways...

One, you can simply type in a supplement name and hit the “Search” button.

This will result in page after page of research done that included that specific supplement, each paper will have the title listed, the date, the researcher, and usually a short summary of the findings or extracted text using the term you searched for.

Simply browse down the list of titles until you find one that appears to relate to your goals (e.g. – muscle building or “hypertrophy”, fat loss or “lyposis”, etc.) and read the findings for yourself!

A Word From The "Muscle Nerd"...



"Now don't be too worried that you won't be able to understand the contents of the research paper. Typically, scientists don't have a lot of time to read page after page of a bazillion scientific papers either.

Each research paper should begin with a "Summary of Findings" that will allow you to get the basic understanding of what the results were and the researcher's interpretation of those results."

And here's the SECOND way your newly found research ability can help you...

When you see a scientific reference listed as support for a supplement's claim to fame...check out the actual report!

By searching for the specific paper the company had quoted (their reference should state the publication it came from, the title of the paper, the researcher's name, date, etc.) you can see if their statements are taken out of context, or hold any scrap of truth to begin with.

Supplement companies know that 99% of their customers will never check up on them...so check up on them!



Look For COMPLIMENTARY Training Information

Any supplement company worth their salt knows that ANY supplement can't work at achieving any kind of results without the aid of a proper diet and exercise program. You now know that this is impossible.

Although it's not a requirement (after all, it's not really the responsibility of the company itself), a supplement manufacturer will actually WANT you to succeed with your bodybuilding or dieting efforts and so provide you with information on how to eat and train right so you can make the most progress using their compounds.

Yet most are simply happy sending you a bottle of pills and letting you loose to try and figure it out for yourself.



Look For A MONEY-BACK GUARANTEE

Sounds impossible, right?

Well, it's not. You may actually find a few ads that offer a guarantee on their product and if you DO, then that's a good sign that it will be worth a test.

But you have to be VERY careful...

Supplement manufacturers know that the VAST MAJORITY of their customers are training ineffectively and eating incorrectly so their supplement won't likely benefit them at all...even if IS as effective as they claim.

So why then would they offer a "money-back guarantee"?

Well, they also know that most people are too lazy to take the time to box the now empty bottle of pills up...bring it down to their local post office...stand in line for an hour or so...pay the return postage (and insurance just in case the package mysteriously gets "lost") to send it back...and then wait another 4 weeks to receive their \$50 check from the supplement company. I don't know about you...but time is my biggest commodity and it's just not worth it to me to send it back.

So the reality is that most people, even after finding that the supplement was worthless (or didn't work for them because their training program wasn't sound enough to warrant adding supplements to it in the first place), won't return the product anyway and the supplement company will make FAR greater sales just by offering the guarantee compared with the number of refunds they'll have to process.

Now, that being said, there IS actually a trend that could truly benefit you and allow you to safely test a supplement without having to risk any money...

There are now a few retail supplement centers that offer full money-back guarantees on ALL of the products in their store regardless of your reasons why or the brand you buy!

One that I know of locally is the "Vitamin Shoppe", a national chain with very good prices, their own in house brand of pretty good quality supplements, and best of all...a KILLER return policy!

My local store allows me to bring back any one of their products (even if EMPTY!) and get a full refund if I feel it didn't work.

Now, isn't it MUCH easier to return a half-used bottle back directly to a store and immediately have your money returned to you as cash in your hand?

A Word From The "Muscle Nerd"...



"I routinely buy the best products on the market when they come out, test them for a 6-week period, and if they don't do what they claim they do, I simply go back to the store and hand them an empty bottle!

How often do I return items that didn't provide measurable results? Well, let's just say that they now know me by my first name!"

So here's what you need to do...

Contact YOUR local [health](#) food stores and supplement retailers and ask them about their return policy. Specifically, ask them if you buy a supplement from them and it ends up not working for you, will they accept an empty bottle and return all of your money.

And don't leave out the local "Mom & Pop" supplement retailers either...they may very well agree to these terms or already have them in place in order to compete with the "Big Boy" supplement chain down the street!

If you see an ad for a supplement that offers a "money back guarantee", look around the page for the fine print or visit the company's website. Most of these companies have a terms and conditions link on their [website](#) which explains how the "guarantee" works.

It may be written in legalese, but if you take the time to read and understand it, even if you have to do so with a dictionary by your side, then do it. You want to look for any wording that lists reasons for not getting a refund, or which lists the only reasons a customer would be entitled to a refund.

If you don't find the information you're looking for, then contact the company directly or your local health [food](#) store that carries that product and inquire about the policy.

A Word From The "Muscle Nerd"...



"You can take the same approach when you see an ad that says "Guaranteed Results!" I've seen this 'buyer's hot button' spread across supplement ads in magazines yet nowhere does it say what 'guaranteed' means!

Find out what it means!"



Look For A Willingness To Answer Questions

Here's a general rule of thumb about reputable supplement companies...they have nothing to hide!

In fact, reputable companies are generally bursting with excitement to answer any questions people might have about their products.

These companies have real people who answer the phones and who can answer any and all concerns. They are also easily accessible by email and promptly respond. Never hesitate to ask any questions you feel are pertinent. If you're given any answers that are unclear then ask for clarification, and continue to do so until the answer makes sense.

If a company won't do this, then don't give them your money. Nine times out of ten you'll be wasting it.



Look For CREDIBLE Advertising Practices

Here's an old adage to keep in mind when you see an advertisement for a supplement product: if it sounds too good to be true, then it probably is. As mentioned already, most advertisements are designed to manipulate people to buy what they are selling. There's nothing wrong with this...as long as you can back up what you claim!

A Word From The "Muscle Nerd"...



"If you visit any of my [websites](#), you'll notice that yes...I market fitness products. You'll also notice that I use language that gets you excited about the potential of my programs and how they may benefit you.

But you'll ALSO notice that I back up everything I report with real evidence and with REAL results.

For example, if you go to www.optimum-anabolics.com, you'll see REAL 'before & after' photos or REAL people who have used the program successfully. These aren't 'paid models' or 'pros'...these are just your 'Average Joe's' (and 'Jane's') you see busting their [butt](#) right along side you at the gym!"

It's generally fairly easy to spot those ads that are flat out LIES. These are the ones who make outrageous claims that seem too good to be true, such as "gain 20 pounds of muscles in ten days," or lose "ten pounds in three days."

On a subconscious level we know that these types of results within such a short time are impossible; however, the advertisements lead us to believe that this is a new product that is revolutionizing the industry. Unfortunately, revolutions don't happen overnight. Credible supplement companies know this and don't use such outlandish language in their advertisements.

A Word From The "Muscle Nerd"...



"Okay, so now you have some strong guidelines to follow when trying to decide whether to trust a supplement company. When it comes to ingesting a product that is not regulated by the government, it is always safe to err on the side of caution before running to the supplement store to pick up the latest "revolutionary product".

Before we move on, there is one last tip which bears mentioning..."

Just because a company sells ONE product that has proven credible and successful for you does not mean that ALL of the products they sell will do the same. In between the good supplement companies and the bad supplement

companies, are those which are wishy-washy, meaning that some of their products may work exceptionally well...while others are complete failures!

Do your homework and you'll never be outsmarted again!

A Word From The "Muscle Nerd"...



“Ok, so now you’re a ‘brain-iac’ when it comes to deceptive [marketing](#) practices and avoiding the booby-traps that lay in wait as you try to develop your own customized supplement program.

It’s time to start showing you HOW to begin creating your OWN supplements and saving GOBS of money!

And it all starts with putting together the right ‘tools’ for the job...”

Chapter 6

Building Your Home-Based “Supplement Lab”

We’ve covered a lot of ground so far and you’re probably wondering when we’re going to get to the “good stuff”.

Well, in order to begin making your own personal “supplement line” to compliment your training program, you first have to have the right “tools”.

Now, we’re NOT talking about any mechanical mixers or conveyor belts passing through your living room, but to be fully prepared, you will need to take inventory of some helpful gadgets and see what you may already have around your home and what you need to purchase to get your “lab” ready.

The initial price of starting your own “supplement lab” won’t cost you more than anywhere from just a few bucks to about \$75 or \$100 for a complete setup depending upon your needs.

A Word From The “Muscle Nerd”...



“This is chump change when you consider how much [money](#) you’re going to save in the long run, as well as how much control you’re going to have over the quality of your own supplements.”

We’re going to go over this list of equipment right now. I’ll explain it to you as we go and even tell you where you can find it. I should also mention that these are in no particular order of importance, but as you begin to decide upon which recipes you want to experiment with, start taking notes of which of the following equipment you may need to complete your project...

[Gelatin Capsules](#)

Many of the pills you purchase these days are powdered ingredients within a gelatin “capsule” for ease of use and packaging. For the SERIOUS home supplement lab, encapsulating your powder supplements is a true sign that you mean [business!](#)

These harmless little “containers” come in several sizes and are great for those people who can’t stand the taste of some supplements (and believe me, there are some out there that taste like the soles of a truck driver’s workboot...um...if I had to guess what the sole of a truck driver’s work boot actually tasted like of course).

They’re also great for those who want the convenience of carrying around “pills” instead of little [bags](#) of white powder everywhere (which if you get pulled over for speeding, could end up with a full body cavity search down at the local police station).

The capsules are made of a degradable, natural substance that breaks down and disintegrates once it hits your stomach (or any liquid), releasing its contents into your body.

Empty gelatin capsules can be purchased very inexpensively in bulk, especially if you browse the internet for deals. You can easily find and purchase 5,000 gelatin capsules for as little as \$50 bucks...quite a nice savings when you consider what some of your supplements are already costing you and how long these capsules will last you. My suggestion...split the cost with a friend or two!

Now, these little wonders come in all sizes so you’ll want to make sure you get the right size for the recipes you want to try. Below are the sizes you’ll order by and the volume they hold...

Gelatin Capsule Sizes And Measure		
Capsule Size	Content In Grams	# of Capsules To Equal 5 grams
000	1.2	4 Capsules
00	1.0	5 Capsules
0E	.8	6 Capsules
0	.7	7 Capsules
1	.5	10 Capsules
2	.4	13 Capsules
3	.3	18 Capsules
4	.2	25 Capsules

Your local vitamin store should carry small packages for home use, but this won't be as cost-effective.

Here are a few potential suppliers for you...

www.capsuline.com

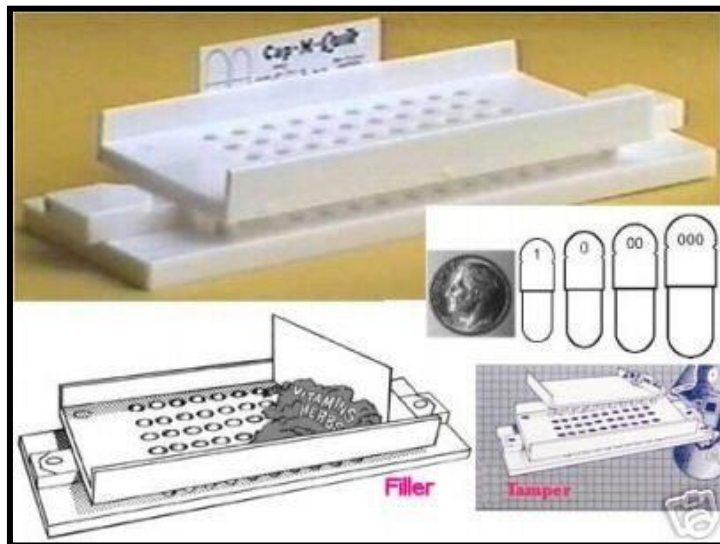
www.wonderlabs.com

Capsule Filler

Unless you own a tiny leprechaun with steady hands, you're going to need a capsule filler.

I've tried filling these little babies before and TRUST ME...it's not easy!

Again, the Internet is a great place to shop for a small capsule filler that will allow you to quickly and neatly fill any size capsule in just a few minutes.



You can find one that allows you to fill anywhere from 15 capsules to one hundred capsules at one time very quickly.

Those looking for MASS production can fill many more...but we're talking about your own personal small-time operation here for your own use so a 15-count filler should do you fine. Don't be lured into buying the larger contraptions.

Some possible places you can find this equipment are at:

www.capsuline.com (has a short video demonstration showing how to fill capsules)

www.cap-m-quick.com (also provides animated instructions on their [website](#))

Capsule Tamping Tool

The Tamping Tool (Tamper) is used to pack down the contents of the capsules you've filled so you have the right measurement and make sure they are filled completely.

A personal "tamper" will run you about \$7 at www.cap-m-quick.com

A Word From The "Muscle Nerd"...



"Personally, I don't use a capsule-filling gadget. I just **shoot** my supplements mixed with about 5 tablespoons of grapefruit juice like a shot of tequila and bear the disgusting taste that many of them have.

But if you want to go the capsule route, my suggestion is to buy a complete kit in the 00-Size. Cap-M-Quick has a package with the capsule filler, tamper, and 500 empty gelatin capsules for under \$30!"

Pill Splitter/Crusher

The situation will arise when you'll need to either split a tablet (to take half of it) or crush it to mix it into a beverage or with other supplement powders.

Now, being an avid gym-monkey, your basic option is to use brute strength (actually, my 5-year old can do it) and use a **knife** to split it and to crush it into a fine powder, just place the tablet between 2 tablespoons and grind away (both spoons need to be facing up so that the pill is IN one spoon and crushed with the **BOTTOM** of the other spoon).



But for just a couple of bucks (around \$5), you can pick up a plastic "pill splitter/crusher" that does the job very quickly and neatly.

Here's where you can pick one up cheap...

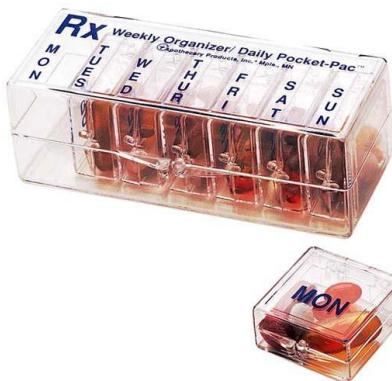
www.store.nationalsupplementcenter.com

www.vitaminshoppe.com

Pill Organizer

These are also often referred to as “pill boxes” and they’re not just for your Aunt Gertrude’s menopause medication anymore.

Let’s face it...it can get confusing trying to keep [track](#) of which supplements we are supposed to take on any given day. You’ll no doubt often find yourself looking at your “fat burner” on Tuesday, scratching your head trying to remember if you took it on Monday. With a pill organizer you can avoid this confusion by filling up a week’s worth of supplement pills you’re taking and just popping that day’s contents



You can pick up a 7-day organizer for as little as \$2-3. My favorite is the one shown to the left that allows you to pull out an individual day’s compartment for taking to work, the gym, etc.

It will cost you less than \$10 at www.diabetesandmore.com

Here’s another supplier...

www.healthaccessories.com

Measuring Spoons

This is pretty self-explanatory. You can buy whatever measuring spoons you like; however, make sure that you know your metric conversions since most supplements are mixed in grams.

Don’t know how to do this? You can always [consult](#) your kid’s algebra book or you can use www.onlineconversion.com which can convert almost any measurement you can think of.

A Word From The "Muscle Nerd"...

"Here's another tip...



Hold on to all of those little "scoops" that come with some powdered supplements like creatine monohydrate. These are usually equal to 5 grams (about 1 teaspoon), a common ingredient measurement with supplements, and provide a simple way to measure out powders."

Measuring Cups

These are just the plastic kind your mom used when baking.

With some of the [recipes](#) you'll find, you'll be mixing larger quantities of powders. Measuring cups will keep you from looking like a fool trying to spoon out 127 tablespoons of an ingredient.

You'll find these right next to the measuring spoons at your grocery or mega store like WalMart or Target.

Sifter

Yes...the same metal "screen" type sifter mom used to make the crust for her apple pie. These are great for completely mixing up powders evenly and come in a small hand-held version, or my favorite, a "screen bowl" version that holds a lot more ingredients.

You can again find this in the baking section of your local grocery or mega store like WalMart or Target.



Funnels



No, don't go to the basement and pull out your old funnel you used for "keg stands" in college.

Just pick up a small assorted set of plastic funnels from your local grocery store or chain mega store. You're going to need these for filling up your supplement containers in some of the [recipes](#).

You want the ones that vary in size (you can usually buy them as a set), but most importantly you'll need a very small one for filling up small bottles with some of the liquid recipes you'll receive in this course.

Hand Blender

A small hand blender will only cost you only about \$10 at your local department store and you may even find one at your grocery.

These are great gadgets for keeping at work and blending up a mid-morning or mid-afternoon protein shake.

You can buy the kind that you insert into a glass to mix it up, but my favorite is the single-size blender you see to the right. It pops off the base and becomes a portable cup so you can just blend and go!



3oz. and 5 oz. Glass or Plastic Bottle (w/screw top)



You'll need a few small glass or plastic bottles or vials like the ones you see to the left.

They don't need to have the "dropper top" on them but I find this useful for using as a "mixer" for some of my own recipes I'll share later.

If you can't find these at your local drug store, do what I did...

I went to my local health [food](#) store and found the cheapest liquid mineral complex or herb in the size bottle I wanted. Take it home, pour out the contents, and just use the bottle.

Small Plastic Containers

These small containers are great for carting around protein powders or other “on-the-go” powdered supplements like creatine monohydrate, glutamine, etc.

You have a couple of effective options here from my experience...

You can purchase a few small food storage containers (1/2 cup or 118 ml size) like the one to the right. These work best for carrying protein powder when you don't want to worry about a bag ripping or for “supplement shooters” as I described before where you mix up some powder with a little grapefruit [juice](#) and “shoot” it like it was happy hour.



Your other option, if you need something smaller, is to use a spare 35mm film case from a camera (the black thingies the film comes in at the store). These also work well for low-budget pill containers!

Zip-Lock Bags

These are listed just as an alternative to the plastic containers if you prefer them. They may prove easier to find, and may be even cheaper, but the choice is yours.

The one problem is that you may open up your gym bag, purse or briefcase to find your pen broke through the bag and you now have protein powder all over the [sales](#) report that's due in 5 minutes.

Very small bags may work well as “pill containers” that you can fill up ahead of time (similar to the “multi-paks” you see for sale from supplement companies), but I still prefer the 7-day pill containers.



Small Cooler and Ice Pack

Pick up a small “lunch-size” insulated cooler that will fit nicely in your gym bag or the locker at your local sweatbox. When you want to give your body the best post-workout relief with a

power-packed protein shake or other post-workout concoction, you'll want it cold and keeping your container in the cooler along with an ice pack will have it ready and waiting to so you don't have to wait until you get home for your next supplement fix.

Hormone Testing Kit

Ok, I add this one ONLY for the SERIOUS bodybuilder...

Basically, this is a "home collection kit" that allows you to take your saliva samples and send them into a lab to have your hormone levels tested.

They can test for a multitude of hormones such as Estradiol, Progesterone, Testosterone, DHEA, Cortisol, Estrone, Estriol, Androstenedione.

If you don't know what these are, then you probably don't need the kit. But just know that testing your hormones will allow you to see if you are low in some key muscle-building, libido-boosting chemicals in your body or if that expensive "testosterone booster" supplement was really worth the price you paid.

You can pick up a home collection kit and have your hormones tested for anywhere from \$60 up to about \$200 depending upon how many hormones you want to test for.

If you're interested, here are a couple of suppliers who provide the kits and take care of the testing for you...

www.testmyhormones.com

http://www.craigmedical.com/Female_Hormone_Tests.htm (useful for BOTH men and [women](#))

A Word From The "Muscle Nerd"...



"Okay, now that you're informed and outfitted with the equipment that you need, let's get to the reason why you're reading my book in the first place—the supplements. The following chapter will be a comprehensive list of supplements that you can make for yourself that will rival the effectiveness of some of the industry's most popular versions."

Chapter 7

How To “Knock Off” The Supplement Industry’s TOP SELLING Supplements...At A FRACTION Of The Cost!

Ok, THIS is where I REALLY start to open your [eyes](#) because I’m about to show you just how OVERPRICED some of the popular supplements you see plastered all over diet and fitness magazines really are...and how you can stop funding their high-priced [marketing](#) campaigns with your [kids’](#) college tuition savings.

But here’s a little surprise that you probably weren’t expecting...

You see, while I’ve just spent, ooooooh...about 60 pages or so WARNING you about the scams you’ll find permeating the supplement industry, my initial advice as you enter into the area of setting up your own little “supplement lab” is going to sound like total “back-peddling”.

But here it is anyway...

Go Out And Actually [BUY](#) The Supplements That Claim
To Achieve The Results You’re Looking For!

That’s right...I actually WANT you to buy the supplements that promise you the personal results you’re looking for BEFORE you attempt to “make your own” powerful “knock off”!

Shocked? Don’t be. It actually makes a LOT of sense when you think of it...

You see, much of the savings you’ll be exploring will come from buying EFFECTIVE ingredients and buying them either at WHOLESALE prices or in BULK and developing your own “[recipes](#)” either based upon already established “winners” or from your own experimentation.

A Word From The “Muscle Nerd”...



“And don’t worry, we’re NOT talking about backing a DUMP TRUCK into your driveway and unloading a small mountain range of protein powder, but the fact is that if you look in the right places, you can save a TON of [money](#) buying direct from manufacturers and distributors. More on this in a bit...”

But since supplements affect different people, well...differently...it DOESN'T make sense to [invest](#) your money in something that hasn't already PROVEN itself to help you achieve your goals, does it?

No, it doesn't.

A Word From The "Muscle Nerd"...



"Think of this as your own little 'sneak attack'!

The GOOD supplement companies do spend tons of [money](#) on research and [development](#) in trying to find the right combination of compounds that will end up being the next 'breakthrough' achievement. For the most part, this is just an educated guessing game, but at the very least, they have a team pouring over potentially ground-breaking research papers from universities and labs around the world.

So if you can take THEIR "best guess" at putting together supplement combinations, then you have 75% of the work already done for you...but ONLY if the supplement actually WORKS!"

As you look at the following supplement breakdowns and decide where you want to start, I have a couple of suggestions...

First, decide on the supplement CATEGORY you feel will most impact your training "results".

You'll find that I've broken each area of supplementation into several different categories based upon the goal of what the primary ingredients are marketed to provide you in results.

On the following page, I show you each category, what it hopes to accomplish, and the page reference where you can find the top sellers in that category within this manual.

Supplement Category	Description	Page Reference
Energy/Pre-Workout Aids	Increase energy levels and endurance prior to intense training sessions	76 – 89
Mass Gainers	Stimulate growth of muscle mass during heavy training periods or for those who have a hard time gaining weight	90 – 105
Muscle Builders	Stimulate growth of lean muscle tissue through activating various elements of the hypertrophic process	106 – 116
Fat Burners	“Thermogenics” that focus primarily on weight loss and fat burning	117 – 131
Sports Performance	Focus on performance improvement for training and competitive events through increased power and endurance	132 – 145
Post-Workout Recovery	Support the body’s recovery process following intense exercise to spare muscle loss and stimulate muscle growth	146 – 158
Nitric Oxide Enhancers	Increasing lean muscle growth due to increases in blood flow to certain areas of the body	159 – 175
Hormone Boosters	Increase the body’s natural production of anabolic hormones (testosterone/growth hormone/etc.)	176 – 191

Once you determine the area you feel you need the most help with, go to that section of this manual.

For each of these categories, I've broken down my analysis to help you several different ways...

Step 1: Top 3 Seller Analysis

The first step in the “Knock Off” attack is to take a serious in-depth look at the top 3 selling supplements in each category.

Listing of the “Top 3” Sellers for the supplement category

Listing of the “primary ingredients related to the marketed goal of the supplement

Listing of the “ancillary” ingredients that play a less important role regarding the marketed goal of the supplement

Retail cost for a 30 day supply of the supplement (these are 30 actual days of dosage according to the manufacturer).

If “1-3 scoops/day” for example, are recommended, the cost is based upon an average of 2 scoops.

Calculated cost of the “knock off” formula that will be recommended

(Costs have been calculated based upon current suppliers and prices and may change over time)




Your potential calculated savings for 30 days of dosage using the “knock off” formula.

Homemade Supplement Secrets

Supplement Category: Energy/Pre-Workout Aids

Supplement Goals:
Prime the body prior to intense workouts for enhanced energy, faster muscle recovery/re-growth of damaged muscle fibers, hormonal secretion, and cell volumization.

The Top Selling “Energy/Pre-Workout” Supplements


	MuscleTech GAKIC	Next Ultimate Orange	MR1 R30
The “Line Up”			
Primary Active Ingredients Related To Marketed “Goal”:	<ul style="list-style-type: none"> • Glycine • L-Arginine 	<ul style="list-style-type: none"> • Protein • Melibrotin • Diacetyl • Saccharin • Fructose • Cellulose • L-Tyrosine • Citrus Red 40 	<ul style="list-style-type: none"> • Vitamin B12 • L-Arginine Alpha-Ketoglutarate • Potassium Alpha-Ketoglutarate
Ancillary Ingredients:	<ul style="list-style-type: none"> • Alpha-Ketoglutaric Acid • Calcium 	<ul style="list-style-type: none"> • Multiple Vitamins & Minerals 	<ul style="list-style-type: none"> • Magnesium Aspartate • Cellulose
Retail Cost For 30-Day Supply	\$79.99	\$99.98	\$43.98
Approximate 30-Day Cost For “Knock-Off” Formula	\$9.06	\$21.39	\$7.84
You Save:	\$70.93/ Month	\$78.59/ Month	\$36.14/ Month

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Step 2: Individual Supplement Analysis

The first step in the “Knock Off” attack is to take a serious in-depth look at the top 3 selling supplements in each category.

Individual supplement being analyzed.

Homemade Supplement Secrets	
Pre-Workout Supplement Knock-Off # 1	
MuscleTech GAKIC	
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> • Glycine • L-Arginine
Ancillary Ingredients:	<ul style="list-style-type: none"> • Alpha-Ketoglutaric Acid • Calcium
Retail Cost For 30-Day Supply:	\$78.88
Approximate 30-Day Cost For "Knock-Off" Formula:	\$8.08
You Save:	\$70.93/ Month!

Listing of the “primary ingredients related to the marketed goal of the supplement

Listing of the “ancillary” ingredients that play a less important role regarding the marketed goal of the supplement

Retail cost for a 30 day supply of the supplement (these are 30 actual days of dosage according to the manufacturer).

If “1-3 scoops/day” for example, are recommended, the cost is based upon an average of 2 scoops.

Calculated cost of the “knock off” formula that will be recommended

(Costs have been calculated based upon current suppliers and prices and may change over time)

Your potential calculated savings for 30 days of dosage using the “knock off” formula.

Ingredient-by-ingredient analysis

Step 3: Recommended "Knock Off" Supplement Recipe

The first step in the "Knock Off" attack is to take a serious in-depth look at the top 3 selling supplements in each category.

Listing of the supplement being "knocked off"

Ingredients listing for "knock off" formula

Explanation of how the "knock off" formula was made; what was added/what was left out...and why.

Directions for how to create the "knock off" formula including dosage, timing, etc.

Calculated cost of the "knock off" formula that is being recommended.

Your potential calculated savings for 30 days of dosage using the "knock off" formula.

Homemade Supplement Secrets	
	The "Muscle Nerd's" Recommended GAKIC "K" Knock Off
Ingredients:	<ul style="list-style-type: none">• L-Glycine Powder: 7g• L-Arginine Powder: 4g
Knock Off Explanation:	Both L-Glycine and L-Arginine have a proven to be powerful amino acids which can assist with the energy needed to push through your workouts while stimulating muscle recovery and metabolic hormonal output.
Directions:	Mix 7grams L-Glycine powder and 4 grams L-Arginine powder into 8 oz. water or juice and consume up to 45 minutes before your workout only on workout days.
Retail Cost For 30-Day Supply:	\$78.88
Approximate 30-Day Cost For "Knock-Off" Formula:	\$8.08
Savings:	You Save Approximately \$70.93 Per Month!

A Word From The "Muscle Nerd"...



"Ok...before we get started, this is where my lawyer said I need to add my obligatory 'disclaimer' in order to cover my ass..."

As I already said in the beginning of this manual, you should know by now that before you start ANY [fitness](#) or nutritional program, you must first consult with a physician, blah, blah, blah.

But here's the OTHER bulletproof vest I have to strap on...

While I've done my best to remain as true to the original 'formula' for each of these supplements for those who are currently using them or test them and find they work for them, I've truly 'strayed' from the actual ingredients listed by the manufacturer.

In other words...these are supplement 'KNOCK OFF's'...NOT an exact copy of the supplement itself (for the most part).

In some cases I've removed the 'sprinkle' ingredients that weren't in large enough quantities to warrant adding them to the knockoff formula.

In other cases, I may have substituted *similar* ingredients that are either MORE effective at achieving the same effect or because it accomplished the same thing...but for less [money](#).

So all you MuscleTech lawyers put away your \$300 fountain pens...I'm NOT claiming that any of my recommended 'brand-name-like' formulas are the exact SAME as any of your supplements, nor would I EVER suggest you were misleading the public (well ok...maybe in a FEW cases).

Ultimately the decision will be up to YOU, the consumer, on what your PERSONAL formula will be made of based upon the information you have and the supplements you actually use.

I reserve the right to be completely full of \$&@#, you don't have to take my word for anything, and I accept no responsibility for you consuming any of these supplements. (i.e. – you're a big boy now).

There! Are you HAPPY now, Law Offices of Glotberg, Richardson & Stein?!"

Supplement Category: Energy/Pre-Workout Aids

Supplement Goals: Prime the body prior to intense workouts for enhanced [energy](#), faster muscle recovery/re-growth of damaged muscle fibers, hormone secretion, and cell volumization.

The Top Selling “Energy/Pre-Workout” Supplements

	MuscleTech GAKIC	Next Ultimate Orange	MRI N30
The “Line Up”:			
Primary Active Ingredients Related To Marketed “Goal”:	<ul style="list-style-type: none"> • Glycine • L-Arginine 	<ul style="list-style-type: none"> • Protein • Maltodextrin • Dextrose • Sucrose • Fructose • Caffeine • L-Tyrosine • Citrulline Malate 	<ul style="list-style-type: none"> • Vitamin B12 • L-Arginine Alpha-Ketoglutarate • Potassium Alpha-Ketoisocaproate
Ancillary Ingredients:	<ul style="list-style-type: none"> • Alpha-Ketoisocaproic Acid • Calcium 	<ul style="list-style-type: none"> • Multiple Vitamins & Minerals 	<ul style="list-style-type: none"> • Magnesium Aspartate • Caffeine
Retail Cost For 30-Day Supply:	\$79.99	\$99.98	\$43.98
Approximate 30-Day Cost For “Knock-Off” Formula:	\$9.06	\$21.39	\$7.84
You Save:	<u>\$70.93/Month!</u>	<u>\$78.59/Month</u>	<u>\$36.14/Month</u>

Pre-Workout Supplement Knock-Off # 1	
MuscleTech GAKIC	
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> Glycine L-Arginine
Ancillary Ingredients:	<ul style="list-style-type: none"> Alpha-Ketoisocaproic Acid Calcium
Retail Cost For 30-Day Supply:	\$79.99
Approximate 30-Day Cost For "Knock-Off" Formula:	\$9.06
You Save:	\$70.93/Month!

Product: MuscleTech GAKIC

Primary Active Ingredients Related To Marketed "Goal": L-Glycine, L-Arginine

Why It May/May Not Work: The primary ingredients listed for GAKIC has long been used as a growth hormone booster and may provide increased energy through the creation of muscle's primary initial energy [source](#), adenosine tri-phosphate.

Primary Active Ingredients Breakdown:

Glycine:

- Has the simplest form of all amino acids which allows it to fit easily within protein chains, leaving room for larger structure amino acids to aid in muscle growth.
- Is a pre-cursor to creatine so it may provide some additional energy during workouts

- Is a neurotransmitter in the central nervous system and of major importance to the creation of protein, creatine, glycogen, hemoglobin, Adenosine Tri-Phosphate, nucleic acids, glucose, and other amino acids.

L-Arginine:

- A semi-essential amino acid that is a building block of protein and performs several physiological functions
- Cannot make naturally within the body, therefore supplementation is necessary to increase levels.
- Increases nitric oxide in the body, aiding bodybuilding efforts.
- Instrumental in hormone secretion (including growth hormone output), the removal of toxic waste products from the body, and immune system defenses.
- Has become popular due to its ability to produce nitric oxide in the body (for better “pumps”), scavenge free radicals, signal muscle cells, release growth hormone, support healthy cholesterol levels, and enhance the metabolism of fat in the body.

Ancillary Ingredients: Alpha-Ketoisocaproic Acid, Calcium

- Alpha-Ketoisocaproic Acid: Claimed to inhibit muscle loss, increase energy production and remove ammonia from the body, recent studies have shown that supplementation with alpha-ketoisocaproic acid has had no effect on protein synthesis or that it affects nitrogen balance and lean muscle growth in laboratory rats.
- Calcium: Yes you need it, but it’s not worth mentioning within the goals of this supplement and can be obtained from a multi-vitamin/mineral complex.

Are The Ancillary Ingredients Worth It? No

Possible Side Effects: None noted by manufacturer however users diagnosed with herpes virus may experience outbreaks using l-arginine.



The "Muscle Nerd's" Recommended GAKIC "Knock Off"

Ingredients:	<ul style="list-style-type: none"> • L-Glycine Powder: 7g • L-Arginine Powder: 4g
Knock Off Explanation:	Both L-Glycine and L-Arginine have proven to be powerful amino acids which can assist with the energy needed to push through your workouts while stimulating muscle recovery and anabolic hormone output.
Directions:	Mix 7 grams L-Glycine powder and 4 grams L-Arginine powder into 8 oz. water or juice and consume up to 45 minutes before your workout only on workout days.
Retail Cost For 30-Day Supply:	\$79.99
Approximate 30-Day Cost For "Knock-Off" Formula:	\$9.06
Savings:	You Save Approximately <u>\$70.93</u> Per Month!

Pre-Workout Supplement Knock-Off #2

Next Ultimate Orange	
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> • Protein • Maltodextrin • Dextrose • Sucrose • Fructose • Caffeine • L-Tyrosine • Taurine • Citrulline Malate
Ancillary Ingredients:	<ul style="list-style-type: none"> • Multiple Vitamins & Minerals
Retail Cost For 30-Day Supply:	\$99.98
Approximate 30-Day Cost For "Knock-Off" Formula:	\$21.39
You Save:	<u>\$78.59/Month!</u>

Product: Next Ultimate Orange

Primary Active Ingredients Related To Marketed "Goal": Whey Protein Isolate, Maltodextrin, Dextrose, Sucrose, Fructose, Caffeine, L-Tyrosine, Taurine and Citrulline Malate.

Why It May/May Not Work: The primary ingredients listed for Ultimate Orange have long been used to intensify workouts by increasing focus and adding a

boost of energy. In addition, these ingredients can also boost recovery time and increase muscle strength and size.

Primary Active Ingredients Breakdown:

Whey Protein Isolate:

- Whey protein isolate is the highest concentration of protein and most bio-available to the body when compared with other milk derived proteins such as whey concentrate or casein.
- Protein is broken down into amino acids inside the body. Among the 20 different amino acids protein is broken down to, 9 of them are called essential amino acids. Essential amino acids are those which cannot be made by the body; thus, supplementation is needed.
- The 9 essential amino acids include Histidine, Isoleucine, Leucine, Valine, Lysine, Methionine, Phenylalanine, Threonine, and Tryptophan. Failure to get all of these amino acids in your [diet](#) on a daily basis can result in the break down of muscle in your body.

Maltodextrin:

- Easily digestible blend of complex carbohydrates that are derived from corn starch and provide great source of energy.
- Contains linked sugar compounds (also known as glucose polymers) that are easier for the body to ingest and use.
- Metabolized at a slow, steady rate so that high energy levels may be sustained during vigorous workouts.

Dextrose:

- Dextrose (also known as glucose) is a monosaccharide that is derived entirely from corn. It is a low-cost supplement and contains no fructose or lactose.
- Great source of rapidly absorbed energy for the body because it is highly water soluble.
- Main source of energy in the body.

Sucrose:

- Easily assimilated macronutrient that provides a quick source of energy to the body.
- While studies have proven sucrose to be a great short-term energy source, users should take care to use it sparingly because of the supplement's adverse health effects, such as [tooth](#) decay or the onset of [diabetes](#).

Fructose:

- Monosaccharide that has the same chemical formula as glucose.
- Often called fruit sugar because it is found in virtually all fruits. However, it can also be found in [vegetables](#), honey and other plants.
- Carbohydrate that is an important source of energy for any serious bodybuilder.

Caffeine:

- Power and energy booster. It energizes the body to enable powerful workouts. It is a fast-acting supplement that delivers the right molecular structure to the energy systems of the body, which allows maximum energy and power exertion.
- Increases mental alertness and provides a mental surge to motivate you through the most tedious of workouts.
- Studies have shown that caffeine reaches deep into the muscle cells to provide long-lasting energy while delaying the onset of muscle fatigue.

L-Tyrosine:

- An essential amino acid and a precursor of the neurotransmitters dopamine, norepinephrine.
- Assists with the maintenance of mental functions supporting mood and a feeling of well being and helps resist fatigue.
- Aids in adrenal, [thyroid](#) and pituitary function, converting to the thyroid hormone thyroxin and controlling metabolic rate, skin health, mental health, and growth rate.

- Is redundant in this formula due to the reliance on caffeine and sugar for fatigue resistance.

Taurine:

- Free-form amino acid which helps with a variety of metabolic processes.
- Neurotransmitter that is involved in glucose uptake.
- Component of bile acids, which are used to help absorb fats and other fat-soluble vitamins.
- Studies have shown that Taurine also helps regulate heart beat, maintain cell membrane stability and prevents brain cell over-activity.

Citrulline Malate:

- A non-essential amino acid that plays a role in nitrogen balance and metabolism that has been used with great success by European scientists who have reported results of increased energy and enhanced feelings of well-being
- While primarily synthesized from glutamine in the intestines, citrulline supplied by the diet is efficiently absorbed from the stomach and much of it bypasses uptake in the liver to be distributed to the kidneys, [brain](#), muscle and other tissues for conversion to arginine.
- Supplemental citrulline malate is a salt form of the amino acid. The malate, or malic acid, is found in fruits such as apples and enhances the effects of citrulline.
- Malic acid takes part in aerobic cellular respiration where oxygen and a carbon compound (acetyl Co-A) are used to produce immediate energy and carbon dioxide in the mitochondria of the cell (commonly called the "Kreb's energy cycle", protecting muscles from fatigue.
- Research done so far, though promising, has not been credible enough to prove its effectiveness and is unnecessary in this formula given the other ingredients.

Ancillary Ingredients: Multiple Vitamins & Minerals

Are The Ancillary Ingredients Worth It? Yes, but can be accomplished with a good multi-vitamin/mineral compound.

Possible Side Effects: None noted by manufacturer; however, some users have complained of diarrhea when taking excessive doses. Also, caffeine intake is not advisable in cases of high blood pressure, pregnancy, [diabetes](#), or heart problems and may cause nervousness, irritability, sleeplessness and occasionally, rapid heart rates.



The "Muscle Nerd's" Recommended Ultimate Orange "Knock Off"

<p>Ingredients:</p>	<ul style="list-style-type: none"> • Liquid Hydrolyzed Collagen (EAA's & BCAA's): 2 Tbsp • Maltodextrin: 16g • Caffeine: 300mg • ¼ Packet Unsweetened Powdered Soft Drink (like "Kool-Aid")
<p>Knock Off Explanation:</p>	<p>Ultimate Orange heavily markets the surge of energy you'll feel in the gym. This is due to the mega dose of sugar (they call it "Quadra-Carb") and caffeine in the ingredients. In addition, the dosage they recommend can be so high that you'll be bouncing off the walls...and tell all your friends how great it is because you can "really feel it".</p> <p>The knock off formula provides proven energy producers and fatigue-resistors but simple sugars (sucrose, dextrose) have been removed to avoid energy crash during workouts.</p> <p>Liquid collagen contains all of the essential amino acids and branched chain amino acids included within the Ultimate Orange formula. If you can't order liquid collagen, you can also use a standard liquid amino acid complex like TwinLab's Amino Fuel.</p>
<p>Directions:</p>	<p>Mix 2 tablespoons of liquid collagen along with 16 grams of maltodextrin and the powdered drink packet into 8-12 ounces of water. Crush up 300 mg caffeine tablet and add to the mixture. Consume approximately 20 minutes before your strength training workout only on workout days.</p>
<p>Retail Cost For 30-Day Supply:</p>	<p style="text-align: center;">\$99.98</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p style="text-align: center;">\$21.39</p>
<p>Savings:</p>	<p style="text-align: center;">You Save <u>\$78.59</u> Per Month!</p>

Pre-Workout Supplement Knock-Off #3

MRI N30	
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> Vitamin B12 L-Arginine Alpha-Ketoglutarate Potassium Alpha Ketoisocaproate Caffeine
Ancillary Ingredients:	<ul style="list-style-type: none"> Magnesium Aspartate Vinpocetine
Retail Cost For 30-Day Supply:	\$43.98
Approximate 30-Day Cost For "Knock-Off" Formula:	\$7.84
You Save:	\$36.14/Month!

Product: MRI N30

Primary Active Ingredients Related To Marketed "Goal": Vitamin B12, L-Arginine Alpha-Ketoglutarate, Potassium Alpha Ketoisocaproate and Caffeine

Why It May/May Not Work: The primary ingredients in this supplement absorb into your bloodstream within minutes, which means that it should be taken just before you start your workout. L-Arginine Alpha-Ketoglutarate has been proven to increase blood flow for prolonged periods and also provides increased mental focus. The addition of Potassium Alpha Ketoisocaproate to the supplement helps increase muscle energy, but in addition, it also provides protection so that you keep the muscle you just busted your butt to gain. Caffeine is a known energy booster that is very effective.

Primary Active Ingredients Breakdown:

Vitamin B12:

- Water-soluble vitamin that is expelled in process of elimination and perspiration. This means that long-term storage of this nutrient in bodybuilders is nearly impossible; thus, daily replenishment of this vitamin is needed.
- Important for maintaining a healthy nervous system and for metabolic utilization of fats and proteins. It also affects your neurological [health](#) and mood, but most importantly, it provides a great source of energy for bodybuilders.
- Vitamin B12 is usually only deficient in vegetarians as it is readily available within meat, eggs, and milk. 99% of supplemental B12 is simply excreted by the body even at higher doses.

L-Arginine Alpha-Ketoglutarate:

- When released in the blood stream, dramatically increases nitric oxide production.
- Studies have shown that an increase in nitric oxide can provide extended and enhanced “muscle pump” after a workout, improved endurance and recovery time, and improved workout capacity.
- More potent and more readily bioavailable form of l-arginine

Potassium Alpha Ketoisocaproate:

- Assists with toxin reduction in the blood stream during workouts.
- Anti-catabolic through acid buffering, providing muscle protection after workouts so that gains made are not lost.

Caffeine:

- Caffeine is a power and energy booster. It energizes the body to enable powerful workouts. It is a fast-acting supplement that delivers the right molecular structure to the energy systems of the body, which allows maximum energy and [power](#) exertion.

Ancillary Ingredients: Magnesium Aspartate

- Magnesium Aspartate: Helps with electrolyte [balance](#), energy production and normal neuro-muscular function. It also helps in the production and transfer of energy, in muscle contraction and relaxation, in nerve conduction, and in protein synthesis.
- Vinpocetine: Experiments with vinpocetine indicate that it may possibly dilate blood vessels, enhance circulation in the brain, improve oxygen utilization, make red blood cells more pliable, and inhibit aggregation of platelets. Vinpocetine also has antioxidant properties. However, some people are very sensitive to this supplement and may show adverse reactions, particularly at high, unchecked doses.

Are The Ancillary Ingredients Worth It? No

Possible Side Effects: None noted by manufacturer however users diagnosed with herpes virus may experience outbreaks using L-arginine. Also, vinpocetine does have side effects in high doses such as dizziness, lightheadedness or malaise.



The "Muscle Nerd's" Recommended N30 "Knock Off"

<p>Ingredients:</p>	<ul style="list-style-type: none"> • L-Arginine Alpha-Ketoglutarate (AAKG): 5 g • Potassium Bicarbonate: 1 g • Caffeine: 200 mg
<p>Knock Off Explanation:</p>	<p>AAKG can be a powerful growth hormone inducer and increase blood flow for better "pumps" in the gym</p> <p>Instead of potassium alpha ketoisocaproate, potassium bicarbonate is just as effective at buffering acid load from workouts and much more available.</p> <p>The knock off formula also includes caffeine which is a proven energy producers and fatigue-resistor during training.</p>
<p>Directions:</p>	<p>Crush up a 200 mg tablet of caffeine and mix with 5 grams of AAKG and 1 gram of potassium bicarbonate powder into 8-12 oz of water or juice (preferably grapefruit juice). Consume approximately 20 minutes before your strength training workout only on workout days.</p>
<p>Retail Cost For 30-Day Supply:</p>	<p>\$43.98</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$7.84</p>
<p>Savings:</p>	<p>You Save <u>\$36.14</u> Per Month!</p>

Supplement Category: Mass Gainers

Supplement Goals: Stimulate growth of muscle mass during heavy training periods or for those who have a hard time gaining weight.

The Top Selling "Mass Gainer" Supplements

	MassTech	MyoZene	Muscle Milk
The "Line Up":			
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> • Whey Protein Concentrate • Whey Protein Isolate • Maltodextrin 	<ul style="list-style-type: none"> • Vitamin C • Potassium • L-Leucine • Creatine Monohydrate • L-Glutamine • L-Taurine 	<ul style="list-style-type: none"> • Casein Protein • Whey Concentrate • Whey Isolate • L-Glutamine • Taurine • Lactoferrin • Maltodextrin
Ancillary Ingredients:	<ul style="list-style-type: none"> • Creatine • L-Isoleucine • L-Leucine • L-Glutamine • Taurine • L-Valine • Flax Seed Powder • Alpha-Lipoic Acid 		<ul style="list-style-type: none"> • MCT Oil • Canola Oil • Multiple Vitamins & Minerals
Retail Cost For 30-Day Supply:	\$49.99	\$68.95	\$79.90
Approximate 30-Day Cost For "Knock-Off" Formula:	\$25.76	\$32.98	\$16.85
You Save:	\$24.23/Month!	\$35.97/Month!	\$63.05/Month!

Mass Gainer Supplement Knock-Off # 1

<p>MuscleTech Mass-Tech</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> • Whey Protein Concentrate • Whey Protein Isolate • Maltodextrin
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • Creatine Monohydrate • L-Isoleucine • L-Leucine • L-Glutamine • Taurine • L-Valine • Flax Seed Powder • Alpha-Lipoic Acid
<p>Retail Cost For 30-Day Supply:</p>	<p>\$49.99</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$25.76</p>
<p>You Save:</p>	<p>\$24.23/Month!</p>

Product: MassTech

Primary Active Ingredients Related To Marketed "Goal": Whey Protein Concentrate, Whey Protein Isolate, Maltodextrin

Why It May/May Not Work: MassTech is a blend of nutrients that have proven to be good sources of protein and other healthy carbohydrates bodybuilders need in order to gain mass without the extra annoyance of packing on fat. Taken twice a day, MassTech provides almost an extra 2000 calories to your [diet](#).

Primary Active Ingredients Breakdown:

Whey Protein Concentrate:

- Whey protein concentrate which is typically about 80% protein depending upon the product with the rest of the profile made of lactose, casein, and fat.
- Easily absorbed by the body for muscle recovery and growth.

Whey Protein Isolate:

- Whey protein isolate is the most pure and concentrated form of whey protein available. It contains 90% or more protein and very little (if any) fat and lactose.
- Very rapidly absorbed by the body (faster than protein concentrate) and more bio-available than other forms of protein powders

Maltodextrin:

- Maltodextrin is an easily digestible blend of complex carbohydrates that are derived from corn starch and provide a great source of long term energy.
- Contains linked sugar compounds that are easier for the body to ingest and use, and it is metabolized at a steady rate so that high energy levels may be sustained during vigorous workouts.

Ancillary Ingredients:

Creatine Monohydrate:

- Can increase muscle mass in as little as two weeks.
- Improves performance in high-intensity exercise.
- Increases energy levels and speeds up recovery time.

Branched-Chain Amino Acids (L-Leucine, L-Isoleucine, L-Valine):

- Increases growth hormone production.

- Enhances energy, increases endurance, and aids in muscle recovery and tissue repair.
- Promotes muscle growth.
- Enhances energy, increases endurance, and aids in muscle recovery and tissue repair.
- Also decreases elevated blood [sugar](#) levels and increases growth hormone production.

L-Glutamine:

- Pro-anabolic essential amino acid that promotes optimum protein synthesis.
- Prevents muscle tissue breakdown and promotes cell volume maintenance.
- As an extra added bonus, it also reduces [cravings](#) for alcohol, sugar and carbohydrates, three things that can be detrimental to the diet of a bodybuilder.

Taurine:

- Free-form amino acid which helps with a variety of metabolic processes.
- Neurotransmitter that is involved in glucose uptake.
- Component of bile acids, which are used to help absorb fats and other fat-soluble vitamins.
- Studies have shown that Taurine also helps regulate heart beat, maintain cell membrane stability and prevents brain cell over-activity.

Flax Seed Powder:

- Flax is an excellent source of Omega 3 Fatty Acids and Omega 6 Fatty Acids in the perfect ratio
- Slows the rate of [digestion](#) of protein and carbohydrates to provide longer amino acid uptake and stabilized insulin response to avoid fat storage

Alpha Lipoic Acid:

- An antioxidant that plays a crucial role in the energy-producing structures in cells.
- Is said to prevent or treat many age-related diseases, from [heart](#) disease, and stroke to [diabetes](#) and Parkinson's disease and Alzheimer's disease, as well as declines in energy, muscle strength, brain function, and immunity. Alpha-lipoic acid is also being studied for HIV disease and multiple sclerosis.

[Are The Ancillary Ingredients Worth It?](#) No, they are in too small of a dosage to provide value to this formula


[Possible Side Effects:](#) None noted by manufacturer.



The "Muscle Nerd's" Recommended Mass-Tech "Knock Off"

<p>Ingredients:</p>	<ul style="list-style-type: none"> • Whey Protein Isolate: 45 g • Maltodextrin: 150 g • Ground Flax Meal: 2 Tbsp
<p>Knock Off Explanation:</p>	<p>The intention of Mass-Tech was to create a meal replacement powder that helps bodybuilders consume massive amounts of carbohydrates and get a fast AND slow digesting protein profile.</p> <p>However, the "sprinkle" ingredients aren't available enough to be valuable to the user.</p> <p>For the "knockoff", whey isolate is used to avoid needing 2 different types of powder and flax meal is added to slow digestion of the protein as it was intended and provide health essential fatty acids for cell structure.</p> <p>Maltodextrin is added to provide complex carbohydrates and in fact, makes up almost 70% of Mass-Tech's total ingredients.</p>
<p>Directions:</p>	<p>Combine all ingredients in a blender along with non-fat milk (and perhaps some frozen fruit like bananas and/or strawberries) and blend until smooth.</p>
<p>Retail Cost For 30-Day Supply:</p>	<p style="text-align: right;">\$49.99</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p style="text-align: right;">\$25.76</p>
<p>Savings:</p>	<p style="text-align: center;">You Save <u>\$24.23</u> Per Month!</p>

Mass Gainer Supplement Knock-Off #2

<p>BioQuest MyoZene</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> • Whey Protein Hydrolysate • Whey Protein Concentrate • Maltodextrin • Dextrose • Vitamin C • Potassium • L-Leucine • Creatine Monohydrate • L-Glutamine • L-Taurine
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • Malic Acid
<p>Retail Cost For 30-Day Supply:</p>	<p>\$68.95</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$32.98</p>
<p>You Save:</p>	<p>\$35.97/Month!</p>

Product: MyoZene

Primary Active Ingredients Related To Marketed "Goal": Whey Protein Hydrolysate, Vitamin C, Sodium, Potassium, L-Leucine, Creatine Monohydrate, L-Glutamine, and L-Taurine.

Why It May/May Not Work: The ingredients in MyoZene, when consumed immediately following a rigorous workout, is rapidly digested and absorbed into the bloodstream, providing a surge of anabolic insulin and amino acid uptake into the muscle tissue, highly accelerating muscle synthesis.

Primary Active Ingredients Breakdown:

Whey Protein Hydrolysate:

- Derived from whey protein isolate which has been subjected to treatment with the digestive enzyme known as protease. This enzymatic process has the effect of shortening the protein and polypeptide chains in order to accelerate their absorption into the bloodstream.
- Most rapidly absorbed form of whey protein powders and highest bioavailability.

Whey Protein Concentrate:

- Whey protein concentrate which is typically about 80% protein depending upon the product with the rest of the profile made of lactose, casein, and fat.
- Easily absorbed by the body for muscle recovery and growth.

Maltodextrin:

- Maltodextrin is an easily digestible blend of complex carbohydrates that are derived from corn starch and provide a great source of long term energy.
- Contains linked sugar compounds that are easier for the body to ingest and use, and it is metabolized at a steady rate so that high energy levels may be sustained during vigorous workouts.

Dextrose:

- Dextrose (also known as glucose) is a monosaccharide that is derived entirely from corn. It is a low-cost supplement and contains no fructose or lactose.
- Great source of rapidly absorbed energy for the body because it is highly [water](#) soluble.
- Main source of energy in the body.

Vitamin C:

- This is one of the most important antioxidants because it effectively prevents free radical damage and helps promote a healthy immune and cardiovascular system.

Potassium:

- Helps with muscle growth and contractions, as well as nerve cell function and protein synthesis. In addition, potassium also helps regulate water balance.

L-Leucine:

- Lowers elevated [blood](#) sugar levels.
- Increases growth hormone production.
- Enhances energy, increases endurance, and aids in muscle recovery and tissue repair.

Creatine Monohydrate:

- Improves performance in high-intensity exercise by regenerating the ADP-ATP energy cycle.
- Increases energy levels and speeds up recovery time.
- Increases cell “volumization” by stuffing muscle cells with additional water.

L-Taurine:

- The second most abundant amino acid in muscle.
- Can act similarly to creatine in that it expands your cells by helping the muscle cell itself hold more water, increasing cell volume resulting in a higher rate of protein synthesis
- Controls the movement of potassium, magnesium and sodium throughout the body.

Ancillary Ingredients: Malic Acid

- Malic Acid: found in apples and other fruits, it is a key intermediate in the major biochemical energy-producing cycle in cells known as the citric acid or Krebs cycle located in the cells' mitochondria. Studies have been inconclusive regarding its effectiveness as a performance aid.

Are The Ancillary Ingredients Worth It? No

Possible Side Effects: Shouldn't be used by individuals under the [age](#) of 18. Pregnant or nursing women should also not use this product. For individuals who are taking medication, a [doctor](#) should be consulted before using this supplement in order to avoid any adverse interactions.



The "Muscle Nerd's" Recommended MyoZene "Knock Off"

<p>Ingredients:</p>	<ul style="list-style-type: none"> • Whey Protein Hydrolysate (Liquid Amino Acid): 20 g • Whey Protein Concentrate: 25 g • Maltodextrin: 30 g • Dextrose: 30 g • Potassium Bicarbonate: 1 g • Creatine Monohydrate: 5 g • L-Glutamine: 5 g • L-Taurine: 1 g
<p>Knock Off Explanation:</p>	<p>Like MyoZene, this formula creates a post workout combination of fast- and slow-digesting carbohydrates as well as a fast- and slow-digesting protein profile.</p> <p>Potassium bicarbonate is added for replacement of this mineral lost during exercise as well as to buffer the damaging acid load from stressful workouts.</p> <p>Creatine, l-glutamine, and taurine are added to increase cell volumization, reduce muscle loss, and increase protein synthesis.</p>
<p>Directions:</p>	<p>Combine all ingredients in a blender along with non-fat milk (and perhaps some frozen fruit like bananas and/or strawberries) and blend until smooth.</p> <p>Place in a plastic container and bring to the gym in a small lunch cooler with ice pack for immediate consumption after your workout.</p>
<p>Retail Cost For 30-Day Supply:</p>	<p style="text-align: center;">\$68.95</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p style="text-align: center;">\$32.98</p>
<p>Savings:</p>	<p style="text-align: center;">You Save <u>\$35.97</u> Per Month!</p>

Mass Gainer Supplement Knock-Off #3	
<p style="font-size: 1.2em; margin: 0;">CytoSport Muscle Milk</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> Casein Protein Whey Protein Concentrate Whey Protein Isolate L-Glutamine Taurine Lactoferrin Maltodextrin
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> MCT Oil Canola Oil Multiple Vitamins & Minerals
<p>Retail Cost For 30-Day Supply:</p>	<p>\$79.90</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$16.85</p>
<p>You Save:</p>	<p>\$63.05/Month!</p>

Product: Muscle Milk

Primary Active Ingredients Related To Marketed "Goal": Casein Protein, Whey Protein Concentrate, Whey Protein Isolate, L-Glutamine, Taurine, Lactoferrin, and Maltodextrin.

Why It May/May Not Work: The ingredients in Muscle Milk were developed to provide a combination of slow- and fast-digesting protein sources to extend protein synthesis and provide recovering muscle cells a steady stream of amino acids for growth.

Primary Active Ingredients Breakdown:

Casein Protein:

- Casein Protein is the main protein found in milk and cheese.
- Is not as easily absorbed by the body due to its poor solubility and is therefore very slowly digested.

Whey Protein Concentrate:

- Whey protein concentrate which is typically about 80% protein depending upon the product with the rest of the profile made of lactose, casein, and fat.
- Easily absorbed by the body for muscle recovery and growth.

Whey Protein Isolate:

- Whey protein isolate is the most pure and concentrated form of whey protein available. It contains 90% or more protein and very little (if any) fat and lactose.
- Very rapidly absorbed by the body (faster than protein concentrate) and more bio-available than other forms of protein powders

L-Glutamine:

- Pro-anabolic essential amino acid that promotes optimum protein synthesis.
- Prevents muscle tissue breakdown and promotes cell volume maintenance.
- As an extra added bonus, it also reduces cravings for alcohol, sugar and carbohydrates, three things that can be detrimental to the [diet](#) of a bodybuilder.

Taurine:

- Free-form amino acid which helps with a variety of metabolic processes.
- Neurotransmitter that is involved in glucose uptake.
- Component of bile acids, which are used to help absorb fats and other fat-soluble vitamins.
- Studies have shown that Taurine also helps regulate heart beat, maintain cell membrane stability and prevents brain cell over-activity.

Lactoferrin:

- A protein that is found in human milk and saliva.
- Boosts the immunity of babies during the first few years of [development](#).
- Is said to have benefits for muscle growth in adults and act as an antioxidant, however research has been inconclusive and it is theorized that as we get older and no longer need the attributes of human milk, the benefits we once received are no longer available by our fully developed systems.

Maltodextrin:

- Easily digestible blend of complex carbohydrates that are derived from corn starch and provide great source of energy.
- Contains linked sugar compounds (also known as glucose polymers) that are easier for the body to ingest and use.
- Metabolized at a slow, steady rate so that high energy levels may be sustained during vigorous workouts.

Ancillary Ingredients: MCT Oil, Canola Oil, Multiple Vitamins & Minerals

MCT (Medium-Chain Triglyceride) Oil:

- MCT's are considered a "fat-burning fat" in that they are quickly burned for energy in the body and cannot be stored as body fat.

- MCT's are often used by advanced bodybuilders during dieting phases to spare muscle loss and increase fat burning.
- Research has been inconclusive as to the actual worthiness of MCT for athletes and taken in high doses can actually impair athletic performance due to intestinal cramping.
- Research on MCT's role in [weight](#) loss has also [produced](#) mixed results.

Canola Oil:

- A long-chain polyunsaturated “healthy” fat that is also used for [cooking](#).

Multiple Vitamins & Minerals:

- Various vitamins and minerals are added to the Muscle Milk ingredients to aid in nutrient utilization.

[Are The Ancillary Ingredients Worth It?](#) Possibly. MCT, though inconclusive, has a large backing with experienced nutritionists specializing in athletic performance.

Canola oil, though it can be found cheaply on any grocery store shelf, is a healthy “biologically active” fat source and can help slow down protein usage and aid in hormone balance.

Multi-vitamins are best obtained from [food](#) or from one multi/mineral source.

[Possible Side Effects:](#) None noted by manufacturer, but intake of too much (like 5 or more Tablespoons a day) of MCT can cause gastric upset and intestinal cramping..



The "Muscle Nerd's" Recommended Muscle Milk "Knock Off"

Ingredients:	<ul style="list-style-type: none"> • Casein Protein (Powdered Milk): 20 g • Whey Protein Isolate: 12 g • L-Glutamine: 5 g • Taurine: 1 g • Maltodextrin: 12 g • MCT Oil: ½ Tbsp • Canola Oil: ½ Tbsp
Knock Off Explanation:	<p>While Muscle Milk markets itself as imitating "mother's milk", nutrients that were helpful to us as infants were ONLY helpful to us as infants and don't provide the same benefits to adults.</p> <p>Powdered milk and Whey Protein Isolate have been used to provide both a slow- and fast-digesting protein mix for extended absorption of amino acids</p> <p>Maltodextrin is added as a slow-burning carbohydrate source and MCT Oil, Canola Oil, l-glutamine, and taurine are added to reduce muscle loss, buffer lactic acid, and increase protein synthesis.</p>
Directions:	<p>Combine all ingredients in a blender along with non-fat milk (and perhaps some frozen fruit like bananas and/or strawberries) and blend until smooth.</p> <p>This formula is best used pre-workout or as a meal replacement during the day...NOT after your workout.</p>
Retail Cost For 30-Day Supply:	\$79.90
Approximate 30-Day Cost For "Knock-Off" Formula:	\$16.85
Savings:	You Save <u>\$63.05</u> Per Month!

Supplement Category: Muscle Builders

Supplement Goals: Stimulate growth of lean muscle tissue through activating various elements of the hypertrophic process

The Top Selling "Muscle Builder" Supplements

	Leukic	Aplodan	Myo-Blast CSP3
The "Line Up":			
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> L-Leucine 	<ul style="list-style-type: none"> Creatine Alpha Lipoic Acid 	<ul style="list-style-type: none"> Cystoseira Canariensis Rhodiola Rosea Extract Taurine L-Leucine
Ancillary Ingredients:	<ul style="list-style-type: none"> Alpha-Ketoisocaproic Acid Calcium Acesulfame Potassium 		
Retail Cost For 30-Day Supply:	\$69.99	\$64.86	\$79.95
Approximate 30-Day Cost For "Knock-Off" Formula:	\$6.23	\$4.54	\$19.34
You Save:	\$63.76/Month!	\$60.32/Month!	\$60.61/Month!

Muscle Builder Supplement Knock-Off #1

<p>MuscleTech LEUKIC</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> • L-Leucine
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • Alpha-Ketoisocaproic Acid • Calcium
<p>Retail Cost For 30-Day Supply:</p>	<p>\$69.99</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$6.23</p>
<p>You Save:</p>	<p>\$63.76/Month!</p>

Product: Leukic

Primary Active Ingredients Related To Marketed "Goal": L-Leucine-Ketoisocapraic Acid Calcium.

Why It May/May Not Work: The leucine component of Leukic is a branched-chain amino acid that works to repair muscles, regulate blood sugar, provide the body with energy, increase production of growth hormones, and help the body burn fat. Leucine also helps promote muscle recovery after exercise and helps prevent muscle loss, a big reason why it is popular with bodybuilders.

Primary Active Ingredients Breakdown:

L-Leucine:

- L-leucine is a branch-chained amino acid used to repair muscle cells from intense training, regulate blood sugar, provide the body with energy, increase production of growth hormones, and help burn body fat.
- Also helps promote muscle recovery after exercise and prevents muscle loss.

Ancillary Ingredients: Alpha-Ketoisocaproic Acid, Calcium

- Alpha-Ketoisocaproic Acid: Claimed to inhibit muscle loss, increase energy production and remove ammonia from the body, recent studies have shown that supplementation with alpha-ketoisocaproic acid has had no effect on protein synthesis or that it effects nitrogen balance and lean muscle growth in laboratory rats.
- Calcium: Yes you need it, but it's not worth mentioning within the goals of this supplement.

Are The Ancillary Ingredients Worth It? No

Possible Side Effects: Should not be used by individuals under the age of 18 or women who are pregnant or nursing. Individuals who have been treated for or diagnosed with, or have a [family](#) history of any medical condition including cardiovascular, central nervous system, or genito-urinary problems, cold sores, or who are using any prescription or over-the-counter medication(s) should consult a medical [doctor](#) before using product. Individuals should not exceed recommended servings. Excessive use of the product will not improve results.



The "Muscle Nerd's" Recommended LEUKIC "Knock Off"

Ingredients:	<ul style="list-style-type: none"> L-Leucine Powder: 7 g
Knock Off Explanation:	This is a case of branched-chain amino acids with window dressing. L-leucine is powerful on its own or with other BCAA's and the Alpha-Ketoisocaproic Acid has been discarded due to lack of conclusive evidence it works.
Directions:	<p>As a dietary supplement, take 1 serving first thing in the morning.</p> <p>On workout days, take 1 serving immediately before your workout.</p>
Retail Cost For 30-Day Supply:	\$69.99
Approximate 30-Day Cost For "Knock-Off" Formula:	\$6.23
Savings:	You Save <u>\$63.76</u> Per Month!

Muscle Builder Supplement Knock-Off #2

<p>MuscleTech APLODAN</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> • 2-(Carbamimidoyl-Methyl-Amino) Ethoxyphosphonic Acid™ • 1,2-Dithiolane-3-Pentanoic Acid™
<p>Ancillary Ingredients:</p>	<p>None</p>
<p>Retail Cost For 30-Day Supply:</p>	<p>\$64.86</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$4.54</p>
<p>You Save:</p>	<p>\$60.32/Month!</p>

Product: Aplodan

Primary Active Ingredients Related To Marketed "Goal": 2-(Carbamimidoyl-Methyl-Amino) Ethoxyphosphonic Acid™, 1,2-Dithiolane-3-Pentanoic Acid™

Why It May/May Not Work: First the bad news...the ingredients listed for this product are basically just synonyms for creatine monohydrate and alpha lipoic acid...inexpensive supplements that can be found at bargain basement prices in any health food store.

The good news? Both of these supplements can help you achieve your goals by providing cell volumization, insulin stabilization, and increased energy for when training.

Primary Active Ingredients Breakdown:

Creatine:

- Improves performance in high-intensity exercise by regenerating the ADP-ATP energy cycle.
- Increases energy levels and speeds up recovery time.
- Increases cell “volumization” by stuffing muscle cells with additional water.

Alpha Lipoic Acid:

- ALA is an antioxidant that helps to inhibit the reactions of damaging “free radicals”
- When taken as a supplement, ALA increases the production of glutathione which helps dissolve toxic substances in the liver by neutralizing free radicals produced in our bodies and thus protects cells.

Ancillary Ingredients: N/A

Are The Ancillary Ingredients Worth It? N/A

Possible Side Effects: None noted by manufacturer.



The "Muscle Nerd's" Recommended APLODAN "Knock Off"

<p>Ingredients:</p>	<ul style="list-style-type: none"> • Creatine Monohydrate: 20 grams/day for 5 days (divided over 10 doses of 2 g throughout the day), followed by 5 grams/day daily for the duration of the cycle • Alpha Lipoic Acid: 100 mg/day
<p>Knock Off Explanation:</p>	<p>Take away the trademarked scientific jargon and you're left with plain old creatine monohydrate and alpha lipoic acid. Creatine works...and it's cheap.</p> <p>Alpha lipoic acid is included in this formula but is not very effective taken in the absence of other antioxidants.</p>
<p>Directions:</p>	<p>Divide creatine up into 10 doses of 2g taken throughout the day for the first 5 days (can be mixed with juice or water)</p> <p>After this, supplement with 5 gram doses each day for up to 8 weeks. Cycle off for 2 weeks and start again.</p> <p>As a daily supplement, take 100 mg of alpha lipoic acid each day (but again, take in combination with other antioxidants).</p>
<p>Retail Cost For 30-Day Supply:</p>	<p style="text-align: center;">\$64.86</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p style="text-align: center;">\$4.54</p>
<p>Savings:</p>	<p style="text-align: center;">You Save <u>\$60.32</u> Per Month!</p>

Muscle Builder Supplement Knock-Off #3

<p>Cytodyne Myo-Blast CSP3</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> Cystoseira Canariensis Rhodiola Rosea Extract
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> Taurine Carnosine L-Leucine
<p>Retail Cost For 30-Day Supply:</p>	<p>\$79.95</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$19.34</p>
<p>You Save:</p>	<p>\$60.61/Month!</p>

Product: Myo-Blast

Primary Active Ingredients Related To Marketed "Goal": Cystoseira Canariensis, Rhodiola Rosea Extract

Why It May/May Not Work: Myo-Blast claims to bind to the myostatin protein (a protein that inhibits muscle growth), blocking its ability to stop muscle growth. This allows brand new muscle proteins called myoblasts to form new fibers of muscle tissue. Each individual new fiber is a chance for users to create new muscle.

However there is a lack of any credible evidence regarding the main ingredients of this product. The addition of amino acids as ancillary ingredients would have some potential to assist the body with muscle growth except that there is less than a half a gram total included in the formula.

Primary Active Ingredients Breakdown:

Cystoseira Canariensis:

- Extract of brown seaweed that is said to inhibit myostatins, which are known to decrease muscle growth in the body.

Rhodiola Rosea Extract:

- Purported to improve both physical and mental performance and reduce fatigue.

Ancillary Ingredients: Taurine, Carnosine, L-Leucine

Taurine:

- Free-form amino acid which helps with a variety of metabolic processes.
- Neurotransmitter that is involved in glucose uptake.
- Component of bile acids, which are used to help absorb fats and other fat-soluble vitamins.
- Studies have shown that Taurine also helps regulate heart beat, maintain cell membrane stability and prevents brain cell over-activity.

Carnosine:

- Buffers PH levels in muscular tissue
- Mitochondrial antioxidant

L-Leucine:

- L-leucine is a branch-chained amino acid used to repair muscle cells from intense training, regulate blood sugar, provide the [body](#) with energy, increase production of growth hormones, and help burn body fat.
- Also helps promote muscle recovery after exercise and prevents muscle loss.

Are The Ancillary Ingredients Worth It? Do they work? Yes. Are they in sufficient amounts to have a desired effect in this formula? No!

Possible Side Effects: Not for use by individuals under the age of 18, or individuals who are [pregnant](#) or nursing. Individuals should consult their health care professional before using this product if they have a medical condition or are taking any medication.



The "Muscle Nerd's" Recommended Myo-Blast CSP "Knock Off"

<p>Ingredients (1 Dose):</p>	<ul style="list-style-type: none"> • Cystoseira Canariensis (Brown Algae Extract): 600 mg • Rhodiola Rosea Powder: 200 mg
<p>Knock Off Explanation:</p>	<p>I fought HARD to find credible evidence that these ingredients work for blocking muscle-limiting myostatin.</p> <p>There is none! Use this formula at your own risk of wasting your money.</p> <p>Ancillary ingredients were omitted due to insufficient amounts in the original formula.</p>
<p>Directions:</p>	<p>Take 1 dose of each supplement in the morning and another 1 dose in the afternoon with 8-oz of water.</p>
<p>Retail Cost For 30-Day Supply:</p>	<p style="text-align: center;">\$79.95</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p style="text-align: center;">\$19.34</p>
<p>Savings:</p>	<p style="text-align: center;">You Save <u>\$60.61</u> Per Month!</p>

Supplement Category: Fat Burners

Supplement Goals: Increase the body's metabolism to aid in [weight](#) loss and stimulate the breakdown and use of body fat for fuel.

The Top Selling "Fat Burner" Supplements

	Lipo 6	Redline	Hydroxycut Hardcore
The "Line Up":			
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> • Synephrine • Guggulsterones • Caffeine Anhydrous • Bioperine 	<ul style="list-style-type: none"> • Caffeine Anhydrous • Green Tea Extract • 5-HTP • Yohimbine HCL • N-Acetyl L-Tyrosine (NAT) 	<ul style="list-style-type: none"> • Green Tea Extract • Caffeine • DMAE • Xanthinol Nicotinate • Evodia Extract • Black Pepper Extract
Ancillary Ingredients:	<ul style="list-style-type: none"> • Yohimbine HCL 	<ul style="list-style-type: none"> • Medium Chain Triglycerides (MCT) • Conjugated Linoleic Acid (CLA) 	<ul style="list-style-type: none"> • White Willow Bark • Aspidosperma Quebracho-Blanco
Retail Cost For 30-Day Supply:	\$49.99	\$52.46	\$89.99
Approximate 30-Day Cost For "Knock-Off" Formula:	\$10.24	\$6.82	\$5.00
You Save:	\$39.75/Month!	\$45.64/Month!	\$84.99/Month

Fat Burner Supplement Knock-Off #1	
<p style="font-size: 1.2em; margin: 0;">Nutrex Lipo 6</p>	
<p style="margin: 0;">Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> Synephrine Guggulsterones Caffeine Anhydrous Bioperine
<p style="margin: 0;">Ancillary Ingredients:</p>	<ul style="list-style-type: none"> Yohimbine HCL
<p style="margin: 0;">Retail Cost For 30-Day Supply:</p>	<p style="margin: 0; font-size: 1.1em;">\$49.99</p>
<p style="margin: 0;">Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p style="margin: 0; font-size: 1.1em;">\$10.24</p>
<p style="margin: 0; font-size: 1.2em;">You Save:</p>	<p style="margin: 0; font-size: 1.2em;">\$39.75/Month!</p>

Product: Lipo6

Primary Active Ingredients Related To Marketed "Goal": Synephrine, Guggulsterones, Caffeine Anhydrous, and Bioperine.

Why It May/May Not Work: Lipo6 is engineered to take advantage of adrenal stimulants such as synephrine and caffeine which have been shown to assist with fat loss.

Primary Active Ingredients Breakdown:

Synephrine HCL:

- Adrenal stimulant similar to caffeine and ephedrine.
- Boosts energy and increases metabolic rate.

- Synephrine carries with it several health precautions that make it a potentially dangerous supplement if not taken correctly and under a physician's advice, especially when combined with other stimulants such as caffeine.

Guggulsterones

- Has been promoted as a weight-loss aid, supposedly by enhancing [thyroid](#) function.
- There is little evidence that guggul extracts actually affect the thyroid, and one small double-blind, placebo-controlled trial failed to find it effective for [weight](#) loss.

Caffeine Anhydrous:

- Adrenal stimulant that enhances mental alertness and reduces fatigue.
- Included in most fat-burning supplements for the purpose of increasing the level of circulating fatty acids, which has been shown to increase the oxidation of fat.
- Studies with caffeine at doses of 150 mg – 200 mg have resulted in a significant elevation in resting energy expenditure, heart rate and blood pressure but this increase is negligible in terms of weight loss.

Bioperine:

- Herbal extract from the pepper plant that claims to increase the absorption and utilization of nutrients in the body.
- No evidence could be found of its effectiveness of increasing absorption.

Ancillary Ingredients:

Yohimbine HCL:

- Effective antioxidant that speeds up blood flow throughout the appendages of the body.
- West African folk herb used as a traditional aphrodisiac.

- Yohimbine may maximize the body's norepinephrine hormone levels thus maximizing fat loss, particularly in "problem areas" specific to men and women.

Are The Ancillary Ingredients Worth It? Maybe. Some "non-double blind" studies have shown promise in men with moderate erectile dysfunction. However these studies were often done with the addition of the amino acid L-arginine and at higher doses than what is contained in Lipo6. Some people do experience effects with as little as 5mg/day but some may need more and not see effects for up to several weeks. It's always best to start with the smaller recommended dose and see how your body reacts first.

Possible Side Effects: Product should not be used by pregnant or nursing women. Individuals should seek the advice of a health care professional if they have any medical conditions. Users should reduce or discontinue use of the product if they experience tremors, nervousness, sleeplessness, [headaches](#) or heart palpitations.



The "Muscle Nerd's" Recommended Lipo 6 "Knock Off"

Ingredients:	<ul style="list-style-type: none"> • Guggulsterones: 20 mg • Caffeine Anhydrous: 200 mg • Bioperine: 5mg • Yohimbine HCL: 3 mg
Knock Off Explanation:	<p>Due to overlapping benefits, synephrine was removed from this formula in place of caffeine as the main component for adrenal stimulation.</p> <p>Guggelsterones, despite conclusive evidence, remains in the knockoff formula for those who are die-hard Lipo 6 fans. However it is by far the most expensive ingredient and removing it drastically reduces the monthly cost to a little over a dollar.</p> <p>Bioperine and Yohimbine HCL are also included to best replicate the Lipo 6 formula without too much judgment of its effectiveness. Higher doses of Yohimbine may be necessary to see a benefit.</p>
Directions:	<p>Take 1 dose 30 minutes before breakfast or morning workout and 1 more dose in the afternoon.</p> <p>Note: Insulin completely blocks yohimbine's fat loss effects so it is ideally used on a low-carb/ketogenic diet. If not following a low-carb diet, consume this formula first thing in the morning on an empty stomach before training.</p>
Retail Cost For 30-Day Supply:	\$49.99
Approximate 30-Day Cost For "Knock-Off" Formula:	\$10.24
Savings:	You Save <u>\$39.75</u> Per Month!

Fat Burner Supplement Knock-Off #2	
<p>VPX Redline</p>	
<p>Primary Active Ingredients Related To Marketed “Goal”:</p>	<ul style="list-style-type: none"> • Caffeine Anhydrous • Green Tea Extract • 5-HTP • Yohimbine HCL • N-Acetyl L-Tyrosine (NAT)
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • Medium Chain Triglycerides (MCT) • Conjugated Linoleic Acid (CLA)
<p>Retail Cost For 30-Day Supply:</p>	<p>\$52.46</p>
<p>Approximate 30-Day Cost For “Knock-Off” Formula:</p>	<p>\$6.82</p>
<p>You Save:</p>	<p>\$45.64/Month!</p>

Product: Redline

Primary Active Ingredients Related To Marketed “Goal”: Caffeine Anhydrous, 5HTP, and Yohimbine HCL.

Why It May/May Not Work: It’s not quite clear (actually not clear at all) of how Redline combines ingredients to create their marketed main benefits of both “shivering” and experiencing a simultaneous “thermogenic” [sweat](#) (?!).

It’s likely that the thermogenesis is activated by what VPX considers their trademarked “Evoburn, which is pure Evodiamine. Evodiamine is a chemical which is extracted from the *Evodia* [family](#) of plants and is similar to capsaicin (hot pepper) which is what may marginally raise body temperature. While evodiamine has been shown to reduce fat uptake in mouse studies, no human studies are

known to have been conducted at the time of this writing and singular supplements for evodiamine have been removed from sellers' inventory, most likely due to lack of credible results.

The other problem is that Redline is not forthcoming with the exact amounts of ingredients it contains. It is likely that the bulk of the ingredients are actually caffeine (based upon the "jacked up" feeling it produces), guggelsterones, yohimbine HCL, and green tea extract (more caffeine...yay!) and these are focused on in the "knockoff" formula.

Again, the purpose of this manual isn't necessarily (well...MOST of the time) to determine the effectiveness or lack of effectiveness of a supplement. But you must know that VPX doesn't release the amounts of ingredients...and in my book (which this IS), that's never a good sign.

Primary Active Ingredients Breakdown:

Caffeine Anhydrous:

- Adrenal stimulant that enhances mental alertness and reduces fatigue.
- Included in most fat-burning supplements for the purpose of increasing the level of circulating fatty acids, which has been shown to increase the oxidation of fat.
- Studies with caffeine at doses of 150 mg – 200 mg have resulted in a significant elevation in resting energy expenditure, heart rate and blood pressure but this increase is negligible in terms of [weight](#) loss.

Green Tea Extract

- One of the most "proven" fat loss aids available with credible research behind it.
- Has been shown to dramatically increase antioxidant levels
- may also be useful in glucose regulation, effectively slowing the rise in blood sugar following a meal.

5-HTP:

- A naturally-occurring amino acid, a precursor to the “feel good” neurotransmitter serotonin and an intermediate in tryptophan metabolism.
- There is also some evidence that 5-HTP may act as an appetite suppressant but results are based upon much higher doses than what are believed to be in Redline.

Yohimbine HCL:

- Antioxidant that speeds up blood flow throughout the appendages of the body.
- West African folk herb used as a traditional aphrodisiac.
- Yohimbine may maximize the body’s norepinephrine hormone levels thus maximizing fat loss, particularly in “problem areas” specific to men and [women](#).

N-Acetyl L-Tyrosine (NAT)

- NAT is a more rapidly absorbed and bio-available form of the amino acid L-Tyrosine that is less prone to urinary excretion.
- When taken as directed by your health practice professional, L-Tyrosine is a precursor for and is converted into key physiological compounds including epinephrine, dopamine, L-Dopa, Co-Q10, melanin, and various thyroid hormones.
- Many health practice professionals recommend taking N-Acetyl L-Tyrosine with other nutritional supplements and vitamins including folic acid and a B vitamin complex that includes vitamin B-6 (pyridoxine) so as to aid in L-Tyrosine's physiological conversion processes.

Ancillary Ingredients:

MCT (Medium-Chain Triglyceride):

- MCT's are considered a “fat-burning fat” in that they are quickly burned for energy in the body and cannot be stored as body fat.
- MCT's are often used by advanced bodybuilders during dieting phases to spare muscle loss and increase fat burning.

- Research has been inconclusive as to the actual worthiness of MCT for athletes and taken in high doses can actually impair athletic performance due to intestinal cramping.
- Research on MCT's role in [weight](#) loss has also produced mixed results.

Conjugated Linoleic Acid

- A naturally occurring free fatty acid found mainly in meat and dairy products
- Widely accepted in the research community that CLA counterbalances the negative effects of linoleic acid and regulates fat and protein metabolism
- Shown to increase muscle mass while reducing body fat
- Also provides anti-catabolic (muscle-sparing), antioxidant, and immune enhancement benefits

[Are The Ancillary Ingredients Worth It?](#) Yes, but not in the amounts provided within this formula.

[Possible Side Effects:](#) Do not consume on an empty stomach or you may experience nausea. Never exceed more than three total doses daily or more than three capsules in a four hour period.



The "Muscle Nerd's" Recommended Redline "Knock Off"

<p>Ingredients:</p>	<ul style="list-style-type: none"> • Guggulsterones: 20 mg • Caffeine Anhydrous: 250 mg • Green Tea Extract: 400 mg • Yohimbine HCL: 5 mg
<p>Knock Off Explanation:</p>	<p>It's likely that most of the ingredients in Redline are not in sufficient amounts to be a benefit so some have been removed to allow for higher amounts of potentially beneficial ingredients.</p> <p>Note that this formula contains more caffeine than most other supplements since this is most likely what Redline has done. Limit the amounts of caffeinated beverages you consume on days you use the formula.</p> <p>Like other "knock off" formulas, this one contains guggulsterones, in order to stay close to the original formula, but it is the most expensive ingredient and it may be best to test not including it to bring down the overall cost.</p> <p>Yohimbine HCL is also included but since it is negated by insulin and best taken on an empty stomach, it is questionable whether following the manufacturer's recommendation to take this supplement with a meal will yield the desired effect.</p>
<p>Directions:</p>	<p>Take 1 dose with a meal prior to workout</p>
<p>Retail Cost For 30-Day Supply:</p>	<p>\$52.46</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$6.82</p>
<p>Savings:</p>	<p>You Save <u>\$45.64</u> Per Month!</p>

Fat Burner Supplement Knock-Off #3

<p>MuscleTech Hydroxycut Hardcore</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> • Green Tea Extract • Caffeine • DMAE • Xanthinol Nicotinate • Evodia Extract • Black Pepper Extract • Yohimbine HCL
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • White Willow Bark • Aspidosperma Quebracho-Blanco
<p>Retail Cost For 30-Day Supply:</p>	<p>\$89.99</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$5.00</p>
<p>You Save:</p>	<p>\$84.99/Month!</p>

Product: Hydroxycut Hardcore

Primary Active Ingredients Related To Marketed "Goal": Green Tea Extract, Caffeine, DMAE, Xanthinol Nicotinate, Evodia Extract, Black Pepper Extract, Yohimbine HCL.

Why It May/May Not Work: Hydroxycut Hardcore utilizes several proven thermogenic ingredients that may aid in fat loss. Two of the primary ingredients, caffeine and green tea extract, have sufficient research proving their aid in lipolysis, though marginal in some cases. The addition of salicin from white willow bark comes close to the historical effective formula of ephedrine-caffeine-aspirin...but without the ephedra component, the synergistic benefit is believed to be lost.

Primary Active Ingredients Breakdown:

Green Tea Extract

- One of the most “proven” fat loss aids available with credible research behind it.
- Has been shown to dramatically increase antioxidant levels.
- May also be useful in glucose regulation, effectively slowing the rise in blood sugar following a meal.

Caffeine Anhydrous:

- Adrenal stimulant that enhances mental alertness and reduces fatigue.
- Included in most [fat](#)-burning supplements for the purpose of increasing the level of circulating fatty acids, which has been shown to increase the oxidation of fat.
- Studies with caffeine at doses of 150 mg – 200 mg have resulted in a significant elevation in resting energy expenditure, heart rate and blood pressure but this increase is negligible in terms of [weight](#) loss.

Deanol acetamidobenzoate (DMAE)

- Typically used to improve [memory](#) and even treat attention deficit disorder
- Short term studies show an increase in vigilance and alertness, with a positive influence on mood. However, while some long term studies showed DMAE to increase the lifespan of animals in which it was tested, others indicate a possible reduction in average life span (studies on quail). With the uncertainty of whether this could be assessed to humans, DMAE supplementation is not generally recommended.

Xanthinol Nicotinate

- The most potent form of the mineral niacin
- Excess niacin can actually inhibit the use of fat as fuel and reduce athletic performance.

Evodia Extract

- Evodia is an extract from the *Evodia* family of plants and is similar to capsaicin (hot pepper) which has been shown to marginally raise body temperature. While evodia has been shown to reduce fat uptake in mouse studies, no human studies are known to have been conducted at the time of this writing and singular supplements for evodia have been removed from sellers' inventory, most likely due to lack of credible results.

Black Pepper Extract:

- Herbal extract from the pepper plant that claims to increase the absorption and utilization of nutrients in the body.
- No evidence could be found of its effectiveness of increasing absorption.

Yohimbine HCL:

- Antioxidant that speeds up blood flow throughout the appendages of the body.
- West African folk herb used as a traditional aphrodisiac.
- Yohimbine may maximize the body's norepinephrine hormone levels thus maximizing fat loss, particularly in "problem areas" specific to men and [women](#).

Ancillary Ingredients:

White Willow Bark

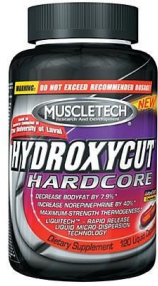
- Similar in effect to "aspirin" as an anti-inflammatory and blood-thinner but without irritating the [stomach](#) lining

Aspidosperma Quebracho-Blanco

- Also known simply as "quebracho", this bark contains several alkaloids that act as central-nervous-system stimulators.
- The extract also offers high amounts of yohimbe, which works to block specific receptors that inhibit fat loss.

Are The Ancillary Ingredients Worth It? No. This includes the additional herbal extracts added to create a “proprietary formula” that are too many to list.

Possible Side Effects: None noted by manufacturer but as with all caffeine products, users should reduce or discontinue use of the product if they experience tremors, nervousness, sleeplessness, [headaches](#) or heart palpitations.



The "Muscle Nerd's" Recommended Hydroxycut Hardcore "Knock Off"


<p>Ingredients:</p>	<ul style="list-style-type: none"> • Green Tea Extract: 400 mg • Caffeine: 280 mg • Black Pepper Extract (Bioperine): 5 mg • Yohimbine HCL: 4.5 mg
<p>Knock Off Explanation:</p>	<p>Since many of the ingredients in Hydroxycut are focused on mental alertness rather than fat loss and caffeine alone will help with this, several have been removed.</p> <p>Other ingredients removed are those determined to potentially be harmful or in insufficient amounts to have any effect. "Quebracho" also has been removed since its yohimbine-like effects are already covered in the addition of actual yohimbine.</p> <p>Note that this formula contains more caffeine than most other supplements. Limit the amounts of caffeinated beverages you consume on days you use the formula.</p>
<p>Directions:</p>	<p>Take 1 dose twice a day 30-60 minutes before meals</p> <p>Note: Insulin completely blocks yohimbine's fat loss effects so it is ideally used on a low-carb/ketogenic diet. If not following a low-carb diet, consume this formula first thing in the morning on an empty stomach before training.</p>
<p>Retail Cost For 30-Day Supply:</p>	<p style="text-align: center;">\$89.99</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p style="text-align: center;">\$5.00</p>
<p>Savings:</p>	<p style="text-align: center;">You Save <u>\$84.99</u> Per Month!</p>

Supplement Category: Sports Performance

Supplement Goals: Increase your endurance, speed, and power while providing the body with the nutrients needed to maximize training intensity.

The Top Selling "Sports Performance" Supplements

	TwinLab Ultra Fuel	EAS Catapult	Purple Wraath
The "Line Up":			
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> • Maltodextrin • Fructose 	<ul style="list-style-type: none"> • L-Tyrosine • Apha (GPC) • Sucrose • Maltodextrin • Caffeine Anhydrous 	<ul style="list-style-type: none"> • L-Leucine • L-Valine • L-Isoleucine • L-Lysine • L-Arginine • L-Histidine • L-Threonine • L-Methionine • L-Phenylalanine
Ancillary Ingredients:	<ul style="list-style-type: none"> • 11 Vitamins & Minerals 		
Retail Cost For 30-Day Supply:	\$47.12	\$53.94	\$50.00
Approximate 30-Day Cost For "Knock-Off" Formula:	\$8.78	\$6.39	\$15.99
You Save:	\$38.34/Month!	\$47.55/Month	\$34.01/Month

Sports Performance Supplement Knock-Off # 1	
TwinLab Ultra Fuel	
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> • Maltodextrin • Fructose
Ancillary Ingredients:	<ul style="list-style-type: none"> • 11 Vitamins & Minerals
Retail Cost For 30-Day Supply:	\$47.12
Approximate 30-Day Cost For "Knock-Off" Formula:	\$8.78
You Save:	\$38.34/Month!

Product: TwinLab Ultra Fuel

Primary Active Ingredients Related To Marketed "Goal": Maltodextrin and Fructose.

Why It May/May Not Work: Ultra Fuel uses complex carbohydrate sugar sources to maximize the replacement of glycogen in hard-working muscles, extending endurance, speeding recovery and helping to improve overall performance during workouts.

Primary Active Ingredients Breakdown:

Maltodextrin:

- Easily digestible blend of complex carbohydrates that are derived from corn starch and provide great source of energy.

- Contains linked sugar compounds (also known as glucose polymers) that are easier for the body to ingest and use.
- Metabolized at a slow, steady rate so that high energy levels may be sustained during vigorous workouts.

Fructose:

- Monosaccharide that has the same chemical formula as glucose.
- Often called “fruit sugar” because it is found in virtually all fruits. However, it can also be found in vegetables, honey and other plants.
- Carbohydrate that is an important source of energy for any serious bodybuilder.

Ancillary Ingredients: 11 vitamins and minerals including vitamin C, Thiamin, Riboflavin, Niacin, Vitamin B6, Biotin, Pantothenic Acid, Magnesium, Chromium, Sodium, and Potassium

Are The Ancillary Ingredients Worth It? During intense training, athletes require more vitamins and minerals than individuals who do not train in order to maximize recovery and facilitate biological processes. However, in this formula, individual vitamins and minerals are excluded in place of a multi-vitamin/mineral supplement.

Possible Side Effects: None noted by manufacturer.



The "Muscle Nerd's" Recommended Ultra Fuel "Knock Off"

Ingredients:	<ul style="list-style-type: none"> • Maltodextrin: 75 g • Fructose: 25 g • 1/3 Packet Unsweetened Powdered Drink Mix (like Kool-Aid) • Multi-Vitamin/Mineral: 1 daily dose
Knock Off Explanation:	<p>The focus of Ultra Fuel is the replacement of lost carbohydrates and muscle glycogen during intense or long duration training. This is easily accomplished through ingestion of a combination of two different slow-digesting sugars which are the main ingredients of this supplement.</p> <p>The addition of a multi-vitamin/mineral powder helps to facilitate recovery and nutrient usage. This addition will likely supply more nutrients than the original formula and the cost has been excluded from price since multi's are part of so many formulas and should be standard daily supplement.</p>
Directions:	Mix all ingredients in a container of up to 1 liter of water and consume before and/or during intense or endurance exercise.
Retail Cost For 30-Day Supply:	\$47.12
Approximate 30-Day Cost For "Knock-Off" Formula:	\$8.78
Savings:	You Save \$38.34 Per Month!

Sports Performance Supplement Knock-Off #2	
<p>EAS Catapult</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> • L-Tyrosine • Apha (GPC) • Sucrose • Maltodextrin • Caffeine Anhydrous
<p>Ancillary Ingredients:</p>	<p>None noted</p>
<p>Retail Cost For 30-Day Supply:</p>	<p>\$53.94</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$6.39</p>
<p>You Save:</p>	<p>\$47.55/Month!</p>

Product: EAS Catapult

Primary Active Ingredients Related To Marketed "Goal": L-Tyrosine, Alpha Glycerol Phosphoryl Choline (Alpha GPC), Sucrose, Maltodextrin, Caffeine Anhydrous

Why It May/May Not Work: Catapult boosts workout intensity and energy through the use of both simple and complex carbohydrates, and caffeine. The addition of the amino acid l-tyrosine has shown marginal results for increasing mental acuity and no conclusive evidence of benefits from Alpha GPC have been noted.

Primary Active Ingredients Breakdown:

L-Tyrosine:

- Tyrosine is a nonessential amino acid found in dairy products, meats, fish, eggs, nuts, beans, oats, and wheat.
- There is interest in tyrosine for preventing the negative effects related to stress by increasing the synthesis of “catecholamines” like epinephrine, norepinephrine, and dopamine.
- There is some evidence in animals and humans that supplemental tyrosine might improve performance, memory, and learning under extreme environmental conditions, intense exercise, or psychological [stress](#)

Alpha Glycerol Phosphoryl Choline (Alpha GPC)

- Alpha-GPC is used for Alzheimer's disease, improving [memory](#) and cognitive function, and learning but there is insufficient reliable evidence to its effectiveness

Sucrose (Table Sugar):

- Easily assimilated macronutrient that provides a quick source of energy to the body.
- While studies have proven sucrose to be a great short-term energy source, users should take care to use it sparingly because of the supplement's adverse health effects, such as [tooth](#) decay or the onset of diabetes.
- In addition, since sucrose is very high glycemic and causes a significant insulin response, the resulting “energy crash” caused by spiked insulin could impair performance shortly after peak effectiveness.

Maltodextrin:

- Easily digestible blend of complex carbohydrates that are derived from corn starch and provide great source of energy.

- Contains linked sugar compounds (also known as glucose polymers) that are easier for the body to ingest and use.
- Metabolized at a slow, steady rate so that high energy levels may be sustained during vigorous workouts.

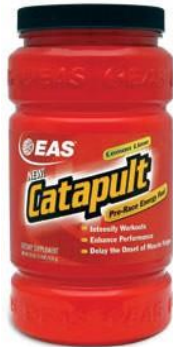
Caffeine Anhydrous:

- Adrenal stimulant that enhances mental alertness and reduces fatigue.

Ancillary Ingredients: N/A

Are The Ancillary Ingredients Worth It? N/A.

Possible Side Effects: Do not take late in the day or exceed two doses in any 24-hour period. Allow at least four hours between doses. Smaller individuals or those sensitive to caffeine may wish to reduce dosage. Remain properly hydrated during extended periods of physical activity.



The "Muscle Nerd's" Recommended Catapult "Knock Off"

Ingredients:	<ul style="list-style-type: none"> • Maltodextrin: 9 g • Sucrose (Table Sugar): 12 g • L-Tyrosine: 3 g • Caffeine Anhydrous: 200 mg • ~ ¼ Packet Unsweetened Powdered Drink Mix (like Kool-Aid)
Knock Off Explanation:	<p>The focus of Catapult is to create a quick energy boost through the inclusion of table sugar (sucrose) and caffeine and then sustain energy levels through the complex carbohydrate maltodextrin.</p> <p>Alpha GPC has been removed from this formula due to any credible evidence of its effectiveness and it is a very expensive supplement to include.</p> <p>The ingredients included all provide the necessary formula to achieve Catapult's intended results.</p>
Directions:	Mix all ingredients in 8-12 ounces of water and consume 10 minutes prior to workouts.
Retail Cost For 30-Day Supply:	\$53.94
Approximate 30-Day Cost For "Knock-Off" Formula:	\$6.39
Savings:	You Save <u>\$47.55</u> Per Month!

Sports Performance Supplement Knock-Off #3

<p>Controlled Lab's Purple Wraath</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> • L-Leucine • L-Valine • L-Isoleucine • L-Lysine • L-Arginine • L-Histidine • L-Threonine • L-Methionine • L-Phenylalanine • Beta Alanine • Citrulline Malate • Betaine Anhydrous
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • Ginger (from root), L-Norvaline
<p>Retail Cost For 30-Day Supply:</p>	<p>\$50.00</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$15.99</p>
<p>You Save:</p>	<p>\$34.01/Month!</p>

Product: Purple Wraath

Primary Active Ingredients Related To Marketed "Goal": L-Leucine, L-Valine, L-Isoleucine, L-Lysine, L-Arginine, L-Histidine, L-Threonine, L-Methionine, L-Phenylalanine, Beta Alanine, Citrulline Malate, and Betaine Anhydrous

Why It May/May Not Work: The ingredients in Purple Wraath are comprised mainly of "essential" and branched-chain amino acids in order to limit the amount

of muscle lost from intense training and facilitate rapid recover. The addition of beta alanine and histidine combine to provide energy, enhance recovery, promote muscle growth, and optimize hormone levels in order to provide users with the edge needed to get the most out of their workouts.

Primary Active Ingredients Breakdown:

L-Leucine:

- Lowers elevated blood sugar levels.
- Increases growth hormone production.
- Enhances energy, increases endurance, and aids in muscle recovery and tissue repair.

L-Valine:

- Promotes muscle growth and tissue repair.
- Enhances energy, increases endurance, and aids in muscle recovery and tissue repair. Also decreases elevated [blood](#) sugar levels and increases growth hormone production.

L-Isoleucine:

- Regulates blood sugar and energy levels.

L-Lysine:

- Provides beta-oxidation, nitrogen balance, increased calcium absorptions, and energy.

L-Arginine:

- A semi-essential amino acid that is a building block of protein and performs several physiological functions
- Cannot make naturally within the body, therefore supplementation is necessary to increase levels.
- Increases nitric oxide in the body, aiding bodybuilding efforts.

- Instrumental in hormone secretion (including growth hormone output), the removal of toxic waste products from the body, and immune system defenses.
- Has become popular due to its ability to produce nitric oxide in the body (for better “pumps”), scavenge free radicals, signal muscle cells, release growth hormone, support healthy [cholesterol](#) levels, and enhance the metabolism of fat in the body.

L-Histidine:

- Causes the blood vessels to dilate.
- Increases sexual function.

L-Threonine:

- Increases nutrient uptake.
- Provides [boost](#) to the immune system.

L-Methionine:

- Enhances metabolic rate and increases energy.
- Studies have shown that it elevates mood and acts as an antioxidant.

L-Phenylalanine:

- Enhances energy and elevates mood, as well as regulates hormones.

Citrulline Malate:

- A non-essential amino acid that plays a role in nitrogen balance and metabolism that has been used with great success by European scientists who have reported results of increased energy and enhanced feelings of well-being
- While primarily synthesized from glutamine in the intestines, citrulline supplied by the diet is efficiently absorbed from the stomach and much of it bypasses uptake in the liver to be distributed to the kidneys, brain, muscle and other tissues for conversion to arginine.

- Supplemental citrulline malate is a salt form of the amino acid. The malate, or malic acid, is found in fruits such as apples and enhances the effects of citrulline.
- Malic acid takes part in aerobic cellular respiration where oxygen and a carbon compound (acetyl Co-A) are used to produce immediate energy and carbon dioxide in the mitochondria of the cell (commonly called the “Kreb’s energy cycle”, protecting muscles from fatigue.
- Research done so far, though promising, has not been credible enough to prove its effectiveness. In one human study researchers examined the effects of supplementation with 6 grams of citrulline malate daily for 15 days. Results showed that there was a significant reduction in the sensation of fatigue following exercise, a 34% increase in the rate of oxidative ATP production during exercise, and a 20% increase in the rate of phosphocreatine recovery after exercise. However these doses are MUCH higher than what are included in this formula and due to cost and lack of results at such a low dose, it has been omitted.

Beta Alanine:

- Amino acid that combines with l-histidine in skeletal muscle into carnosine.
- Significant evidence shows that beta alanine may delay fatigue and increase exercise performance but dosage in promising studies used 3-4 grams/day, much less than what is included in this formula.
- Best results from research came when beta alanine was combined with creatine. Creatine is absent in the Purple Wraath formula.

Betaine Anhydrous

- Betaine anhydrous occurs naturally in the body and is the major metabolite of choline.
- It has been shown to reduce homocysteine levels, reducing the risk of coronary artery disease, but its use in this formula is unclear. Betaine Anhydrous may work synergistically with glycocyamine to help the body produce creatine, but this companion supplement is absent and with such small amounts of BA included, it has been omitted.

Ancillary Ingredients: Ginger (from root), L-Norvaline

- Ginger Root: a digestive and circulation aid that assists with the breakdown of proteins, relaxes muscles and increases blood flow. Also works as an anti-inflammatory and lowers LDL cholesterol levels.
- L-Norvaline: an analog of the branched chain amino acid Valine that may increase arginine concentrations for enhanced conversion to nitric oxide.

Are The Ancillary Ingredients Worth It? Ginger Root has been added in order to assist with circulation of nutrients and decrease inflammation caused by training. L-norvaline is omitted as the inclusion of L-arginine in the formula makes it obsolete.

Possible Side Effects: Purple Wraath may cause a slight tingling in some individuals due to the beta alanine. Individuals should not take this [product](#) if they have any prior medical condition, including [diabetes](#) or high blood pressure.



The "Muscle Nerd's" Recommended Purple Wraath "Knock Off"

<p>Ingredients:</p>	<ul style="list-style-type: none"> • Liquid Hydrolyzed Collagen (EAA's & BCAA's): 1 Tbsp • Beta Alanine: 3 g • Ginger Root Powder: 100 mg • ~ ¼ Packet Unsweetened Powdered Drink Mix (like Kool-Aid) • Sucralose (calorie-free sweetener): 12-20 grams to taste
<p>Knock Off Explanation:</p>	<p>Liquid collagen contains all of the essential amino acids and branched chain amino acids included within the Purple Wraath formula. If you can't order liquid collagen, you can also use a standard liquid amino acid complex like TwinLab's Amino Fuel.</p> <p>The addition of beta alanine has been increased to a level reflecting benefits from legitimate research while other questionable ingredients were omitted and combines with the l-histidine within the collagen to form carnosine. (Note: it's suggested that creatine be included within your own formula to work synergistically with BA but is not added here)</p> <p>Ginger root powder is included to aid in circulation for the removal of free fatty acids and act as an anti-inflammatory.</p>
<p>Directions:</p>	<p>Combine all ingredients with 6-14 oz. of water, and consume it pre-workout or over an extended period of time (pre-workout, during your workout, and post-workout).</p> <p>(Note: Test formula with only ½ dose of beta alanine to see how your body reacts. Higher doses may result in a "tingling" effect that may be uncomfortable for a short period of time.)</p>
<p>Retail Cost For 30-Day Supply:</p>	<p>\$50.00</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$15.99</p>
<p>Savings:</p>	<p>You Save <u>\$34.01</u> Per Month!</p>

Supplement Category: Post Workout Recovery

Supplement Goals: Facilitate the body's ability to recover from intense training sessions, stimulating muscle repair and growth, energy regeneration, hormone regulation, and [fat](#) burning.

The Top Selling "Post Workout" Supplements

	Cell-Tech Hardcore	CE2	CellMass
The "Line Up":			
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> • Creatine Matrix • Taurine • Betaine HCL • Glutamine • Alpha Lipoic Acid • "Insulin Maximizer" Matrix • Dextrose 	<ul style="list-style-type: none"> • Creatine Ethyl Ester 	<ul style="list-style-type: none"> • Creatine Ethyl Ester Malate • Glutamine AKG • Cinnulin-PF
Ancillary Ingredients:	<ul style="list-style-type: none"> • Various plant/fruit extracts 		<ul style="list-style-type: none"> • Maltodextrin • Potassium Citrate • Sucralose
Retail Cost For 30-Day Supply:	\$85.49	\$59.97	\$89.93
Approximate 30-Day Cost For "Knock-Off" Formula:	\$19.06	\$2.61	\$17.97
You Save:	\$66.43/Month!	\$57.36/Month	\$71.96/Month!

Post-Workout Supplement Knock-Off #1

<p>MuscleTech Cell-Tech Hardcore</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> • Creatine Matrix • Taurine • Betaine HCL • Glutamine • Alpha Lipoic Acid • "Insulin Maximizer" Matrix • Dextrose
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • Ginger (from root), L-Norvaline
<p>Retail Cost For 30-Day Supply:</p>	<p>\$85.49</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$19.06</p>
<p>You Save:</p>	<p>\$66.43/Month!</p>

Product: Cell-Tech Hardcore

Primary Active Ingredients Related To Marketed "Goal": Creatine Monohydrate, Taurine, Betaine HCL, Glutamine, Alpha Lipoic Acid, Dextrose

Why It May/May Not Work: Reviewing MuscleTech's advertising language and trademarked proprietary blends is a trip into the deep recesses of some ancient thesaurus. Nonetheless, many of the ingredients included in their Cell-Tech Hardcore formula has been shown to increase energy, facilitate recovery after training, and increase overall performance.

The biggest decision for the consumer is whether to buy into MuscleTech's theory of "nanoparticulation". The "nanoparticulation" process greatly decreases the size of ingredients so they pass through the cell wall easier, therefore

allowing easier absorption. Several drug companies are beginning to seek patents in this technology for the reason of allowing faster drug absorption, controlled dosage release into the human body and minimizing side-effects.

The “knockoff” formula used includes traditional supplement forms that have been shown to have adequate results respective to this supplement’s stated goals and without the high-ticket pricetag.

Primary Active Ingredients Breakdown:

Deciphering MuscleTech’s advertising explanations and “proprietary blend” matrix’s requires the world’s biggest Thesaurus. To simplify explanation, most of the individual ingredients are summarized within their stated categories below.

Creatine Matrix: Includes “nano-diffused” Creatine Monohydrate, Creatine Alpha Ketoglutarate, Creatine Anhydrous, Dicreatine Malate, Creatine-6,8-Thioctic Acid-Ketoisocaproic Acid Calcium, Creatine Pyroglutamate, Tricreatine HCA

Creatine Benefits:

- Improves performance in high-intensity exercise.
- Increases energy levels and speeds up recovery time.
- The alpha-ketoglutarate and ethyl-ester versions of creatine may be better assimilated as an alternative for those who have not had results with traditional creatine or don’t feel the need for “nanoparticulation”. Creatine AKG does not need the help of a creatine transporter to enter cells, but is taken directly into muscle cells. After the creatine is taken in, the remaining AKG is used as energy for the muscles by being converted into creatine phosphate

Cell “Volumizer” Matrix: Includes versions of Taurine, Betaine, and Glutamine

Taurine:

- Free-form amino acid which helps with a variety of metabolic processes.
- Neurotransmitter that is involved in glucose uptake.
- Component of bile acids, which are used to help absorb fats and other fat-soluble vitamins.

- Studies have shown that Taurine also helps regulate heart beat, maintain cell membrane stability and prevents brain cell over-activity.

Betaine HCL:

- Betaine HCL is a non-essential nutrient and a source of hydrochloric acid, a naturally occurring chemical in the stomach that helps digest food by breaking up fats and proteins. In particular, Betaine HCL is necessary for adequate absorption of protein, calcium, vitamin B12 and iron.
- Also known as hydrochloric acid and stomach acid. The low pH of the stomach's hydrochloric acid also destroys ingested bacteria and microorganisms.

Glutamine:

- Largest amino acid in skeletal muscle
- Supplementation may minimize the breakdown of muscle tissue and improve protein metabolism.
- AKG version may efficiently bypass the gut and has the ability to enter the muscle cell for superior absorption and cell volumization.

“Saturation Optimizer” Matrix:

Alpha Lipoic Acid:

- ALA is an antioxidant that helps to inhibit the reactions of damaging “free radicals”
- When taken as a supplement, ALA increases the production of glutathione which helps dissolve toxic substances in the liver by neutralizing free radicals produced in our bodies and thus protects cells.

“Insulin Maximizer” Matrix: Includes various forms of sugar and common wheat but is nothing compared with the 75 grams of dextrose added to the formula

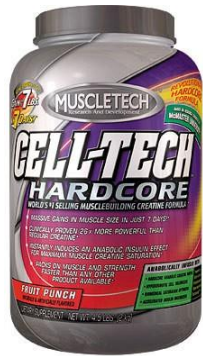
Dextrose:

- Dextrose (also known as glucose) is a monosaccharide that is derived entirely from corn. It is a low-cost supplement and contains no fructose or lactose.
- Great source of rapidly absorbed energy for the body because it is highly water soluble.
- Main source of energy in the body.

Ancillary Ingredients: Small amounts of various plant and fruit extracts with little evidence of related benefit, particularly in such small doses.

Are The Ancillary Ingredients Worth It? No.

Possible Side Effects: As with all creatine products, maintain adequate state of hydration during use. Do not use if you suffer from diabetes or if you are prone to hyperglycemia or hypoglycemia. If you experience a [skin](#) rash or any other allergic reaction, discontinue use and consult a physician.



The "Muscle Nerd's" Recommended Cell-Tech Hardcore "Knock Off"

Ingredients:	<ul style="list-style-type: none"> • Creatine Ethyl Ester: 20 g/day (divided over 10 doses of 2 g throughout the day) for 5 days, followed by 5 g/day daily for the duration of the cycle • Alpha Lipoic Acid: 200 mg • Taurine: 1.3 g • Glutamine AKG: 1 g • Dextrose: 75 g • ¼ Packet Unsweetened Powdered Drink Mix (like Kool-Aid)
Knock Off Explanation:	<p>Creatine Ethyl Ester and the AKG version of glutamine have been chosen for best assimilation and value. As a less-expensive alternative, regular creatine and glutamine may be used depending upon individual results. If regular glutamine is used, use twice as much.</p> <p>The "driver" for maximum assimilation of the ingredients is the simple sugar dextrose which quickly raises blood sugar and insulin, shuttling nutrients into cells. Due to the resulting insulin spike, it's recommended that this formula only be used on workout days immediately after training.</p>
Directions:	Combine all ingredients with 6-14 oz. of water, and consume it immediately after your workout.
Retail Cost For 30-Day Supply:	\$85.49
Approximate 30-Day Cost For "Knock-Off" Formula:	\$19.06
Savings:	You Save <u>\$66.43</u> Per Month!

Post-Workout Supplement Knock-Off #2

MRI CE2 Platinum	
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> • Creatine Ethyl Ester
Ancillary Ingredients:	None
Retail Cost For 30-Day Supply:	\$59.97
Approximate 30-Day Cost For "Knock-Off" Formula:	\$2.61
You Save:	\$57.36/Month

Product: CE2

Primary Active Ingredients Related To Marketed "Goal": Creatine Ethyl Ester

Why It May/May Not Work: CE2 employs the same "ester-bond" delivery technology you find in some of today's prescription drugs. CE2 claims to be rapidly absorbed by the body's creatine-dependent cells, not just muscle cells, quicker and without the puffy look that sometimes comes with using traditional creatine.

Primary Active Ingredients Breakdown:

Creatine Ethyl Ester:

- Improves performance in high-intensity exercise by regenerating the ADP-ATP energy cycle.
- Increases energy levels and speeds up recovery time.

- Increases cell “volumization” by stuffing muscle cells with additional water.
- Does not require a “loading” phase or cycling like the monohydrate version of creatine.
- Creatine ethyl ester’s benefit over regular creatine is questionable in comparison with “post-load” monohydrate effects. Once the muscle cells have reached a saturation point with any form of creatine, the effects may be the same. Long term studies have not been conducted yet on this potentiality.

Ancillary Ingredients: None

Are The Ancillary Ingredients Worth It? No.

Possible Side Effects: None noted by manufacturer but as with all creatine products, maintain adequate state of hydration during use. Do not use if you suffer from diabetes or if you are prone to hyperglycemia or hypoglycemia. If you experience a [skin](#) rash or any other allergic reaction, discontinue use and consult a physician.



The "Muscle Nerd's" Recommended CE2 Platinum "Knock Off"

Ingredients:	<ul style="list-style-type: none"> • Creatine Ethyl Ester: 3 g/day divided over 2 doses
Knock Off Explanation:	This is a "no frills" formula which uses a very effective form of creatine known as creatine ethyl ester.
Directions:	Use 1.5 grams twice a day for at least 8 weeks with no other delivery instructions.
Retail Cost For 30-Day Supply:	\$59.97
Approximate 30-Day Cost For "Knock-Off" Formula:	\$2.61
Savings:	You Save <u>\$57.36</u> Per Month!

Post-Workout Supplement Knock-Off #3

BSN CellMass	
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> Creatine Ethyl Ester Malate Glutamine AKG Cinnulin-PF
Ancillary Ingredients:	<ul style="list-style-type: none"> Maltodextrin Potassium Citrate Sucralose
Retail Cost For 30-Day Supply:	\$89.93
Approximate 30-Day Cost For "Knock-Off" Formula:	\$17.97
You Save:	\$71.96/Month!

Product: CellMass

Primary Active Ingredients Related To Marketed "Goal": Creatine Ethyl Ester Malate, Glutamine AKG, and Cinnulin-PF.

Why It May/May Not Work: CellMass begins to stimulate muscle hypertrophy by saturating muscles with creatine immediately after your workout in order to replace creatine stores lost during training. This also helps to speed recovery, enhance volumization of the muscle cells, increasing muscle density and hardness, and activating a powerful anabolic growth phase.

Primary Active Ingredients Breakdown:

Creatine Ethyl Ester Malate:

- A membrane permeable form of creatine that theoretically can enter the cells without having to use the "typical" creatine transporter molecules.
- Improves performance in high-intensity exercise by regenerating the ADP-ATP energy cycle.
- Increases [energy](#) levels and speeds up recovery time.
- Increases cell "volumization" by stuffing muscle cells with additional water.
- Does not require a "loading" phase or cycling like the monohydrate version of creatine.
- Users gain substantial increases in strength and muscle mass, with none of the gastrointestinal discomfort or water bloating normally associated with the monohydrate form.
- Creatine ethyl ester's benefit over regular creatine is questionable in comparison with "post-load" monohydrate effects. Once the muscle cells have reached a saturation point with any form of creatine, the effects may be the same. Long term studies have not been conducted yet on this potentiality.

Glutamine Alpha-Ketoglutarate:

- Glutamine is the largest amino acid in skeletal muscle
- Supplementation may minimize the breakdown of muscle tissue and improve protein metabolism.
- AKG version may efficiently bypass the gut and has the ability to enter the muscle cell for superior absorption and cell volumization.

Cinnulin-PF:

- A safe and effective aqueous extract from cinnamon.
- Supports healthy glucose management.
- Helps optimize healthy cholesterol levels.
- Bolsters health blood pressure.

- May help with cellular uptake of nutrients.

Ancillary Ingredients: Maltodextrin, Potassium Citrate and Sucralose.

- **Maltodextrin:** Maltodextrin is an easily digestible blend of complex carbohydrates that are derived from corn starch and provide a great source of energy. It contains linked sugar compounds that are easier for the body to ingest and use, and it is metabolized at a steady rate so that high energy levels may be sustained during vigorous workouts.
- **Potassium Citrate:** Helps increase absorption of the supplement into the body and increases recovery time.
- **Sucralose:** Sweetener made from sugar. It has no calories and no nutritional value whatsoever.

Are The Ancillary Ingredients Worth It? Yes, the addition of maltodextrin can increase energy and assist with formula uptake by the muscle cells. Potassium can help replace mineral loss during training. However, sucralose is not necessary with the addition of the maltodextrin.

Possible Side Effects: Before consuming CellMass users should seek advice from a health care professional if they are unaware of their current health condition or have any pre-existing medical conditions including, but not limited to: high or low blood pressure, cardiac arrhythmia, stroke; heart, liver, or thyroid disease; [anxiety](#), depression, seizure disorder, psychiatric disease, diabetes, pernicious anemia, difficulty urinating due to [prostate](#) enlargement, or if taking an MAO inhibitor or any other medication. Women should not use CellMass if they are pregnant, nursing, prone to dehydration, or exposed to excessive heat. Users should reduce or discontinue use if sleeplessness, tremors, dizziness, nervousness, [headaches](#), or heart palpitations occur. CellMass should only be used by healthy adults 18 years of age or older.



The "Muscle Nerd's" Recommended CE2 Platinum "Knock Off"

Ingredients:	<ul style="list-style-type: none"> • Creatine Ethyl Ester: 3 g • Glutamine AKG: 2 g • Cinnamon Extract: 500 mg • Maltodextrin: 10 g • Potassium Bicarbonate: 500 mg
Knock Off Explanation:	<p>The highest quality forms of creatine and glutamine are included in this formula (though lower quality forms may be just as effective for you at a reduced cost).</p> <p>The addition of cinnamon extract and potassium are included for cellular uptake and enhanced recovery.</p>
Directions:	<p>Divide the dosage listed into 2 equal servings.</p> <p>Mix all ingredients with 4-6oz of cold water and consume your first serving immediately following your workout on an empty stomach.</p> <p>A second serving should be consumed 6-8 hours after your post-workout serving, again, on an empty stomach.</p>
Retail Cost For 30-Day Supply:	\$89.93
Approximate 30-Day Cost For "Knock-Off" Formula:	\$17.97
Savings:	You Save <u>\$71.96</u> Per Month!

Supplement Category: Nitric Oxide

Supplement Goals: Increase lean muscle growth and size by increasing blood flow and stimulating the release of anabolic ("muscle building") hormones.

The Top Selling "Nitric Oxide" Supplements

	NO2	No-Xplode	Anadrox
The "Line Up":			
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> Arginine Alpha Ketoglutarate 	<ul style="list-style-type: none"> L-Arginine AKG L-Citrulline L-Histidine AKG Betaine Glycocyamine Calcium Potassium Magnesium L-Tyrosine Taurine Phosphates of Calcium, Potassium, and Sodium Caffeine 	<ul style="list-style-type: none"> L-Arginine HCL Citrilline Malate L-Tyrosine Vanadyl Sulfate Choline Dihydrogen Citrate Green Tea Extract Caffeine 7-KETO DHEA Guggulsterones
Ancillary Ingredients:	<ul style="list-style-type: none"> Calcium Phosphate 	<ul style="list-style-type: none"> Maltodextrin Sodium Bicarbonate 	<ul style="list-style-type: none"> Bioperine
Retail Cost For 30-Day Supply:	\$119.95	\$134.89	\$42.85
Approximate 30-Day Cost For "Knock-Off" Formula:	\$18.00	\$31.55	\$16.58
You Save:	\$84.59/Month!	\$103.34/Month	\$26.27/Month!

Nitric Oxide Supplement Knock-Off #1

MRI NO2	
Primary Active Ingredients Related To Marketed “Goal”:	<ul style="list-style-type: none"> • Arginine Alpha Ketoglutarate
Ancillary Ingredients:	None
Retail Cost For 30-Day Supply:	\$119.95
Approximate 30-Day Cost For “Knock-Off” Formula:	\$18.00
You Save:	\$101.95/Month!

Product: MRI N30

Primary Active Ingredients Related To Marketed “Goal”: L-Arginine Alpha-Ketoglutarate (AAKG)

Why It May/May Not Work: L-Arginine Alpha-Ketoglutarate has been proven to increase blood flow for prolonged periods which delivers more nutrients to muscles and extending the “pumped” feeling from resistance training. There is also evidence that AAKG may increase mental focus.

Primary Active Ingredients Breakdown:

L-Arginine Alpha-Ketoglutarate (AAKG):

- When released in the blood stream, dramatically increases nitric oxide production.

- Studies have shown that an increase in nitric oxide can provide extended and enhanced “muscle pump” after a workout, improved endurance and recovery time, and improved workout capacity.
- More potent and more readily bioavailable form of L-arginine

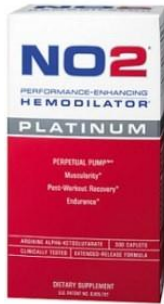
Ancillary Ingredients:

Calcium Phosphate: Included as a “delivery mechanism” and is the most common form of phosphorus and is critical for membrane structure, transport, and energy storage.

Are The Ancillary Ingredients Worth It? No

Possible Side Effects: Do not use if you are pregnant or nursing. Consult your healthcare professional before use if you are being treated for high blood pressure or erectile dysfunction. Use this product with caution if you have a history of cold sores. Use of this product is not recommended in individuals allergic to corn products or citrus fruits. Products containing ephedra may reduce the effectiveness of nitric oxide supplements if taken concurrently, and their use is not recommended. Keep out of reach of [children](#).

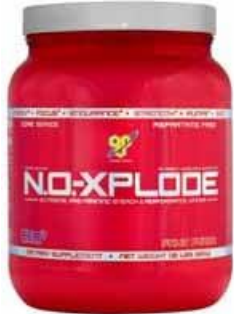
Also, users diagnosed with herpes virus may experience outbreaks using L-arginine.



The "Muscle Nerd's" Recommended NO2 "Knock Off"

Ingredients:	<ul style="list-style-type: none"> Arginine Alpha-Ketoglutarate: 4 g + 4 g...or 5 g + 5 g
Knock Off Explanation:	AAKG can be a powerful growth hormone inducer and increase blood flow for better "pumps" in the gym
Directions:	<p>From the manufacturer's website:</p> <p>If you weigh between 160 and 200 pounds... Take 4 grams 30 minutes before breakfast and 4 grams 30 minutes before lunch (4 + 4). Keep in mind, there is no loading phase with this formula so continue with the 4 + 4.</p> <p>If you weigh OVER 200 pounds... Take 5 grams 30 minutes before breakfast and 5 grams 30 minutes before lunch (5 + 5). Keep in mind, there is no loading phase with this formula so continue with the 5 + 5.</p> <p>IMPORTANT: If you miss a dose, don't worry, just continue on schedule. Do not "double dose" to try to make-up for the one you missed. Some users actually take all 10 grams first thing in the morning just to prevent missing the afternoon dose. Not ideal, but better than continually missing doses.</p>
Retail Cost For 30-Day Supply:	\$119.95
Approximate 30-Day Cost For "Knock-Off" Formula:	\$18.00
Savings:	You Save <u>\$101.95</u> Per Month!

Nitric Oxide Supplement Knock-Off #2

<p>BSN NO-Xplode</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> • L-Arginine AKG • L-Citrulline Malate • L-Citrulline AKG • L-Histidine AKG • Trimethylglycine • Glycocyamine • Ketoisocaproate Potassium • L-Tyrosine • L-Tyrosine AKG • Taurine • Di-Calcium Phosphate • Di-Potassium Phosphate • Di-Sodium Phosphate
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • Maltodextrin • Sodium Bicarbonate
<p>Retail Cost For 30-Day Supply:</p>	<p>\$134.89</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$31.55</p>
<p>You Save:</p>	<p>\$103.34/Month!</p>

Product: BSN NO-Xplode

Primary Active Ingredients Related To Marketed "Goal": L-Arginine Alpha-Ketoglutarate (AAKG), L-Citrulline Malate, L-Tyrosine, Taurine, Caffeine, Calcium/Potassium/Sodium Phosphate

Why It May/May Not Work: The primary active ingredient in this formula is likely L-Arginine Alpha-Ketoglutarate that has been proven to increase blood flow for prolonged periods which delivers more nutrients to muscles and extending the “pumped” feeling from resistance training. There is also evidence that AAKG may increase mental focus.

However there is a problem in creating a “knock off” formula because BSN is not forthcoming with the exact amounts of ingredients it contains. I’ve taken the most likely active ingredients and used them in the final formula to focus on our “best guess” at what has the best potential for working within the ingredients they have listed.

Additionally, BSN uses several individual ingredients to create an assortment of “proprietary blends” but may not contain enough of several ingredients to have the desired effect. To simplify explanation, most of the individual ingredients are summarized within their stated categories below.

Primary Active Ingredients Breakdown:

“NO Meta-Fusion”: primarily L-Arginine AKG, Citrulline and Histidine

L-Arginine Alpha-Ketoglutarate (AAKG):

- When released in the blood stream, dramatically increases nitric oxide production and growth hormone.
- Studies have shown that an increase in nitric oxide can provide extended and enhanced “muscle pump” after a workout, improved endurance and recovery time, and improved workout capacity.
- More potent and more readily bioavailable form of L-arginine

Citrulline Malate:

- A non-essential amino acid that plays a role in nitrogen balance and metabolism that has been used with great success by European scientists who have reported results of increased energy and enhanced feelings of well-being
- While primarily synthesized from glutamine in the intestines, citrulline supplied by the diet is efficiently absorbed from the stomach and much of it bypasses uptake in the liver to be distributed to the kidneys, [brain](#), muscle and other tissues for conversion to arginine.

- Supplemental citrulline malate is a salt form of the amino acid. The malate, or malic acid, is found in fruits such as apples and enhances the effects of citrulline.
- Malic acid takes part in aerobic cellular respiration where oxygen and a carbon compound (acetyl Co-A) are used to produce immediate energy and carbon dioxide in the mitochondria of the cell (commonly called the “Kreb’s energy cycle”, protecting muscles from fatigue.
- Research done so far, though promising, has not been credible enough to prove its effectiveness. In one human study researchers examined the effects of supplementation with 6 grams of citrulline malate daily for 15 days. Results showed that there was a significant reduction in the sensation of fatigue following exercise, a 34% increase in the rate of oxidative ATP production during exercise, and a 20% increase in the rate of phosphocreatine recovery after exercise. However these doses are MUCH higher than what are included in this formula and due to cost and lack of results at such a low dose, it has been omitted.

L-Histidine:

- Causes the blood vessels to dilate.
- Increases sexual function.

“Muscle Volumizing Creatine Matrix”: primarily Creatine Ethyl Ester, Cinnuline PF, and Trimethylglycine (Betaine)

Creatine Ethyl Ester:

- Improves performance in high-intensity exercise by regenerating the ADP-ATP energy cycle.
- Increases energy levels and speeds up recovery time.
- Increases cell “volumization” by stuffing muscle cells with additional water.
- Does not require a “loading” phase or cycling like the monohydrate version of creatine.

- Creatine ethyl ester's benefit over regular creatine is questionable in comparison with "post-load" monohydrate effects. Once the muscle cells have reached a saturation point with any form of creatine, the effects may be the same. Long term studies have not been conducted yet on this potentiality.

Cinnulin-PF:

- A safe and effective aqueous extract from cinnamon.
- Supports healthy glucose management.
- Helps optimize healthy cholesterol levels.
- Bolsters health blood pressure.
- May help with cellular uptake of nutrients.

Betaine HCL:

- Betaine HCL is a non-essential nutrient and a source of hydrochloric acid, a naturally occurring chemical in the stomach that helps digest food by breaking up fats and proteins. In particular, Betaine HCL is necessary for adequate absorption of protein, calcium, vitamin B12 and iron.
- Also known as hydrochloric acid and stomach acid. The low pH of the stomach's hydrochloric acid also destroys ingested bacteria and microorganisms.

"Ener-Tropic Explosion": primarily L-Tyrosine, Taurine, Caffeine, MCT's (Medium Chain Triglycerides)

L-Tyrosine:

- Tyrosine is a nonessential amino acid found in dairy products, meats, fish, eggs, nuts, beans, oats, and wheat.
- There is interest in tyrosine for preventing the negative effects related to [stress](#) by increasing the synthesis of "catecholamines" like epinephrine, norepinephrine, and dopamine.

- There is some evidence in animals and humans that supplemental tyrosine might improve performance, memory, and learning, under extreme environmental conditions, intense [exercise](#), or psychological stress

<http://www.gethypnosis.com/?hopId=c6ec6f96-2340-4fbb-91e5-1627476b1d7a>

Taurine:

- Free-form amino acid which helps with a variety of metabolic processes.
- Neurotransmitter that is involved in glucose uptake.
- Component of bile acids, which are used to help absorb fats and other fat-soluble vitamins.
- Studies have shown that Taurine also helps regulate heart beat, maintain cell membrane stability and prevents brain cell over-activity.

Caffeine:

- Adrenal stimulant that enhances mental alertness and reduces fatigue.

MCT (Medium-Chain Triglyceride):

- MCT's are considered a "fat-burning fat" in that they are quickly burned for [energy](#) in the body and cannot be stored as body fat.
- MCT's are often used by advanced bodybuilders during dieting phases to spare muscle loss and increase [fat](#) burning.
- Research has been inconclusive as to the actual worthiness of MCT for athletes and taken in high doses can actually impair athletic performance due to intestinal cramping.

"Phospho-Electrolyte Replacements": Di-Calcium Phosphate, Di-Potassium Phosphate, Di-Sodium Phosphate

- Various phosphate salts meant to increase athletic performance through the replacement of calcium, potassium, and sodium and acid buffering. Studies have not shown phosphates to affect athletic performance and supplementing with a multi-vitamin/mineral should be enough to maintain proper levels.

Ancillary Ingredients: Maltodextrin, Sodium Bicarbonate

Maltodextrin:

- Easily digestible blend of complex carbohydrates that are derived from corn starch and provide great source of energy.
- Contains linked sugar compounds (also known as glucose polymers) that are easier for the body to ingest and use.
- Metabolized at a slow, steady rate so that high energy levels may be sustained during vigorous workouts.

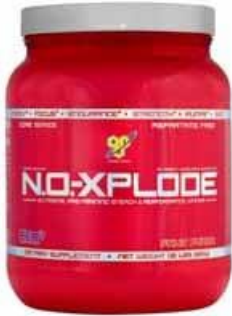
Sodium Bicarbonate:

- Also known as “baking soda”, sodium bicarbonate is extremely alkaline and is often used to reduce blood and urine acidity.

Are The Ancillary Ingredients Worth It? Yes. Maltodextrin is very effective for increasing energy and endurance during training. Sodium bicarbonate, taken in the right dosage, is effective for buffering acid levels which increase due to training.

Possible Side Effects: Before using product, seek advice from a health care practitioner if you are unaware of your current health condition or have any pre-existing medical condition including but not limited to: high or low blood pressure, cardiac arrhythmia, stroke, heart, liver or thyroid disease, [anxiety](#), depression, seizure disorder, psychiatric disease, diabetes, pernicious anemia, difficulty urinating due to [prostate](#) enlargement or if you are taking an MAO inhibitor or any other medication. Do not use if you are pregnant, nursing, prone to dehydration or exposed to excessive heat. Reduce or discontinue use if sleeplessness, tremors, dizziness, nervousness, [headaches](#), or heart palpitations occur. This product is only intended to be consumed by healthy adults 18-50 years of age.

Users diagnosed with herpes virus may experience outbreaks using l-arginine.



The "Muscle Nerd's" Recommended NO-Xplode "Knock Off"

Ingredients (1 dose):	<ul style="list-style-type: none"> • Arginine Alpha-Ketoglutarate: 8 g • Citrulline Malate: 6 g • Carnosine: 250 mg • L-Tyrosine: 1 g • Taurine: 1 g • Maltodextrin: 7 grams • Sodium Bicarbonate: .5 gram • Cinnamon Extract: 500 mg • Caffeine: 200 mg • ¼ Packet Unsweetened Powdered Drink Mix (like Kool-Aid) • Sucralose (Splenda) sweetener to taste
Knock Off Explanation:	<p>AAKG can be a powerful growth hormone inducer and increase blood flow for better "pumps" in and out of the gym.</p> <p>Citrulline Malate has been added at the minimum dose seen to show potential results in humans.</p> <p>Carnosine is added in place of l-histidine since it's counterpart beta alanine was missing in order to synthesize into carnosine in muscle tissue. This also aids in reducing acidity from training along with sodium bicarbonate.</p> <p>Caffeine, taurine, and l-tyrosine are added due to effectiveness and to stay closer to original formula</p>
Directions:	On training days, mix all ingredients with 5-12 oz of cold water and consume on empty stomach 30-45 minutes before training.
Retail Cost For 30-Day Supply:	\$134.89
Approximate 30-Day Cost For "Knock-Off" Formula:	\$31.55
Savings:	You Save <u>\$103.34</u> Per Month!

Nitric Oxide Supplement Knock-Off #3

<p style="font-size: 1.2em;">MHP Anadrox</p>	
<p>Primary Active Ingredients Related To Marketed “Goal”:</p>	<ul style="list-style-type: none"> • L-Arginine HCL • Citrilline Malate • L-Tyrosine • Vanadyl Sulfate • Choline Dihydrogen Citrate • Green Tea Extract • Caffeine • 7-KETO DHEA • Guggulsterones
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • Bioperine
<p>Retail Cost For 30-Day Supply:</p>	<p>\$42.85</p>
<p>Approximate 30-Day Cost For “Knock-Off” Formula:</p>	<p>\$16.58</p>
<p>You Save:</p>	<p>\$26.27/Month!</p>

Product: MHP Anadrox

Primary Active Ingredients Related To Marketed “Goal”: L-Arginine HCL, Citrilline Malate, L-Tyrosine, Vanadyl Sulfate, Choline Dihydrogen Citrate, Green Tea Extract, Caffeine, 7-KETO DHEA, Guggulsterones

Why It May/May Not Work: The stated focus of MHP’s Anadrox is to provide the dual benefit of increased “muscle pump” while offering the thermogenic properties of a [fat](#) loss supplement. Indeed several of the ingredients are commonly used for both of these goals.

However, the original formula contains far too many components at far too low of a dosage to offer their true potential benefit. Several ingredients have been omitted in order to streamline the analysis and offer a resulting formula that comes as close as possible to the original formula but enhanced to better achieve the intended results.

Primary Active Ingredients Breakdown:

L-Arginine Alpha-Ketoglutarate (AAKG):

- When released in the blood stream, dramatically increases nitric oxide production and growth hormone.
- Studies have shown that an increase in nitric oxide can provide extended and enhanced “muscle pump” after a workout, improved endurance and recovery time, and improved workout capacity.
- More potent and more readily bioavailable form of l-arginine

Citrulline Malate:

- A non-essential amino acid that plays a role in nitrogen balance and metabolism that has been used with great success by European scientists who have reported results of increased energy and enhanced feelings of well-being
- While primarily synthesized from glutamine in the intestines, citrulline supplied by the diet is efficiently absorbed from the stomach and much of it bypasses uptake in the [liver](#) to be distributed to the [kidneys](#), brain, muscle and other tissues for conversion to arginine.
- Supplemental citrulline malate is a salt form of the amino acid. The malate, or malic acid, is found in fruits such as apples and enhances the effects of citrulline.
- Malic acid takes part in aerobic cellular respiration where oxygen and a carbon compound (acetyl Co-A) are used to produce immediate energy and carbon dioxide in the mitochondria of the cell (commonly called the “Kreb’s energy cycle”, protecting muscles from fatigue.
- Research done so far, though promising, has not been credible enough to prove its effectiveness. In one human study researchers examined the effects of supplementation with 6 grams of citrulline malate daily for

15 days. Results showed that there was a significant reduction in the sensation of fatigue following exercise, a 34% increase in the rate of oxidative ATP production during exercise, and a 20% increase in the rate of phosphocreatine recovery after exercise. However these doses are MUCH higher than what are included in this formula and due to cost and lack of results at such a low dose, it has been omitted.

L-Tyrosine:

- Tyrosine is a nonessential amino acid found in dairy products, meats, fish, eggs, nuts, beans, oats, and wheat.
- There is interest in tyrosine for preventing the negative effects related to stress by increasing the synthesis of “catecholamines” like epinephrine, norepinephrine, and dopamine.
- There is some evidence in [animals](#) and humans that supplemental tyrosine might improve performance, memory, and learning, under extreme environmental conditions, intense exercise, or psychological [stress](#)

Vanadyl Sulfate (Vanadium):

- A trace mineral found naturally in the body with a very low requirement for maintenance.
- In the past, vanadyl sulfate has been recommended as an aid in bodybuilding. However, animal studies suggest that taking high doses of vanadium can be harmful. For this reason, it has been omitted from the final formula.

Choline Dihydrogen Citrate (Choline):

- Traditionally known as a B vitamin, choline has been used by athletes to delay fatigue felt during training. However, naturally found in the body, choline deficiency is rare and there has been no evidence that supplementing with choline will improve [sports](#) performance.

Green [Tea](#) Extract

- One of the most “proven” fat loss aids available with credible research behind it.
- Has been shown to dramatically increase antioxidant levels.

- May also be useful in glucose regulation, effectively slowing the rise in [blood](#) sugar following a meal.

Caffeine Anhydrous:

- Adrenal stimulant that enhances mental alertness and reduces fatigue.
- Included in most fat-burning supplements for the purpose of increasing the level of circulating fatty acids, which has been shown to increase the oxidation of fat.
- Studies with caffeine at doses of 150 mg – 200 mg have resulted in a significant elevation in resting energy expenditure, heart rate and [blood pressure](#) but this increase is negligible in terms of weight loss.

7-KETO DHEA:

- Used to increase metabolism and thermogenesis to promote weight loss, to improve lean body mass and build muscle.
- 7-KETO is a clinically studied, safe form of DHEA that will not convert into testosterone and estrogens. That means it provides all the advantages of DHEA without the safety concerns associated with sex hormones.

Guggulsterones

- Has been promoted as a weight-loss aid, supposedly by enhancing thyroid function.
- There is little evidence that guggul extracts actually affect the thyroid, and one small double-blind, placebo-controlled trial failed to find it effective for [weight](#) loss.

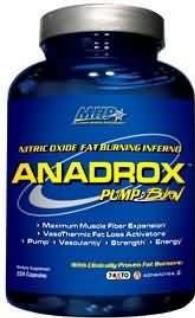
Ancillary Ingredients: Bioperine

Bioperine (Black Pepper Extract):

- Herbal extract from the pepper plant that claims to increase the absorption and utilization of nutrients in the body.
- No evidence could be found of its effectiveness of increasing absorption.

Are The Ancillary Ingredients Worth It? No

Possible Side Effects: None noted by manufacturer, but users diagnosed with herpes virus may experience outbreaks using l-arginine.



The "Muscle Nerd's" Recommended Anadrox "Knock Off"

<p>Ingredients (1 dose):</p>	<ul style="list-style-type: none"> • L-Arginine HCL: 2 g • L-Tyrosine: 50 mg • Green Tea Extract: 200 mg • Caffeine: 100 mg • 7-KETO DHEA: 50 mg
<p>Knock Off Explanation:</p>	<p>AAKG can be a powerful growth hormone inducer and increase blood flow for better "pumps" in the gym through nitric oxide enhancement</p> <p>Citrulline Malate has been removed only due to completely inadequate amounts included in the original formula.</p> <p>7-KETO DHEA has been included due to promising credible evidence but is a very expensive supplement to include. Testing with and without this ingredient is worthwhile to monitor changes in lean body mass and determine personal value. DHEA can be substituted at half the dosage but should be confirmed by a physician first.</p> <p>Green Tea Extract, caffeine, and l-tyrosine are added due to effectiveness and to stay closer to original formula.</p>
<p>Directions:</p>	<p>Consume 1 dose in the morning and 1 dose in the afternoon.</p>
<p>Retail Cost For 30-Day Supply:</p>	<p style="text-align: center;">\$42.85</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p style="text-align: center;">\$16.58</p>
<p>Savings:</p>	<p style="text-align: center;">You Save <u>\$26.27</u> Per Month!</p>

Supplement Category: Hormone Boosters

Supplement Goals: Increase the body's natural hormone release for activation of lean muscle growth, enhanced [sex](#) drive, and increased fat-burning.

The Top Selling "Hormone Booster" Supplements

	T-Bomb II	Secretagogue-One	17-HD
The "Line Up":			
Primary Active Ingredients Related To Marketed "Goal":	<ul style="list-style-type: none"> • Tribulus Terrestris • Saw Palmetto • Tongkat Ali • Pygeum africanum • Flaxseed • Glycine • L-Arginine 	<ul style="list-style-type: none"> • Glycine • L-Glutamine • L-Tyrosine • L-Arginine • L-Lysine (1kg.us) • Gamma Aminobutyric Acid (GABA) 	<ul style="list-style-type: none"> • 17- Halo-Methyl-Dianadron • Ge Gan • Smilax Officinalis • N.O. Oliliacae • Betaecdysterone • Wild yam extract • Glabra
Ancillary Ingredients:	<ul style="list-style-type: none"> • Bioperine • Red Clover • Chrysin • DIM • Avena Sativa 	<ul style="list-style-type: none"> • Broad Bean • Potassium Bicarbonate • Sodium Bicarbonate 	
Retail Cost For 30-Day Supply:	\$85.70	\$74.95	\$79.95
Approximate 30-Day Cost For "Knock-Off" Formula:	\$1.91	\$9.31	\$3.75
You Save:	\$83.79/Month!	\$65.64/Month!	\$76.20/Month!

Hormone Booster Supplement Knock-Off #1

<p>MHP T-Bomb II</p>	
<p>Primary Active Ingredients Related To Marketed “Goal”:</p>	<ul style="list-style-type: none"> • Tribulus Terrestris • Saw Palmetto • Tongkat Ali • Pygeum Africanum • Flaxseed • Glycine • L-Arginine
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • Bioperine • Red Clover • Chrysin • DIM (diindolymethane), • Avena Sativa
<p>Retail Cost For 30-Day Supply:</p>	<p>\$85.70</p>
<p>Approximate 30-Day Cost For “Knock-Off” Formula:</p>	<p>\$1.91</p>
<p>You Save:</p>	<p>\$83.79/Month!</p>

Product: T-Bomb II

Primary Active Ingredients Related To Marketed “Goal”: Tribulus Terrestris, Saw Palmetto, Tongkat Ali, Pygeum Africanum, Flaxseed, Glycine, L-Arginine

Why It May/May Not Work: This is possibly a case of ingredients taken individually have a completely opposite effect when taken with other supplements. As you will see, the ingredients listed for this supplement, while attempting to both increase testosterone and lower estrogen, may in fact cancel each other out leaving no effect.

The final formula includes all of the active ingredients in the original formula but suggestions are made for possible individual testing based upon research results.

However, the original formula contains far too many components at far too low of a dosage to offer their true potential benefit. Several ingredients have been omitted in order to streamline the analysis and offer a resulting formula that comes as close as possible to the original formula but enhanced to better achieve the intended results.

Primary Active Ingredients Breakdown:

Tribulus terrestris:

- An herb commonly used for enhancing athletic performance, male impotence, mood enhancement and an aphrodisiac
- Preliminary research suggests that tribulus, when used alone, may increase levels of testosterone, luteinizing hormone (LH), dehydroepiandrosterone (DHEA), and dihydrotestosterone (DHT).
- However, clinical research suggests that when used in combination with other supplements such as androstenedione, DHEA, chrysin, indole-3-carbinol, and saw palmetto, tribulus terrestris does NOT effect levels of leutenizing lormone, estradiol, free testosterone, total testosterone, and other sex hormones. Some of these conflicting supplements are included in T-Bomb II's original formula.
- Clinical research also suggests that tribulus does not affect mood, body [weight](#), body fat, muscle mass, or muscle strength in athletes despite the potential increase in testosterone. In fact, one well designed study that compared tribulus against a placebo (fake supplement), the placebo group increase athletic performance MORE than the tribulus group at the end of the 8-week study.

Saw Palmetto

- Saw palmetto is an herb commonly used to increase breast size, to improve sexual vigor, and as an aphrodisiac.
- Appears to prevent the conversion of testosterone to dihydrotestosterone (DHT) which increases the availability of free testosterone.

- Also seems to have antiestrogen effects, contributing to availability of free testosterone for use in the body.

Tongkat Ali (Longjack)

- Commonly referred to as “Eurycoma” or just “Longjack”, it is used for erectile dysfunction, impotence, infertility, and increasing libido.
- Promising studies have shown that rats supplemented with tongkat ali experienced a significant increase in testosterone levels and stimulated muscle growth without aromatization into estrogen.
- Individual human results vary.

Pygeum africanum

- Primarily used as a treatment for [prostate](#) enlargement, pygeum is sometimes proposed for impotence and male infertility. However, there is little real evidence that it works for these conditions.

Flax Seed

- Hard, tiny seeds that are a healthy source of omega-3-fatty acids.
- Substances called “lignans” in flaxseed have phytoestrogenic properties and credible studies have shown that flax can actually decrease testosterone levels in men while providing women with beneficial hormone balancing benefits.

Glycine:

- Has the simplest form of all amino acids which allows it to fit easily within protein chains, leaving room for larger structure amino acids to aid in muscle growth.
- Is a pre-cursor to creatine so it may provide some additional energy during workouts
- Is a neurotransmitter in the central nervous system and of major importance to the creation of protein, creatine, glycogen, hemoglobin, Adenosine Tri-Phosphate, nucleic acids, glucose, and other amino acids.

L-Arginine:

- A semi-essential amino acid that is a building block of protein and performs several physiological functions
- Cannot make naturally within the body, therefore supplementation is necessary to increase levels.
- Increases nitric oxide in the body, aiding bodybuilding efforts.
- Instrumental in hormone secretion (including growth hormone output), the removal of toxic waste products from the body, and immune system defenses.
- Has become popular due to its ability to produce nitric oxide in the body (for better “pumps”), scavenge free radicals, signal muscle cells, release growth hormone, support healthy cholesterol levels, and enhance the metabolism of fat in the body.

Ancillary Ingredients: Fenugreek, Bioperine, red clover, Chrysin, DIM (diindolymethane), Avena sativa

Bioperine (Black Pepper Extract):

- Herbal extract from the pepper plant that claims to increase the absorption and utilization of nutrients in the body.
- No evidence could be found of its effectiveness of increasing absorption.

Red Clover

- Plant that actually may have estrogenic effect. Avoid using if you're a man.

Chrysin

- A flavonoid that was popular with athletes interested in its potential effect on testosterone levels. In vitro research shows that chrysin might inhibit aromatase and decrease aromatization of androstenedione and testosterone to estrogen and dihydrotestosterone (DHT), but research in humans shows that chrysin does not increase testosterone levels.

DIM (diindolymethane)

- A major active metabolite of indole-3-carbinol which is a compound that may be antagonistic with tribulus, potentially canceling out testosterone increase from other ingredients.

Avena Sativa

- Otherwise known as “oat straw”, it is widely marketed for enhancing male sexual function. However, the only evidence for these claims comes from unpublished studies conducted by the manufacturer of oat straw products.

Are The Ancillary Ingredients Worth It? No

Possible Side Effects: None noted by manufacturer, but artificially stimulating male hormone production may lead to excessive dihydrotestosterone (DHT) increases (which may cause [hair](#) loss), estrogen (a female hormone) reactions, and other side effects. Users should consult a physician prior to experimenting with any hormone enhancement products.



The "Muscle Nerd's" Recommended T-Bomb II "Knock Off"

<p>Ingredients (1 dose):</p>	<ul style="list-style-type: none"> • Tribulus Terrestris: 500 mg • Tongkat Ali (Longjack): 750 mg
<p>Knock Off Explanation:</p>	<p>This was a hard supplement to evaluate due to the conflicting reactions among ingredients. T Bomb's formula seems to do as much to DECREASE testosterone as it does to increase it. In addition, there may simply be too little of too many ingredients to have the desired results</p> <p>In addition, concentrations of individual ingredients with actual credible evidence of results are so low in the formula that it is unlikely that they will have the desired effect.</p> <p>For these reasons, several ingredients have been omitted in the interest of creating a "T-Bomb-like" supplement that may in fact provide the user with actual testosterone increases.</p> <p>Note however that one of the reasons MHP may not list side effects for their product is that due to the negating effects of individual ingredients, there may be no measurable increase in testosterone to worry about.</p> <p>It is also recommended that you not exceed 8 weeks of continuous use.</p>
<p>Directions:</p>	<p>Consume 1 dose in the morning and 1 dose in the afternoon.</p>
<p>Retail Cost For 30-Day Supply:</p>	<p>\$85.70</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$1.91</p>
<p>Savings:</p>	<p>You Save <u>\$83.79</u> Per Month!</p>

Hormone Booster Supplement Knock-Off #2	
<p>MHP Secretagogue-One</p>	
<p>Primary Active Ingredients Related To Marketed "Goal":</p>	<ul style="list-style-type: none"> • Glycine • L-Glutamine • L-Tyrosine • L-Arginine • L-Lysine • Gamma Aminobutyric Acid (GABA)
<p>Ancillary Ingredients:</p>	<ul style="list-style-type: none"> • Broad Bean • Potassium Bicarbonate • Sodium Bicarbonate
<p>Retail Cost For 30-Day Supply:</p>	<p>\$74.95</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p>\$9.31</p>
<p>You Save:</p>	<p>\$65.64/Month!</p>

Product: MHP Secretagogue-One

Primary Active Ingredients Related To Marketed "Goal": Glycine, L-Glutamine, L-Tyrosine, L-Arginine, L-Lysine, Gamma Aminobutyric Acid (GABA)

Why It May/May Not Work: The amino acids used within the Secretagogue formula provide the necessary essential nutrients to maximize muscle recovery and optimum release of Human Growth Hormone (HGH).

However, it is possible that the original formula may contain too small of an amount of the ingredients to provide a large benefit.

Primary Active Ingredients Breakdown:

Glucose Polymer Complex:

- Basically “sugar” used to provide energy for the body.

Glycine:

- Has the simplest form of all amino acids which allows it to fit easily within protein chains, leaving room for larger structure amino acids to aid in muscle growth.
- Is a pre-cursor to creatine so it may provide some additional energy during workouts
- Is a neurotransmitter in the central nervous system and of major importance to the creation of protein, creatine, glycogen, hemoglobin, Adenosine Tri-Phosphate, nucleic acids, glucose, and other amino acids.

L-Glutamine:

- Pro-anabolic essential amino acid that promotes optimum protein synthesis.
- Prevents muscle tissue breakdown and promotes cell volume maintenance.
- As an extra added bonus, it also reduces [cravings](#) for alcohol, sugar and carbohydrates, three things that can be detrimental to the [diet](#) of a bodybuilder.

L-Arginine (HCL):

- When released in the blood stream, dramatically increases nitric oxide production and growth hormone.
- Studies have shown that an increase in nitric oxide can provide extended and enhanced “muscle pump” after a workout, improved endurance and recovery time, and improved workout capacity.
- More potent and more readily bioavailable form of L-arginine

L-Tyrosine:

- Tyrosine is a nonessential amino acid found in dairy products, meats, fish, eggs, nuts, beans, oats, and wheat.
- There is interest in tyrosine for preventing the negative effects related to stress by increasing the synthesis of “catecholamines” like epinephrine, norepinephrine, and dopamine.
- There is some evidence in [animals](#) and humans that supplemental tyrosine might improve performance, [memory](#), and learning, under extreme environmental conditions, intense exercise, or psychological [stress](#)

L-Lysine:

- Provides beta-oxidation, nitrogen balance, increased calcium absorptions, and energy.

Gamma Aminobutyric Acid (GABA):

- Amino acid classified as a “neuotransmitter” (it helps nerve impulses cross the synapses (gaps) and communicate better)
- Potential to stimulate the production of Human Growth Hormone (HGH) in the body, resulting in increased [fat](#) loss and lean muscle growth when taken in smaller doses (larger doses appear to decrease HGH production)
- Has also been shown to increase the body's sleeping cycle when HGH release is at its peak.

Ancillary Ingredients: Broad Bean, Potassium Bicarbonate, Sodium Bicarbonate

Broad Bean:

- Also known as “fava bean” is used to reduce uric acid in the [kidneys](#) and aid in blood purification.

Sodium Bicarbonate:

- Also known as “baking soda”, sodium bicarbonate is extremely alkaline and is often used to reduce blood and urine acidity.

Potassium Bicarbonate:

- A mineral that plays a role in many body functions including PH balance and is crucial to physiological processes including [nerve](#) impulse transmission; muscle contraction; gastric secretion; renal function; tissue synthesis; and carbohydrate synthesis

[Are The Ancillary Ingredients Worth It?](#) Only Potassium Bicarbonate which can provide lactic acid buffering improving performance and replacing lost potassium from intense training.

[Possible Side Effects:](#) None noted by manufacturer, but users diagnosed with herpes virus may experience outbreaks using l-arginine.



The "Muscle Nerd's" Recommended Anadrox "Knock Off"

<p>Ingredients (1 dose):</p>	<ul style="list-style-type: none"> • Sugar (or maltodextrin if concerned with nighttime carb intake): 6 g • Liquid Amino Acid Complex (such as TwinLab Amino Fuel): 1 Tbsp (about 5 g) • Gamma Aminobutyric Acid (GABA): 1 g • Potassium Bicarbonate: 500 mg • ¼ Packet Unsweetened Powdered Soft Drink (like "Kool-Aid")
<p>Knock Off Explanation:</p>	<p>Liquid collagen contains all of the essential amino acids and branched chain amino acids included within the Secretagogue-One formula. If you can't order liquid collagen, you can also use a standard liquid amino acid complex like TwinLab's Amino Fuel.</p> <p>The addition of GABA is used to promote Human Growth Hormone increases (HGH) during sleep while the addition of potassium bicarbonate is used to replace potassium lost due to intense training while reducing the body's acidity level.</p>
<p>Directions:</p>	<p>Mix all ingredients with 4-6 oz of water and consume at night or before going to bed.</p>
<p>Retail Cost For 30-Day Supply:</p>	<p style="text-align: center;">\$74.95</p>
<p>Approximate 30-Day Cost For "Knock-Off" Formula:</p>	<p style="text-align: center;">\$9.31</p>
<p>Savings:</p>	<p style="text-align: center;">You Save <u>\$65.64</u> Per Month!</p>

Hormone Booster Supplement Knock-Off #3	
<p style="font-size: 1.2em; margin: 0;">Cytodyne 17-HD</p>	
<p style="margin: 0;">Primary Active Ingredients Related To Marketed “Goal”:</p>	<ul style="list-style-type: none"> 17- Halo-Methyl-Dianadrone Betaecdysterone Ge Gan (pueraria lobota) Smilax Officinalis N.O. Oliliacae Wild Yam Extract Glabra
<p style="margin: 0;">Ancillary Ingredients:</p>	
<p style="margin: 0;">Retail Cost For 30-Day Supply:</p>	<p style="margin: 0;">\$79.95</p>
<p style="margin: 0;">Approximate 30-Day Cost For “Knock-Off” Formula:</p>	<p style="margin: 0;">\$3.75</p>
<p style="font-size: 1.2em; margin: 0;">You Save:</p>	<p style="font-size: 1.2em; margin: 0;">\$76.20/Month!</p>

Product: Vyo-Tech 17-HD

Primary Active Ingredients Related To Marketed “Goal”: 17- Halo-Methyl-Dianadrone, Ge Gan (pueraria lobota), Smilax Officinalis, N.O. Oliliacae, Betaecdysterone, Wild Yam Extract, Glabra

Why It May/May Not Work: Actually, I can’t see how it CAN work. Unfortunately, it appears that this is another product that is almost exclusively comprised of all but “imaginary” ingredients and some [herbs](#) that have actually been known to decrease testosterone levels.

Primary Active Ingredients Breakdown:

17- Halo-Methyl-Dianadron: Extensive research through several medical literary resources couldn't produce a single reference to this compound. It appears that this name was created by the development team specific for the 17-HD product and the ingredients, not being listed, are unclear.

Betaecdysterone:

- Betaecdysterone is the primary ingredient related to Vyo-Tech's [marketing claims](#).
- It is a chemical found in insects that is chemically similar to testosterone, leading to the belief that it might possess anabolic (muscle-building) properties.
- There is no credible research evidence in humans that demonstrates any anabolics effects from betaecdysterone

Ge Gan ("Kudzu"):

- Contains isoflavones that may have both estrogenic and antiestrogenic properties.
- Long term dosing has created severe side effects in some people and due to the potential to increase estrogen (a female hormone) levels and side effects, it is omitted from the "knock off" formula

Smilax Officinalis (sarsaparilla):

- A root traditionally used for [skin](#) diseases, rheumatoid arthritis, kidney disease, and as an anabolic performance enhancement for bodybuilders
- Supplement marketers incorrectly suggest that the sterols from sarsaparilla can be converted into anabolic steroids such as testosterone. However plant sterols CANNOT be converted to steroid substances in the body. Testosterone has never been detected in any plant, including sarsaparilla

N.O. Oliliacae:

- The closest thing I can come up with is it's some sort of cabbage derivative, perhaps meant to provide indole-3-carbinol for decreased

testosterone levels. However there is not listing for this specific ingredient in any formal medical publication.

Wild Yam Extract:

- Is used as a "natural alternative" for estrogen replacement therapy, postmenopausal vaginal dryness, premenstrual syndrome, osteoporosis, increasing energy and libido in men and [women](#), and for breast enlargement. In other words, if you're a guy and this stuff actually works, you could end up with bigger breasts than your spouse or girlfriend due to the estrogen reaction.

Glabra:

- There are 52 varieties of "Glabra", but it is widely assumed that the form used in 17-HD is "Glycyrrhiza Glabra" or "licorice root"
- May have estrogen-like qualities.
- Can increase water retention and cortisol ("[stress hormone](#)" that may limit muscle growth, increase blood pressure, and cause gain of body [fat](#))

[Ancillary Ingredients](#): None worth listing

[Are The Ancillary Ingredients Worth It?](#) N/A

[Possible Side Effects](#): None noted by the manufacturer, but please see ingredient analysis above for all possible side effects (there are many).



The "Muscle Nerd's" Recommended Cytodyne 17-HD "Knock Off"

Ingredients:	<ul style="list-style-type: none"> Beta Ecdysterone: 100 mg
Knock Off Explanation:	<p>Due to the vast potential of problems that may occur with consuming this product, almost all of the ingredients have been omitted.</p> <p>Since the main ingredient related to the marketed benefits is Beta Ecdysterone, this has been included in the "knock off" formula for those who wish to try it.</p> <p>However, the amounts listed in 17-HD are so small for the dosage provided that it is likely that the reason no side effects are listed are because it has no effect at all on the body.</p> <p>Use this formula at your own risk.</p>
Directions:	Take ½ dose of each supplement in the morning and another ½ dose in the afternoon with 8-oz of water.
Retail Cost For 30-Day Supply:	\$79.95
Approximate 30-Day Cost For "Knock-Off" Formula:	\$3.75
Savings:	You Save <u>\$76.20</u> Per Month!

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