CREATINE:

INDUSTRY INSIDER SECRETS REVEALED

12 Facts Every Consumer Should Know

Ethyl Ester HCL · di-Creatine · Micronized · Titrate · Monohydrate · Effervescent · Phosphate · Anhydrous · Creatine-AKG · Serum · Malate · Kre-Alkalyn® EFX · Creatine Citrate · New Technology???

"This report is for those who are confused by all the choices of creatine products on the market and want to know once and for all what the differences are."

By All American EFX

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INTRODUCTION

You and I are probably enough alike that I can confidently make the following statement: We both want to gain as much lean size and strength as we can possibly can…and we want it now! We also both know there are very few supplements out there that can make this happen faster (and do it **drug-free)** than creatine. Bottom line…the stuff works.

Odds are pretty high you either use creatine or you're planning to. Odds are also high that you don't really know for sure what makes one type of creatine different from another.

I mean, you certainly can't tell by looking at all those crazy ads cramming the magazines each month. Each one sounds like it's the latest "miracle". And now with Kre-Alkalyn® EFX in the mix, you're probably even more confused.

Well, that's what we're here for…to help you find the facts hidden somewhere in all this mess. You see part of our corporate philosophy at All American EFX is based on a saying we developed that goes like this: **"We put you in the lab and on the conveyor belt."**

This book will do exactly that. By the way, just in case you don't know who we are yet, let me fill you in by telling you a quick story...

Who The Heck Is All American EFX?

We're the guys who loved Kre-Alkalyn® creatine so much, we made its patent holder an offer "he couldn't refuse" …

On June 4th, 2002, Jeff Golini was awarded an official U.S. Manufacturing Patent (#6,399,661) for pulling off something that no one else could do in the ten years before him: he created a **completely stable creatine** called Kre-Alkalyn®. Since then, he's been awarded another patent from the country of New Zealand…plus there are ***33 more*** pending worldwide.

For the past 2 years, my business partner and I have been using the inventor's original brand called Kre-Alkalyn® EFX, and we can tell you hands down it's the best supplement we've ever used. Just like the label claims, there's no loading, no cycling, and best of all you *"Get the body without the bloat!"*

Opportunity Comes-A-Knocking

One day my partner and I were having lunch with the Kre-Alkalyn® inventor and half-jokingly asked him if he wanted to sell his patent. Well, it was worth a good laugh, (he politely said no). Then with straight faces we told him that we were seriously interested in buying his private label brand called Kre-Alkalyn® EFX.

When all was said and done we made him an offer "he couldn't refuse" (no, we're not the mafia). After the ink dried, not only did we buy Kre-Alkalyn® EFX, but we scored the whole enchilada...including his private in-house company called All American Nutrition. **We now call it All American EFX.**

It's About Time Someone Finally Separated Fact From Fiction

If there's one thing supplement users are starving for, it's **credible** information – especially about creatine. So we felt it was about time we cleared the air by giving you the facts. Not just about Kre-Alkalyn® EFX, but also those other "Next Generation", "New", and "Better" creatines.

Listen up. I'm not about to waste your time by rehashing the same old information you've already heard about creatine. Nor will I throw a bunch of techno-speak drivel...or long-winded bafflegab at you.

No…what you are about to read is a comprehensive collection of the research data we gathered in the 2 years BEFORE we "took the plunge" and bought the inventor's private in-house company and brand, All American and Kre-Alkalyn® EFX.

Don't take it lightly when I say that my business partner and I are two of the biggest skeptics you'll ever meet when it comes to dietary supplements and the crazy claims made about many of them. We've been around the iron game collectively for over 40+ years now, and we've both seen (and been victims of) some big scams in our day.

In fact, we made it a condition of the sale that certain tests be performed for us on various creatine products, including Kre-Alkalyn® EFX. BioCeuticals Research & Development Analytical Laboratory, in Montana, performed these tests using Near Infrared Analysis (NIR). Additional testing was also performed using HPLC (High Performance Liquid Chromatography).

We also wanted enough time to complete additional outside research that included interviews with manufacturers, scientists, current users of Kre-Alkalyn® EFX, and even users of other creatine products. As you will see, we've really done our homework here. And this book you are now holding in your hands is the proof.

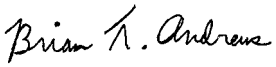
We had to be sure we were making the best possible decision with serious money about to change hands. After we examined all of the data we had collected, the evidence in favor of Kre-Alkalyn® EFX was so staggering, we were all but forced to draw this one conclusion: We'd be absolute fools to sell any other creatine but Kre-Alkalyn® EFX, regardless of the profit potential.

Bottom line: Don't take our word for it. Study this book closely. Learn the "12 Facts" about creatine we uncovered. Then review the 4 Critical Characteristics that any "New and Improved" creatine must have.

Finally, compare how Kre-Alkalyn® EFX, or any other creatine for that matter, out there stacks up against them. **Then... and only then… decide for yourself**. At the very least, you deserve to know what I'm about to share with you.

So let's not waste anymore time and get down to business…

All The Best,



Brian Andrews
President, All American EFX

SECTION 1:

There's Only One Thing You Really Ever Need To Understand About Creatine To Cut Through The Hype And Avoid Confusion:

How It's Actually Made.

If you take nothing else at all away from this book, then let it be the information contained right here in this very first section.

Here's why: I'm actually going to teach you how creatine is made. If you don't understand why this could be so important, hang with me for few minutes…and you will.

First, let me ask you a question. As popular as creatine has become over the past decade or so, how many articles have you ever seen or read that explain how creatine is actually made?

I already know the answer to my question is somewhere between very little and none. But why? Is the process a "jealously guarded secret"? No… The only thing I can logically conclude is that most in this industry simply don't know this process. Because if they did, there's no way we'd have so many different kinds of creatine products on the market.

I'm sure a small handful of industry 'gurus' know something *about* it. But what I'm talking about here is how it's *actually* done…the entire process from start to finish. So by the time we're through, you will probably know more about it than 99% of the people who actually work in the supplement industry.

Now I can't stress this enough...it is absolutely critical for you to fully understand this process. Because once you do, my sincere promise is this: All the mystery (and the hype) surrounding these so-called "new" creatines will suddenly, almost magically, disappear.

By the way, understand that when I say "new" creatine, I'm referring to anything other than standard Creatine Monohydrate.

Okay then, are you ready? Here's what no other supplement company is going to show you… that is, no one but All American EFX.

How is Creatine Made?

Creatine is made in the body by combining three amino acids: Glycine, Arginine, and Methionine. Chemically, it is called "a-methyl-guanidinoacetic acid" ($C_4H_9N_3O_2$).

Creatine is also found in red meat, but extracting large enough amounts for commercial use would be very impractical. And frankly it would make the raw product so expensive, no one could ever make a profit from it.

Enter Synthetic Creatine...

Synthetic creatine is manufactured from two chemicals: **Sarcosine** (a sodium salt and derivative of acetic acid; also called methyl-glycoccol) and **Cyanamide** (an organic amide…not to be confused with the similar sounding poison Cyanide).

Yes, these are chemicals, but don't worry. Because the end result of their reaction is something that's perfectly fine for human consumption: good old creatine.

FACT #1: Reacting the chemicals Sarcosine with Cyanamide in a medium of water, inside a glass-lined reactor, is the only way to make synthetic creatine.

A similar example of this phenomenon is seen when you combine sodium and chloride. Sodium is basically safe to consume in its raw form. But Chloride, on the other hand, is toxic to humans and will burn the skin. That's why it's been used in gas form as a weapon in war.

However, through the magic of chemistry, Sodium and Chloride combine to create a new and harmless compound: common table salt.

Moving right along…

Creatine must be made in a vessel called a reactor. A reactor is a large, steel vat that's specifically used for mixing chemicals. Its walls are usually about an inch thick because it must withstand the extremely high pressures and temperatures needed to react certain chemicals. It is also glass-lined because most chemicals will react with metal.

Most reactors have a thick motorized shaft that extends down into the vat to agitate solutions for quicker processing and to produce a more complete reaction. The whole thing sort of looks like an oversized milkshake machine. If you're curious, just type "glass-lined reactor" into your favorite search engine, and you'll find a good number of links with photos.

One thing to note is that a reactor is a highly specialized piece of equipment. A decent sized unit costs somewhere in the neighborhood of $350,000 to $500,000. Easily way out of range for nearly any supplement company…let alone even most manufacturers.

FACT #2: All synthetic creatine is manufactured or "synthesized" the same way.

The process for synthesizing creatine has been nearly the same since the 1800's. Sure, advancements in technology have allowed for improvements in the process with regard to the quality of the finished product. But all things being equal, it's still basically the same.

What's The Actual Process?

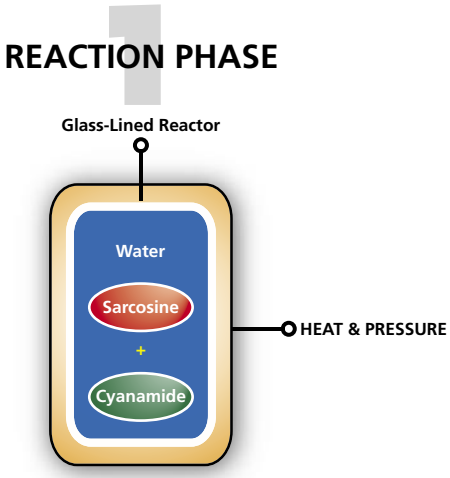
The entire creatine manufacturing process happens in four main stages:

1) Reaction Phase

2) Cleaning Phase

3) Drying Phase

4) Milling Phase

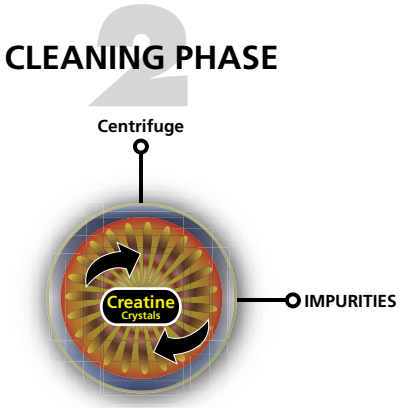


1) Reaction Phase

First, the glass-lined reactor is filled with water, which acts as a medium for the reaction. Water is very stable and its temperature is easy to control.

Next, Sarcosine and Cyanamide are added, along with a catalyst to trigger the reaction. Then the entire mixture is heated and pressurized.

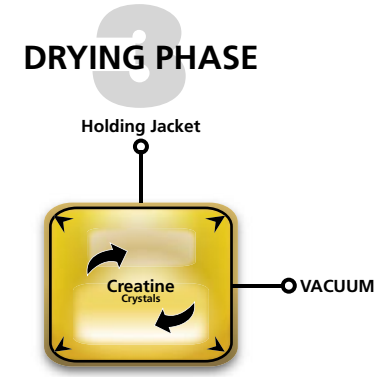
The heat and pressure causes crystals to form…and these crystals are creatine. However, the crystals are not completely pure at this point, so they must be cleaned.



2) Cleaning Phase

The creatine crystals are now placed into a large centrifuge. As it spins, byproducts (e.g., dicyandiamide, dihydrotriazine, and creatinine) separate from the creatine crystals and go into a reservoir for disposal.

When the centrifuge finally spins down, the crystals are now very pure. But, they are also still a bit damp. So the next step in the process is to dry them.

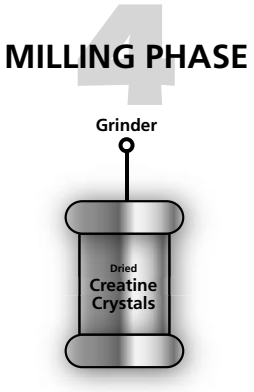


3) Drying Phase

To properly dry creatine, you must use a specialized vacuum-based unit. This machine has a large jacket inside where the crystals are placed to keep them isolated from moisture. The jacket begins to tumble as a large generator pumps heat into the unit.

The heat inside causes condensation. However, a very powerful vacuum extracts this moisture and pumps it into a holding tank. This result is dry, pure creatine crystals.

By the way, if this sounds at all like the way your clothes dryer works…that's because it is. If anything, the principles involved are the same.



4) Milling Phase

At this point, the dried crystals are typically still a bit too large. So they are put into a large grinder that mills them down into a fine powder.

By the way, the term "micronized" refers to creatine that has been ground down to what is called '200 mesh'. In other words, it's simply smaller granules of creatine…nothing special.

The Final Result

Finally, we have a dry, pure finished creatine ready to be bottled or encapsulated. Pure finished creatine is usually **88% creatine** and **12% water** because creatine picks up and bonds to water molecules during the initial reaction process.

Which means…

FACT #3: Just like 2 + 2 always equals 4…the end result of the creatine manufacturing process is ALWAYS Creatine Monohydrate. You CANNOT make any other form of creatine from scratch.

Now don't be deceived by how simple my explanation makes this whole process appear. Synthesizing creatine isn't exactly something you can do at home in your garage. Just the equipment alone would run you well into the millions of dollars.

And…as any good chemist will tell you, chemical reactions, especially of this magnitude, are extremely hard to pull off. In this particular case, three elements must be tightly controlled at all times: temperature, pressure, and time. And everything in the process must be EXACT.

It's not like baking a cake where you can get away with adding a little too much sugar to the mix, or accidentally let it bake for a few extra minutes. No way. Make a similar mistake while synthesizing creatine and you seriously risk ruining the entire batch.

Furthermore, performing this process wrong can also result in a finished product that's full of nasty contaminants and impurities such as dicyandiamide, dihydrotriazine, and creatinine. That's why there are only a handful of manufacturers who've actually mastered the art of synthesizing creatine.

An Eye-Opening Look At All The Various "New" Creatines

Now that we've covered the process for synthesizing creatine, it's time to get to the juicy stuff.

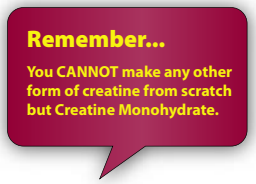
I stated before that it's critically important for you to understand how creatine is made. This way you'll better understand what all these so-called "new" creatines on the market actually are.

Specifically, the "new" creatines I'm referring to are: Creatine Titrate, Creatine Malate, Creatine Alpha-Ketoglutarate, Creatine Ethyl Ester, di-Creatine Malate…and now even tri-Creatine Malate, just to name a few. And it's only fair that we add Kre-Alkalyn® EFX to the list too.

Some ads for products that contain these creatine forms claim they're better and even more powerful (some up to 40 *times* as much) than the time-tested standard, Creatine Monohydrate.

However, the facts just don't agree…I told you in the last section there is only one way to make synthetic creatine. And the end result of that process is always Creatine Monohydrate. Therefore…

FACT #4: To create a "new" form of creatine, you must take FINISHED Creatine Monohydrate and react it all over again in water with the desired bonding compound, inside a glass-lined reactor.



Phase 1

Phase 2

However…this is precisely where many problems arise from both a manufacturing and a scientific standpoint.

To illustrate these problems, let's use an example of how Creatine Malate might be manufactured. Creatine Malate is supposed to be a combination of Creatine Monohydrate and Malic Acid chemically **bonded** to form the new compound.

As you can see, I've emphasized the word "bonded" above. Bonding is critical to this point because it MUST happen to form true Creatine Malate. With me so far? Good.

Now see if this process sounds familiar…First, the glass-lined reactor is filled with water. Next, add Creatine Monohydrate. Then Malic Acid is mixed in, along with a catalyst to cause a reaction so that the creatine will bond to the Malic Acid. Then the entire mixture is heated. Once the process is finished, we now have Creatine Malate…or do we?

You see, even though this is essentially the same process I described earlier for synthesizing creatine, there's a major problem with it this time around…

FACT #5: Creatine Monohydrate is unstable in liquids and acids. It undergoes a chemical conversion to creatinine – a mostly useless byproduct.* Furthermore, creatine can't be bound to an acid because the acid destroys the creatine.

Where before water was the medium in which the reaction takes place in, water now becomes the catalyst that *causes* the reaction…only this time the reaction is with the creatine itself.

What happens is the creatine actually "falls apart" once it's activated by liquids and turns into something called creatinine – a mostly *useless* **byproduct** – *that cannot enter the muscle cell.*

The actual *speed* of this conversion process is usually a topic of heavy debate in scientific circles. But one thing is for sure…it does happen. By the way, creatinine is also what causes side effects like bloating, diarrhea and cramping usually associated with creatine.

So what does this mean to you? Simply put, whatever amount you scoop out of the bottle *isn't* the same amount getting to your muscle cells. Sure some does get there…but the rest is being wasted…along with your money. In other words, it loses its potency during transport to your muscles.

Similarly, Chemistry 101 also tells us that reacting creatine with an acid actually destroys the creatine molecule and converts it into creatinine. That's why they can't be bound together.

Remember, even if you could bond an acid to creatine, you must use water or another fluid as a medium for the chemical reaction. Either way, you get *creatinine***.**

Now just suppose we actually tried to synthesize Creatine Malate from scratch…instead of using finished creatine. Would it work? Not on your life. Here's why…

When synthesizing creatine from scratch, the pH of the formula must be very close to neutral (usually pH 6.5 or so) to get a proper reaction. This explains why most finished creatine products also have a neutral pH. However, adding an acid to the formula *lower*s the pH, and now you won't get a proper reaction. Anyway you look at it, there's just no getting around all these problems.

What Then Are All These "New" Creatines?

At best, they are actually one of three things:

1) Ordinary Creatine Monohydrate labeled as something else

2) A simple mixture of Creatine Monohydrate and the acid it's supposedly bonded with

3) A botched version created by a manufacturer who tried to "bond" Creatine Monohydrate to an acid without knowing the associated problems.

Furthermore, terms such as, "di" and "tri", as they relate to creatine, are simply made up.

If anything, these "new" creatines should actually be called, **Creatinine** Titrate, **Creatinine** Malate, **Creatinine** Alpha-Ketoglutarate, **Creatinine** Ethyl Ester, di-**Creatinine** Malate…and tri-**Creatinine** Malate. The point is you want to deliver **creatine** to the system, and not ***creatinine*** (which, once again, is a mostly *useless* byproduct that *cannot* enter the muscle cell).

Phase 1

Phase 2

(Just in case you're wondering how all this relates to Kre-Alkalyn® EFX, we'll cover it specifically in Part 2 of this book)

FACT #6: Simply mixing or blending Creatine Monohydrate with another compound does not create a new form of creatine. You can't just "push" them together. In order to create the new compound...a chemical reaction must take place via a catalyst.

Remember back in your 4th grade science class when you made those little miniature volcanoes? To make it erupt, you'd mix vinegar and baking soda to cause an eruption. But what happens if you mix *powdered* vinegar with baking soda? Absolutely nothing. That is, until you add water (the catalyst) and cause a chemical reaction.

And so it goes with the "new" creatines. As I said earlier, they're usually just a simple *mixture* (also called an "admixture") of Creatine Monohydrate and a powered form of the acid it's supposedly *bonded* with. Mixing compounds together does NOT make something new because there is no chemistry involved. At least, not until you add a catalyst.

So the next time you take your creatine mix that has Malic Acid and Citric Acid in it, consider this. When you add water (a catalyst) to it, you're causing a chemical reaction to take place that creates **Creatinine** Malate and **Creatinine** Citrate because the creatine portion is converting to ***creatinine*** and then bonding to the acids.

You see, acids in powdered form can coexist because there isn't a catalyst present to cause a chemical reaction. But add water (the catalyst), and bam!

Here's the bottom line. You can blend just about anything together with Creatine Monohydrate and call it whatever you want. But in reality, it's still only a simple **mixture**, and not anything new.

To further prove this point, let's have a little fun together. We are going to invent our very own 'super creatine'. **Ready?**

First we'll throw in some Creatine Monohydrate. Next, let's add Malic Acid, Alpha Lipoic Acid, Citric Acid and finally Arginine-alpha-Ketoglutarate to the mix (all in powdered form, of course).

Okay, we're done.

So what should we call our new 'super creatine'? Hmmm… how does this one sound? "Quad-Creatine-Mal-Lipoic-AKG-Citrate". Impressive enough, eh?

Next, we'll turn this creation over to our marketing department and let them have their way with it. Finally, we'll announce our creation to the world…and make millions! Of course this is an oversimplified example, but this my friend, is exactly how it's done. **(Look...there's our new product to the left...ready to hit the shelves.)**

As is the case with so many products today, there simply isn't any **real** science backing them. The sad truth is that most ads go largely unchallenged…so companies get away with it.

By the way. What do you think would happen if we actually tried to make our 'super creatine' for real? You got it. As we've already learned from the creatine manufacturing process, reacting all these compounds together would actually destroy the creatine…and at the very best, we would have, "Quad-***Creatinine***-Mal-Lipoic-AKG-Citrate".

I think it's important to note that most supplements companies actually aren't necessarily at fault here. They've simply bought into the idea of using some of these concoctions with the sincere hope they'd be giving their customers a superior product.

But as I stated in the very beginning, most supplement companies don't know what you do now: how creatine is actually made.

FACT #7: You cannot make pure creatine more powerful than it already is.

Look. Forget those ridiculous claims you keep seeing about how one creatine form is 10 times… 20 times… or even 40 times better than ordinary creatine.

The most powerful creatine is actually one that starts with 100% potency, and then stays that way once you take it.

In other words, if you have a pure, unadulterated Creatine Monohydrate molecule, that is as good as it gets. Period. Unfortunately, we already know that creatine is unstable and becomes *less and less* effective starting from the time it's introduced into a liquid.

So rather than trying to create a more powerful creatine, it's better to think about the whole thing in reverse: We need a pure, fully stable creatine that **WON'T** lose any of its existing effectiveness as it makes its way to the cell.

FACT #8: You cannot force a muscle cell to accept creatine beyond its physiological capacity.

Once a muscle cell reaches maximum capacity, that's it my friend. Don't fall for the claims some products are making that they contain certain forms of creatine or special nutrients that will expand muscle cells, or the pathways that lead to muscle cells, so they will absorb more.

Think about it this way. Imagine you own a swimming pool. There are 2 pipes attached that refill it as water is evaporated away. Now we upgrade these 2 pipes so they can deliver *twice* as much water.

What happens? Any excess water will do nothing but overflow the pool after it's full. The same goes for muscle cells and creatine.

FACT #9: Creatine Monohydrate is the ONLY form of creatine backed by 200+ studies, with over 70 published in peer-reviewed journals.

It is the single most studied sports supplement ever. Don't even bother trying to find another one that even comes close.

Unfortunately, you wouldn't know it based on all the misinformation floating around the internet, on message boards, and in advertisements for whatever happens to be this month's newest "breakthrough" in creatine.

So, let's finally answer the question: "Which creatine is the best"?

Simple: It doesn't get any better than the gold standard – Creatine Monohydrate. Based on the number of studies backing it, not to mention the problems associated with reprocessing creatine to make a "new" version, the answer to that question should be obvious by now.

Key Facts You Need To Remember When It Comes To "New" Forms Of Creatine

1. To create a "new" form of creatine, you must take FINISHED Creatine Monohydrate and react it all over again in water with the desired bonding compound, inside a glass-lined reactor. Remember, you CANNOT make any other form of creatine from scratch but Creatine Monohydrate.
2. Creatine Monohydrate is unstable in liquids and acids. It undergoes a chemical conversion to creatinine – a mostly useless byproduct.* Unlike most chemicals, creatine will react with just water *alone.* Furthermore, creatine can't be bound to an acid. This fact means you can't chemically create these so-called "new" and "better" forms of creatine. At best, you can only blend two compounds together, which only creates a mixture.
3. Simply mixing or blending Creatine Monohydrate with another compound does not create a new form of creatine. You can't just "push" them together. A chemical reaction must take place via a catalyst to create the new compound.
4. You cannot make pure creatine more powerful than it already is.
5. You cannot force a muscle cell to accept creatine beyond its physiological capacity.
6. Creatine Monohydrate is the ONLY form of creatine backed by 200+ studies, with over 70 published in peer-reviewed journals. Since you now know the problems associated with reprocessing Creatine Monohydrate to try and bond it to acids, it should be obvious that Creatine Monohydrate is the very best form of creatine.

*__FOOTNOTE:__ Even though the instability of creatine in has been clearly proven, it still continues to be a topic of debate in some circles. Therefore, I thought you should see the following information taken directly from the Merck Index.

This one-volume, 1000+ page encyclopedia is **THE** industry standard reference for chemists, biochemists, pharmacologists, pharmacists, and related professionals. It's a standard fixture in every lab and sits on just about every desk of those who work in these industries.

Here's what the Merck Index says under the heading, **Creatine (#2637, pg. 435 of the 12th edition):** *"In aqueous solution creatinine is formed…".* Reading further it also speaks to the pH of creatine, *"… and aqueous and alkaline solutions contain an equilibrium mixture of creatine and creatinine, while in acid solution the formation of creatinine is complete".*

Furthermore, this respected publication also points out that this information is based on research performed…back in 1928! (Canna, Shore, Biochem. J. 22, 924 (1928). This means science has known about creatine's stability issue for over 79 years.

Additionally, here's what it says under the heading, **Creatinine (#2638):** *"Creatinine is ususally prepared from commercial creatine by treatment with HCl (Hydrochloric Acid)".* This is the chemical most commonly used to synthesize creatine ethyl ester (CEE).

The Common (But Almost Never Talked About) Problem Facing Every Bodybuilder & Athlete Who Uses Supplements …

Has this ever happened to you? You buy a product and get great results from it. But the next time around, it just seems different. You don't get the same pump. Or maybe it tastes a little odd. Or it has a different color. You start getting weird side effects…just what in the heck is going on here?

As if this weren't enough it seems like almost everyday the headlines are filled with stories about Professional and Olympic level athletes in major trouble after using what should've been a "clean product", only later to test positive for a banned substance. This kind of garbage means huge fines, ruined reputations and even spells the bitter end of some careers.

And what about label claims? I mean so what if a product has the world's most effective ingredients. If there aren't enough of them in it, you won't get the results you were expecting… in fact, you couldn't. Hey, aren't results what you're really paying all that money for in the first place?

Unfortunately, just because the label says it's there, that's no guarantee it actually is. *I mean, all you have to do is test some of these products, and it's blatantly obvious there's a major problem.*

FACT #10: The biggest problem in the sports nutrition industry today is the fact that almost no one tests their products for impurities, to guarantee they meet label claims, etc. If they do, it is likely not on a consistent basis.

Why don't companies test? One word: Money.

Testing products on a consistent basis is very expensive, and few companies are willing to shell out the bucks do it. Another big reason is that most supplement companies do not really have labs. Sure, their ads show scientists in lab coats holding a dropper in one hand and a glass vile or beaker in the other.

Now do you honestly believe this is a picture of a real scientist at their company? I suppose many people do since this little trick sends sales soaring into the millions.

Major "Short Cuts" In Quality And Testing Are Costing You Big Money And Big Results

Let's face it. Quality control is usually the first to be cut when a company wants to increase its bottom line because as we've already mentioned…it's *very* expensive.

Look at it this way. Every product starts out with raw materials. Now what if those raw materials are contaminated…or fake? If they aren't tested properly—*or even tested at all*—the manufacturer won't know… so how on earth would you?

In the end, what kind of results do you think you're going to get? Exactly…a big fat zero.

Now, just in case you might think I'm pointing all these issues out to make other companies look

bad, take a look at this quote from a study published in Nutrition Outlook (April 2000):

"Last year, more than 70% of manufacturers switched raw ingredient suppliers – 54% of them cited quality as why."

Friend, these numbers don't lie. And do you really think things have improved all that much since then? Think again.

FACT #11: When it comes to creatine products, everything comes down to just one word: quality.

You see, anyone can claim that they test. And even if they did, what really matters is how they actually do it. To fully understand the concept of testing, you need to know the differences between all the methods available.

Creatine Testing Methods

Unfortunately, no one method of testing fits all. Various compounds respond differently to various types of testing methods. And creatine is certainly no different.

The most commonly used form of testing in the supplement industry is HPLC (High Performance Liquid Chromatography). The greatest strength of this testing method is determining the purity of a compound. It measures the compound based on the pattern it gives off in a liquid state.

Unfortunately, HPLC also has four basic weakness:

1) It can only look for one compound in a sample at a time.

2) It cannot examine the entire sample in its entirety, "as is". The sample must go into a liquid.

3) It is usually not effective for identifying a compound. You must know what you are looking for to begin with.

4) It requires a new sample standard to be created every time you test with it, which leaves too much room for human error.

FACT #12: It is best to test creatine using the science of Spectroscopy because it measures a compound in its entirety, "as is", and also gives you the ability to identify the source materials.

A good example of a Spectroscopy testing method is Nuclear Magnetic Response (NMR). This is a very powerful testing method, but it is far out of the realm for realistic use by most supplement companies and manufacturers.

Enter Near Infrared Analysis (NIR)...

Used heavily in the pharmaceutical industry, NIR is the test of choice due to its **speed and 100% reproducible accuracy.**

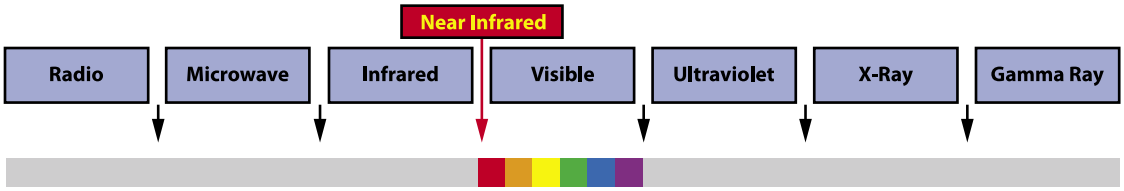
Even more amazing is the fact that it can look at every individual molecule of a product.

Best of all, it examines a compound dry or "as is", unlike HPLC, which is a "wet" method.

In a nutshell, NIR works like this:

Every chemical reflects light from the Near Infrared spectrum in a unique way. This light pattern could actually be considered its 'fingerprint'. When a sample is placed on the NIR machine, light is passed through it.

The light pattern bounces back into the machine, and its highly sensitive instrumentation identifies it based on the pattern. At the same time, it separates and categorizes every component within the sample…all the way down to the *molecular* level.



In Summary, The Biggest Differences Between NIR & HPLC Are:

- NIR tests a compound "as is", without any changes to the original sample.
- **NIR has much less chance for human error because it never needs a new standard once it is setup. It is stored indefinitely in the computer's memory.**
- With NIR, you do not need to know beforehand what you are looking for when analyzing a compound. With HPLC you do.
- **NIR is more accurate. HPLC is usually within 1-2%. <u>NIR is usually within .01%</u>.**

As a side note, we test everything using the best method of analysis available...NIR, but we also have our products tested by an independent lab that uses HPLC, which also guarantees that our quality and purity is dead on.

Welcome To The Future Of Testing

Here's a quick example that demonstrates just how powerful NIR Technology really is. Imagine we take two different packets of common white table sugar and mix them together in a bowl. While they are both sugar, their chemical makeup will differ slightly due to moisture content, processing times, etc.

Next, we take this sugar mixture, and analyze it using our NIR machine. Even though the two packets are mixed together, the machine will scan it and then actually determine which granules came from which packets. Simply incredible.

Kre-Alkalyn® EFX Was Discovered Thanks To NIR

By the way…you might find it interesting to know that Kre-Alkalyn® EFX was discovered thanks to Near Infrared Analysis (NIR).

Until that time, the inventor relied mostly on HPLC for testing products. However, once he began using NIR in the mid 1990's to test samples of creatine in water, it was suddenly very easy to see exactly what was actually happening to them. The rest, as they say, is history.

Key Facts You Need To Remember When It Comes To Creatine Testing Methods

1. The biggest problem in the sports nutrition industry today is the fact that almost no one tests their products for impurities, to guarantee they meet label claims, etc. If they do, it is likely not on a consistent basis.

2. When it comes to creatine products, everything comes down to just one word: quality.

3. It is best to test creatine using the science of Spectroscopy because it measures a compound in its entirety, "as is", and also gives you the ability to identify the source materials. Plus, you do not need to create a new standard for testing, which eliminates human error. Near Infrared Analysis (NIR) is in this category.

SECTION 2:
Putting Kre-Alkalyn® EFX Under The Microscope

Before we move on, let's review the 12 Facts we've covered up to this point:

FACT #1: Reacting the chemicals Sarcosine with Cyanimide in a medium of water, inside a glass-lined reactor, is the *only* way to make synthetic creatine.

FACT #2: All synthetic creatine is manufactured or "synthesized" the same way.

FACT #3: Just like 2 + 2 always equals 4…the end result of the creatine manufacturing process is ALWAYS Creatine Monohydrate. You CANNOT make any other form of creatine from scratch.

FACT #4: To create a "new" form of creatine, you must take FINISHED Creatine Monohydrate and react it all over again in water with the desired bonding compound, inside a glass-lined reactor. Remember, you CANNOT make any other form of creatine from scratch but Creatine Monohydrate.

FACT #5: Creatine Monohydrate is unstable in liquids and acids. It undergoes a chemical conversion to creatinine – a mostly useless byproduct. Furthermore, creatine can't be bound to an acid because the acid destroys the creatine.

FACT #6: Simply mixing or blending Creatine Monohydrate with another compound does not create a new form of creatine. You can't just "push" them together. A chemical reaction must take place via a catalyst to create the new compound.

FACT #7: You cannot make pure creatine more powerful than it already is.

FACT #8: You cannot force a muscle cell to accept creatine beyond its physiological capacity.

FACT #9: Creatine Monohydrate is the only form of creatine backed by 200+ studies, with over 70 published in peer-reviewed journals.

FACT #10: The biggest problem in the sports nutrition industry today is the fact that almost no one tests their products for impurities, to guarantee they meet label claims, etc. If they do, it is likely not on a consistent basis.

FACT #11: When it comes to creatine products, everything comes down to just one word: quality.

FACT #12: It is best to test creatine using the science of Spectroscopy because it measures a compound in its entirety, "as is", and also gives you the ability to identify the source materials.

Based on all these points, we can now draw some powerful and revealing conclusions. Any "New and Improved" creatine product must have these 4 Critical Characteristics:

1. It must be made from Creatine Monohydrate

2. It must be 100% stable in liquids so that it doesn't lose potency before reaching muscle

3. It must bypass the problems caused by reacting finished Creatine Monohydrate all over again in water due to its instability

4. It must be proven to be 100% pure and potent by using at least NIR and HPLC Analysis

So what about Kre-Alkalyn® EFX?

How does it stack up to this list?

Let's put it under the microscope right now and answer the following question once and for all…

Is Kre-Alkalyn® EFX just one more option among the many creatines you could choose…or the **only** one you should use?

Examine the facts and decide for yourself.

Here's How Kre-Alkalyn® EFX Stacks Up…And Why You Won't Find Another Creatine Technology Like It…Anywhere…At Any Price...

Kre-Alkalyn® EFX & Critical Characteristic #1:

1. It must be made from Creatine Monohydrate

2. It must be 100% stable in liquids so that it doesn't lose potency before reaching muscle

3. It must bypass the problems caused by reacting finished Creatine Monohydrate all over again in water due to its instability

4. It must be proven to be 100% pure and potent by using at least NIR and HPLC Analysis

Kre-Alkalyn® EFX vs. Creatine Monohydrate

As I've already stated, Creatine Monohydrate is the gold standard of creatine. And we also know, based on our 4 Critical Criteria above that any "new" creatine **must** come from this form. There's simply no debating this one.

Even though Kre-Alkalyn® EFX could be considered a "new" creatine, it's still nearly identical to Creatine Monohydrate. But how?

Here's the answer: Kre-Alkalyn® EFX is actually pure Creatine Monohydrate.

Yes, you read that right. And now you may be wondering how this is possible based on everything we've covered so far. For example, how does it bypass the problems we discussed earlier caused by reacting finished creatine in water to create a "new" version? Great question…I'll cover that specifically later on.

But first, before we go any further, let me point out an interesting phenomenon. You know...it never ceases to amaze me that a few people are actually ***disappointed*** to discover that Kre-Alkalyn® EFX is indeed Creatine Monohydrate (**remember, it's the only one you can manufacture from scratch**).

If anything, I guess it demonstrates just how effective all the marketing for these other forms of "new" creatines has really been. But...knowing what you do now, it's easy to see how foolish that is.

So let's slam the door shut on this one once and for all: Creatine Monohydrate is the ONLY form of creatine backed by 200+ studies, with over 70 published in peer-reviewed journals. Period. Enough said.

WARNING: The following 4 pages contain information that may only appeal to the hardcore "scientific types". If this doesn't describe you, skip ahead to page 24.

Kre-Alkalyn® EFX vs. Creatine Ethyl Ester

If you recall from the introduction, I stated that we made it a condition of the sale that certain tests be performed for us on various creatine products. Now that we had established the 4 Critical Criteria to benchmark any creatine against, it was time to get the testing started.

Our focus in this round of testing was to determine which form of creatine was the closest to Creatine Monohydrate.

Of all the creatine products out there, the one we wanted to examine more than any other was something called Creatine Ethyl Ester.

By this time we completely understood the creatine manufacturing process, much like you do now. So it was all but completely obvious this stuff wasn't all it was cracked up to be.

Just in case you don't know, "Esterfication" is a **legitimate** pharmaceutical delivery technology currently used by many drug companies. However, it is not suitable for creatine due in part to the process used to create it (i.e., reprocessing finished Creatine Monohydrate by reacting it with a strong acid, along with various alcohols to "esterfy" it).

But even after knowing all this, we wanted 100% verification that we were correct.

So we decided to test it to see how it **chemically** compares to Kre-Alkalyn® EFX and Creatine Monohydrate. BioCeuticals Research & Development Analytical Laboratory, in Montana, performed these tests for us under very strict conditions using Near Infrared Analysis (NIR).

Here's how the whole thing worked. The first thing we did was to find suppliers of the raw material used to manufacture CEE products. We only wanted raw material and not finished products because this would give us the material in its purest possible form.

We were able to locate three suppliers of raw CEE and bought five samples of material from each. Why five? Because we wanted to guarantee that our standard for each was a fair representation of their product. Sure, one bad batch could possibly slip through the cracks, but definitely not five.

After all five samples were analyzed, the results were combined and then averaged to create one standard lot for each supplier's material. Follow me so far?

Next, we did the same thing with five separate lots of Kre-Alkalyn® EFX and five separate lots of Creatine Monohydrate. Now we had all of our sample lot standards, we were ready to begin.

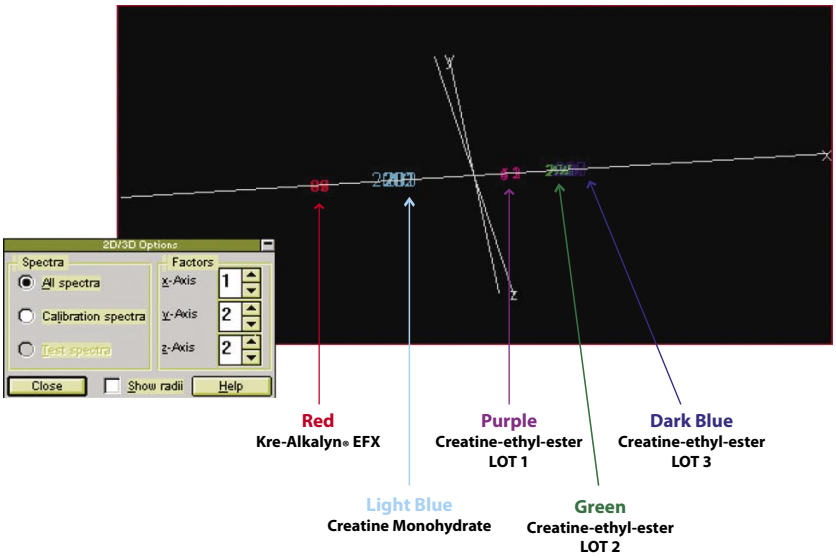
For good measure, each test was run three times and then averaged. Finally, the NIR machine's software was programmed to tabulate each analysis and measure it chemically against our overall standard: Creatine Monohydrate.

Here are the final results…

NIR BOM Cluster Analysis of:

Color ↓	Compound ↓	Lot # ↓	Creatine Monohydrate ↓	Creatine Ethyl Ester HCL ↓	Creatinine ↓	Other Contaminents ↓
1. Red	Kre-Alkalyn® EFX	lot 33541	99.9%	N/A	0.0%	0.0%
2. Light Blue	Creatine Monohydrate	lot 20000501	99.7%	N/A	0.0%	0.0%
3. Purple	Creatine-ethyl-ester	lot 1	72%	<0.01%	20%	8.0%
4. Green	Creatine-ethyl-ester	lot 2	40%	30%	28%	2.0%
5. Dark Blue	Creatine-ethyl-ester	lot 3	40%	0.0%	50%	10%

Screen Capture #1:



Screen Capture #1 Explained

If you look closely at this screen capture, you can see the X, Y and Z-axis. Everything is separated along the X-axis. This is actually a 3-D look at all the lots we had tested, combined with our standard, Creatine Monohydrate.

If you'll notice, each cluster looks like a bunch of numbers grouped together on top of each other. These are actually the five individual lot numbers that make up each sample.

Even though the Creatine Monohydrate standard tested at 99.7% pure and Kre-Alkalyn® EFX standard tested at 99.9% (just a .2% difference), the NIR machine is so sensitive, it still separated the two from each other. Separation from left-to-right is based on the pH level of each compound. Separation from right-to-left is based on the level of **creatinine** (mostly useless byproduct) in each product.

Notice that Creatine Monohydrate and Kre-Alkalyn® EFX are both on the same side of the axis, while all three lots of CEE are on the right side. Looking closely at the overall percentage breakdowns for each CEE lot clearly explains why this happened.

It also confirms what I said before about most "new" creatines. At best, they are:

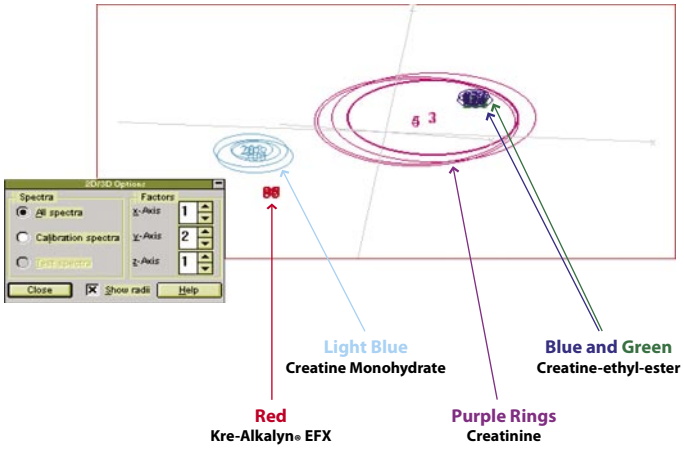
1) Ordinary Creatine Monohydrate labeled as something else

2) a simple mixture of Creatine Monohydrate and the acid it's supposedly bonded with

3) a botched version created by a manufacturer who tried to "bond" Creatine Monohydrate to an acid without knowing the associated problems.

In this particular case, these three CEE lots are good examples of #2 & #3 above. Even though they do have some Creatine Monohydrate mixed in them (the most was Purple Lot 1 with 72%), you don't have to be a scientist to see just how far from actual creatine they really are.

Screen Capture #2:



NIR Separation:

- **Purple Rings:** Creatinine
- **Light Blue:** Creatine
- **Red:** Kre-Alkalyn® EFX
- **Purple, Dark Blue, & Green:** Contain high levels of Creatinine and other containments.

Screen Capture #2 Explained

This screen capture shows the same results, but this time the software was calibrated to focus on the **creatinine** levels found in each sample, represented by the large purple rings.

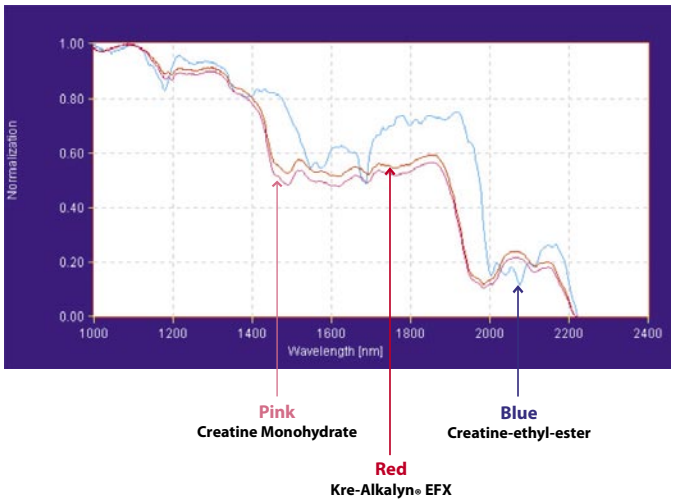
Once again, both Creatine Monohydrate and Kre-Alkalyn® EFX clearly separate out from the CEE products and are very close together.

But even more significant is the fact that the large purple rings of **creatinine** encircle ALL the CEE products. The reason is obvious: Lot 1 has 20%, Lot 2 has 28% and Lot 3 has 50%. Remember, this analysis was performed on raw material…in a dry state.

If you are wondering why our Creatine Monohydrate sample (shown in light blue) has a few small rings around it that's because it contains a very *small* amount of creatinine. However, we're only talking about 300 parts per *million*, which is acceptable for a pure creatine product. Once more, this shows you how sensitive the testing equipment actually is.

For what it's worth, the Kre-Alkalyn® EFX sample lot (in red) obviously doesn't have any rings around it. In fact, the numbers from its analysis show a creatinine level of just 10 parts per *million*. When I explain our extreme testing methods a little later, you'll understand exactly why it's so pure.

Screen Capture #3:



NIR Spectra Full Chemical Analysis

- **Blue:** Creatine Ethyl Ester Lot 2
- **Red:** Kre-Alkalyn® EFX
- **Pink:** Creatine

Screen Capture #3 Explained

This screen capture is known as "Spectra". In short, it shows the entire chemical makeup of Creatine Monohydrate (pink), Kre-Alkalyn® EFX (red) and CEE Lot #2 (blue) all in one shot, from left to right. We specifically used Lot#2 for this test because, of the three, it had the highest levels of CEE (30%).

As you can clearly see, the chemical "fingerprint" of Kre-Alkalyn® EFX tracks almost on top of the Creatine Monohydrate sample. By comparison, CEE Lot #2 follows its own pattern because it is a *different* chemical. It also explains why all the compounds were separated on opposite sides in both Screen Capture #1 and #2.

In fact, the only reason why any part of the CEE fingerprint does track with the Creatine Monohydrate sample is due to the fact that this particular batch was "cut" by its manufacturer with 40% creatine (see its analysis in Screen Capture #1).

If you happened to notice that the Kre-Alkalyn® EFX line doesn't track *exactly* on top of the Creatine Monohydrate line, there's a good reason for it. Creatine Monohydrate is unstable in liquids. On the other hand, **Kre-Alkalyn® EFX is 100% stable in liquids.**

The variations between these two lines, while very minor, show that Kre-Alkalyn® EFX actually has its own highly specific chemical properties.

In the next section, we'll specifically look at why Kre-Alkalyn® EFX works. Why it's completely stable in liquid. And why it's the world's **ONLY** creatine that **DOESN'T** lose potency **BEFORE** reaching muscle. Let's go...

Kre-Alkalyn® EFX & Critical Criteria #2:

1. It must be made from Creatine Monohydrate

2. It must be 100% stable in liquids so that it doesn't lose potency before reaching muscle

3. It must bypass the problems caused by reacting finished Creatine Monohydrate all over again in water due to its instability

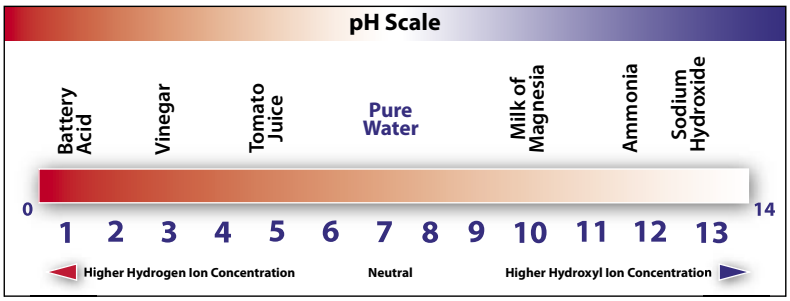
4. It must be proven to be 100% pure and potent by using at least NIR and HPLC Analysis

Solving Creatine's Stability Problem: It's All About The "pH"

The letters 'pH' represent a universal number used by scientists to indicate the concentration of hydrogen ions in a solution. The "p" stands for "potenz" (the potential to be) and the "H" stands for Hydrogen (H+).

Therefore pH stands for potential hydrogen. And pH is determined by the proportion of Hydrogen ions to Hydroxyl ions (OH-).

In plain English, the pH scale shows how **acidic** (pH 0-6.9…more Hydrogen ions) or **alkaline** (pH 7.1-14…more Hydroxyl ions) a solution is. At pH 7, the solution is neither acidic nor alkaline – it is **neutral**.



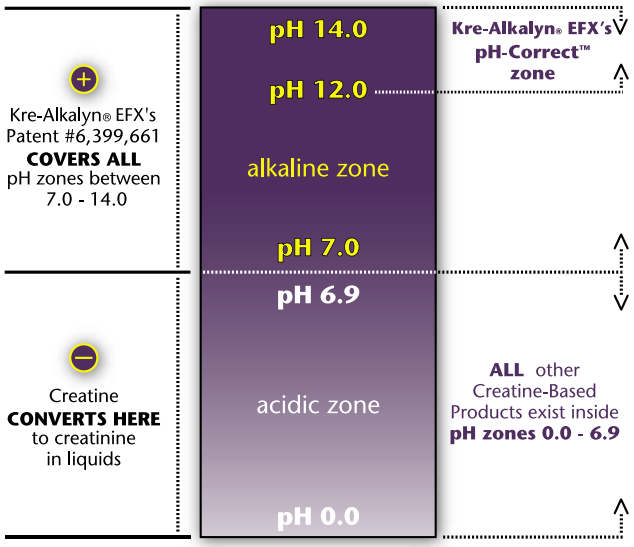
Now it's important to understand that each point on the scale represents a **tenfold** change. This means when you compare a solution with a pH of 6 and one with a pH of 4 does not mean that the latter is twice as acidic. **Rather, it is 100 times more acidic**.

Are pH And "Buffering" Really That Important?

Not sure? Then just give your local pool, gardening or fish supply store a call and ask them if pH is important. Furthermore, the Chemical, Biochemistry, Agronomy, Food Science, Pulp and Paper, Chemical Research and Engineering, and Environmental Research and Pollution Control industries all live and die by this science. So does your own body.

You see, most biological fluids fall somewhere between pH 6 and 8, with a few exceptions, such as stomach acid (around pH 3). Buffering capacity defined as a compound's ability to **resist** changes in pH.

Thankfully, your blood has a built-in buffering ability because it *must* maintain a constant pH level close to 7.4. If it drops to 7 or rises above 7.8, you would **die**. Now that's important!



What Makes Kre-Alkalyn® EFX The Only 100% Stable Creatine In The World?

The answer to this question is pH Levels 7-14 & U.S. Patent #6,399,661. Hang with me; I'll try to keep this as simple as possible…

Remember from before that most creatine products have a *finished* pH of 6.5 or so, roughly the same as most tap water.

The research behind Kre-Alkalyn® EFX's patent proves that creatine's speed of conversion to creatinine is directly related to its pH—the lower the pH, the ***faster*** it converts.

Furthermore, the conversion rates slow dramatically as the pH of the creatine is raised above 7… and stops ***completely*** above pH 12. Here's why…

A pH level above 12 represents the perfect ratio of Hydrogen ions to Hydroxyl ions to **stop** the chemical reaction, or acidic "cyclization" of creatine, where: Creatine + H20 = Creatinine.

The buffering agents in Kre-Alkalyn® EFX effectively "mop up" the excess Hydrogen ions and prevent them from lowering pH. In other words, it gives creatine the ability to resist changes in pH that it normally doesn't have.

This protects the creatine molecules during transport…delivering them intact to the bloodstream so they can reach your muscle cells with 100% potency.

Kre-Alkalyn® EFX is the *only creatine product in the world* with a pH above 12 because its molecules are bonded to "buffering" agents using a *patented* manufacturing process.

Kre-Alkalyn® EFX's patent also covers all pH levels from 7-14. Therefore, the pH of all other creatine products must be pH 6.9 or less (they aren't buffered and *cannot* resist changes in pH) — meaning they **will** convert to creatinine and lose potency in liquids.

What Happens To Kre-Alkalyn® EFX In The Stomach?

What you are about to see below is some of the original research data that helped secure Kre-Alkalyn® EFX's patent, performed at BioCeuticals Research & Development Analytical Laboratory in Montana. Once again, this particular study used Near Infrared analysis (NIR) to measure the how various forms of creatine would react in a human stomach, including Kre-Alkalyn® EFX.

NIR ANALYSIS OF STOMACH (Page 1)

NIR Analysis of Stomach:

Purpose of Study: The purpose of this study was to duplicate and study the stability and pH effects of creatine monohydrate, effervescent creatine, creatine fruit-flavored powder, and Kre-Alkalyn® EFX on the stomach.

The Study: A stomacher (glass vessel used to duplicate the stomach) was stabilized to room temperature. A hydrochloric acid solution (similar to the acid in our stomach) was made to a pH 3 to duplicate the average pH of our stomach.

In the same way we would ingest a powder substance, the liquid creatine mixtures were added to the stomach to simulate digestion. pH was monitored throughout the entire experiment. **(See figure: 1)**

Figure: 1

*Stomacher:	Creatine Monohydrate	Effervescent Creatine	Fruit-Flavored CrM	Kre-Alkalyn® EFX
Acid simulator	Hydrochloric acid solution	Hydrochloric acid solution	Hydrochloric acid solution	Hydrochloric acid solution
Starting simulated pH level	3	3	3	3
Amount of creatine	1.5g	1.5g	1.5g	1.5g
Solution mixed with creatine	120ml tap water	120ml tap water	120ml tap water	120ml tap water
Elapsed time in stomacher	10 Minutes	10 Minutes	10 Minutes	10 Minutes

*The creatine mixtures remained in the stomacher for 10 minutes before they were taken out.

FTNIR Test Results: Liquid creatine mixes were tested as is and added to a glass curette and placed in a Buchii FTNIR testing machine to measure pH, creatine levels, and creatinine levels.

Test 1 - Creatine Monohydrate: After mix was added stomach pH was raised to 3.5. After 10 minutes, mix was measured. 1.5 grams of creatinine was found with 0% creatine present.

Test 2 - Effervescent Creatine: Stomach pH was raised to 3.9. After 10 minutes, mix was measured. 1.5 grams of creatinine was found with 0% creatine present.

Test 3 - Fruit-Flavored Powder Creatine: Stomach pH was raised to 3.4. After 10 minutes, mix was measured. 1.5 grams of creatinine was found and 0% creatine present.

Test 4 - Kre-Alkalyn® EFX: Stomach pH was raised to 9.0. After 10 minutes, mix was measured. 0% creatinine was found and 1.5g of creatine was present.

(pH Measurements See figure: 2)

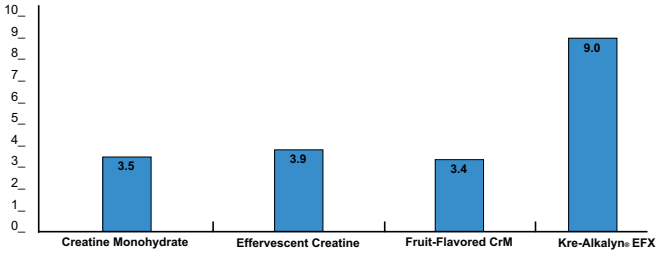
(Creatinine Measurements See figure: 3)

(Creatine Measurements See figure: 4)

NIR ANALYSIS OF STOMACH (Page 2)

Figure: 2

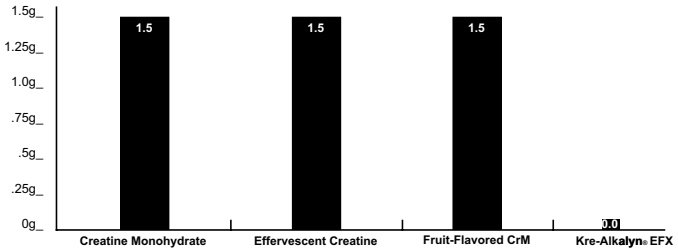
pH Levels:



*Tested as is using Buchii FTNIR.

Figure: 3

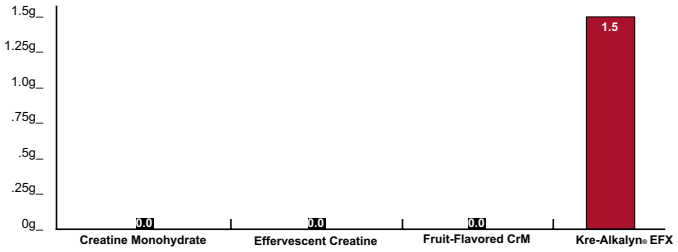
Creatinine Levels:



*Tested as is using Buchii FTNIR.

Figure: 4

Creatine Levels:



*Tested as is using Buchii FTNIR.

Conclusion: This study demonstrates how the acidic environment of the stomach (pH 3) affects regular creatine products after 10 minutes of exposure compared to Kre-Alkalyn® EFX, which utilizes "buffered" creatine technology. Kre-Alkalyn® EFX effectively buffers the acidic environment of the stomach (even for extended intervals), and pass through to the bloodstream intact.

Note: Actual digestion rates vary. Faster digestion rates would allow a portion of standard creatine to pass through intact, before complete degradation to creatinine can occur. This may explain why some individuals still achieve noticeable results while using an "unbuffered" and unstable creatine product.

Kre-Alkalyn® EFX & Critical Criteria #3:

1. It must be made from Creatine Monohydrate

2. It must be 100% stable in liquids so that it doesn't lose potency before reaching muscle

3. It must bypass the problems caused by reacting finished Creatine Monohydrate all over again in water due to its instability

4. It must be proven to be 100% pure and potent by using at least NIR and HPLC Analysis

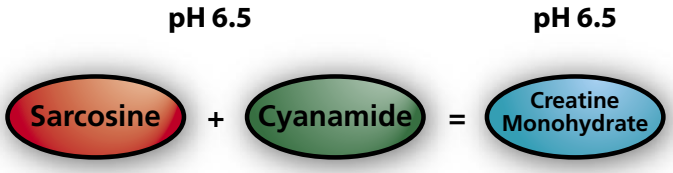
Kre-Alkalyn® EFX – Truly A Category Of One

Yes, Kre-Alkalyn® EFX is a "new" form of Creatine Monohydrate. But how is this even possible from a chemistry standpoint if it must be reprocessed to manufacture it?

Here's the big secret: **It doesn't—everything happens DURING the original process.**

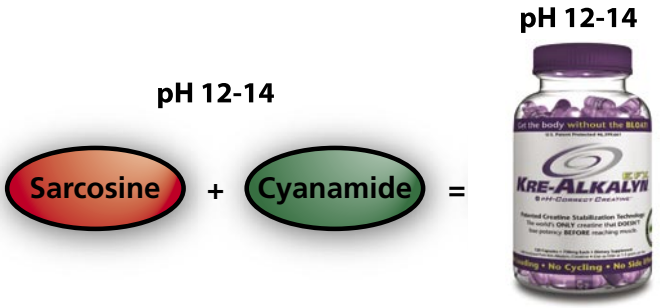
Sidenote: Because it's patent protected...the following explanation of the Kre-Alkalyn® EFX manufacturing process is grossly oversimplified ...but you'll get the point.

Earlier I explained that the pH inside the glass-lined reactor must to be at or near neutral for the base creatine formula to react properly. Going back to the original creatine synthesis process, you also know the end result is always Creatine Monohydrate with a neutral pH:



But… the inventor of Kre-Alkalyn® EFX discovered something that has forever changed creatine. By using a highly specialized process, he developed a way to synthesize creatine at a much higher pH levels, namely 12-14.

What does this mean?



It yields finished "buffered" Creatine Monohydrate with a pH level of 12-14.

Buffering the creatine by **chemically bonding** its molecules to stabilizing agents is what keeps it from converting to creatinine in liquids and acids.

The buffering agents are classified as "food grade technology". Even so, they are still very strong.

One way to clarify this is by comparing how a strong **chemical** acid around pH 3 would severely burn your skin. However, you are able to drink a can of soda, also pH 3, and not be injured. This is possible because sodas contain phosphoric or citric acid – also "food grade technology".

For what it's worth, the Kre-Alkalyn® EFX synthesis process also yields a finished product that is 200 mesh, or "micronized".

So as you can see, Kre-Alkalyn® EFX easily meets Critical Criteria #3: It completely bypasses the problems caused by reacting finished Creatine Monohydrate all over again in water because… **everything happens DURING the original manufacturing process.**

Why Kre-Alkalyn® EFX Can't Be Copied

In so many words, Kre-Alkalyn® EFX is the "new and improved" version of Creatine Monohydrate. But in an industry that's notorious for 'knock-off' after 'knock-off', this is one creatine technology that won't ever be copied. Here's why…**it can't.**

The specialized process used to synthesize Kre-Alkalyn® EFX is protected by an official U.S. Manufacturing Patent (#6,399,661), and also from New Zealand (#519,305)… with 33 more now pending worldwide ready to issue at any time. Here is the current list (as of December 2005):

2 PATENTS AWARDED:
United States #6,399,661
New Zealand #519,305

33 PATENTS PENDING:
Australia
Austria
Belgium
Bulgaria
Canada
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Latvia
Lithuania
Luxembourg
Macedonia
Monaco
Netherlands
Poland
Portugal
Romania
Slovak Republic
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom

By the way, it's important that you understand the difference between a "Manufacturing" Patent and the more common version called a "Use" Patent. Use patents are typically obtained when there is no possibility of getting a "real" patent, such as a Manufacturing Patent.

A Manufacturing Patent typically says that the patent-holder is the only one allowed to make the product using the technique described in the patent. Simply put, this also means a manufacturing Patent is much harder to earn.

So far we've knocked 3 of the 4 Critical Criteria out of the park. Now it's time to take a hard look at the forth and final one: Testing.

Kre-Alkalyn® EFX & Critical Criteria #4:

1. It must be made from Creatine Monohydrate

2. It must be 100% stable in liquids so that it doesn't lose potency before reaching muscle

3. It must bypass the problems caused by reacting finished Creatine Monohydrate all over again in water due to its instability

4. It must be proven to be 100% pure and potent by using at least NIR and HPLC Analysis

The industry standards weren't strong enough to satisfy us…So we created our own. Now it's easily the strictest and most thorough product testing policy this industry has ever seen.

Our ultra high standards for testing reveal & eliminate every possible money-wasting, results-killing impurity that others miss … or never even test for to begin with.

All American EFX is proud to partner with Buchi Analytical, a Swiss-based world leader in cutting-edge Near Infrared (NIR) Analysis technology. NIR is the same testing method used worldwide by the Pharmaceutical Industry to meet their tough regulatory compliance standards.

Unlike traditional testing methods, NIR instantly identifies and verifies *every* molecule of a product in seconds. In fact, NIR testing is so stringent it catches **100%** of all contaminated raw materials…**BEFORE** they ever make it through our manufacturer's door.

Forget The Industry Standards...

We Test Everything Before, During, And After Production To Isolate And Eliminate Impurities—And Guarantee 100% Potency.

Here's How We Do It In Black And White:

BEFORE: It all starts before the product is even made…

If a vendor wants to do business with us, we make them fill out a 30-page questionnaire and send us a sample to test with NIR. If it passes, we order the first batch of raw material. Even though industry standards suggest testing only 1-in-10 barrels, ***we test them all…every single barrel…every time…*****it's non-negotiable.**

DURING: Then we kick it up another notch...

We have in-line quality control safeguards that constantly monitor for proper blending, proportion, etc. Everything is identified, quantified, and tested again during production.

AFTER: Even though everything is finished, the testing isn't…
Before the first finished bottle is ever packed for shipment, samples are sent back to the lab for testing once again with NIR analysis.

Current industry standards require products to meet label claims by a margin of plus or minus 10%. Here is an example of how it works:

A supplement's label claims it has 500mgs of Vitamin C. This means it could actually only contain 450mgs of Vitamin C (not the 500mgs stated on the label) and still pass under the current standards. Well, forget that… All American EFX customers deserve much better.

We demand they fall within a *minimum* of 2%. **Period.** If it passes, our manufacturer gives us a Certificate of Analysis that we post on our website for your review. We even randomly select a few lots and send samples off for additional verification by HPLC analysis.

Because we know you care about what you put in your body...we take our testing even further:

All American EFX establishes yet another industry first
by having our products independently screened for drugs and steroids
at the world's largest WADA-accredited Sports Testing Laboratory

You *deserve* to know that what you put into your body is drug-free…especially when it comes to our products. That's why we also have them independently screened to guarantee it beyond a shadow of any doubt. Here's how we proudly earned this official drug-free seal:

BioCeuticals Research & Development Analytical Laboratory (BR&D), in Montana, also contracts with the largest sports testing laboratory in the world. This particular lab specializes in independent product screening for hidden contaminants such as narcotics and steroids.

According to current WADA (World Anti-Doping Agency) standards, accredited laboratories should remain anonymous to protect the independent nature of their testing.

However, we were at least given a few facts about this elite laboratory…
and why they were BR&D's obvious choice to perform this type of testing:

- For over 40 years they have been a world leader in area of testing nutritional supplements for contamination with drugs and other banned substances.
- Their scientists have collectively published more than 300 scientific papers.
- They have ISO 17025 accreditation for their testing standards
- Their testing data is legally defensible.
- They have a massive 50,000 square foot facility jammed wall-to-wall with some of the most cutting edge testing equipment you could ever imagine…accurate enough to test down to the low *parts per billion*…and some into the *parts per trillion* range.
- This independent lab fully screens our products for 16 substances banned by sports regulatory authorities.

Some Call Our Hardcore Testing Policy 'Too Extreme'...We Just Call It 'Good Business'. After All, You've Only Got One Body

Now You Know What Quality *Really* Looks Like

Does all this testing cost us more? YES! But we simply can't afford to take chances...neither can you. That's why we created these extreme standards in the first place.

Warning …The Copycats Are Coming!

Before I close this section, I'm going to make an extremely bold prediction. I want to state this right now before we close so you can witness this as it happens.

As more and more consumers learn about Near Infrared Analysis and our level of testing, you are suddenly going to see ads appearing from other companies that talk about how they test their products for quality, purity, etc. using NIR or a similar high-end method of analysis.

To top it off…they'll even begin producing even more ads with pictures of their "scientists" in lab coats testing their products. I bet some will also create their own 'seal of approval' to use on their products. Look. Anyone can create a seal. What you need to see is the real science behind their testing methods.

In the end, just remember who brought you all these incredibly high standards for testing first – All American EFX.

Let's Wrap Things Up

You may remember the epidemic we had in the U.S. a few years ago when a certain brand of car tires started blowing out unexpectedly. The treads were separating from the tire core. Anyway you look at it, that's one major flaw.

The end result was over 200 deaths. And hundreds more injured as their cars rolled over or suddenly swerved out of control into oncoming traffic.

Here's the bigger problem. These tires looked just like any other tire out there. They were perfectly round, made of all the right materials…even came from a trusted brand.

Until the exact tire model was finally isolated, taking the family out for a relaxing afternoon drive or just driving to work on them each day became a life-threatening gamble. Worst of all, these poor car owners had absolutely no idea.

When all was said and done, there was a massive recall. The tires were replaced, and everyone got on with their lives.

So what does this have to do with creatine?

Actually, I'm just using this story to illustrate a larger point...

Just like those tires, creatine also has a flaw. And most people have no idea about it. Now, hang on a second…I'm certainly **NOT** implying anyone's life is at risk. No way…but what I do know is that you want the best value possible for the money you spend on supplements like creatine.

Look at it this way. Imagine someone owes you a $1,000 and is going to wire it directly into your bank account. But during the transfer, there was a technical glitch and only $500 of that $1,000 actually made it into your account. Yes, some money did get there, but you also lost $500 in the process.

Sure, this is a hypothetical analogy, but you get my point. There's no way you'd ever put up with losing out like that. So why would you do it with creatine? Especially now that you don't have to since there's Kre-Alkalyn® EFX.

How Long Before Kre-Alkalyn® EFX Replaces Creatine?

Okay, I know a statement like that is about as bold as it ever gets. And whether you agree with me or not, I personally believe this one is inevitable.

Call me crazy, or whatever you want…but just take a minute consider the 12 Facts we covered. They all point to one logical conclusion…there's only one creatine that's based on Creatine Monohydrate and **doesn't** have the same flaws.

Since I'm on a roll here…even though 200+ studies have already been performed using Creatine Monohydrate, I now firmly believe that we still do not fully know the true power of creatine due to the flaws we discussed before.

However, someday we **will** know its true potential as these same or similar studies are performed using Kre-Alkalyn® EFX.

If you've somehow misinterpreted what I've been saying as creatine is bad or that it doesn't work, all I can say is…where have you been during this book?

Quite the contrary…creatine works. Period. Only now it doesn't have the same flaws thanks to Kre-Alkalyn® EFX. Especially when it comes to creatinine.

What's The Big Deal With Creatinine?

Creatinine is a very interesting subject...one that causes much debate in the medical world. But interestingly even more so in the supplement world.

You see, the best thing about Kre-Alkalyn® EFX is that you take much less product overall. The average dosage size is 1.5 grams. Some *may* need to take 3 grams...and it is rare for most people to ever go above this amount. So you can see that this small amount leads to much less creatinine being produced **AFTER** it's spent as fuel in your cells.

The fact is you need to take much higher dosages of unstable ("non-buffered") creatine products just to get a decent amount into your muscle cells. Since it is unstable, this means you are taking in **creatinine** along with your creatine on the **FRONT** side, and *that* is our main concern.

Sure, there are studies that show creatine is safe overall. And for the most part, we see eye to eye with them.

BUT…here's what most of you don't know: 20 million Americans have some level of Chronic Kidney Disease (CKD). That's 1 out of *every* 9 adults. Even worse…there are also *another* 20 million estimated individuals out there who are at risk for kidney problems. Keep this fact in mind: these people do **NOT** know it...yet.

NOTE: These figures are from the National Kidney Foundation...not us (www.kidney.org).

So the real problem, as we see it, is telling the masses that taking *unstable* creatine products is totally harmless...when we **do not know** who all these people are. And it is only logical that increasing the load on one's kidneys with excess creatinine certainly isn't going to help their situation.

Of course, some of our detractors have stated that creatinine isn't really any big deal. And that we're just using "scare tactics" to sell Kre-Alkalyn® EFX. Well, get over it already.

What they don't know is that we work very closely with some of the leading researchers in the **medical** industry (notice I didn't say *supplement* industry) on creatinine and renal analysis. And what we are learning is nothing less than eye-opening to say the least.

Controversy or not, Kre-Alkalyn® EFX solves creatine's stability issue once and for all. So it just makes sense to use it since the whole creatinine issue is also solved along with it.

So Why This Book?

"An angry and educated consumer is a dangerous foe for the marketer to face." – Mark Joyner

While I certainly won't make any claims to having a monopoly on the truth, I'm 100% confident in every last bit of information I've shared with you in this book.

Even so, there may be a handful of people who think the only reason we'd ever reveal this type of information is because we own and sell Kre-Alkalyn® EFX.

Hmmm…slick little plan: make all other creatine products look bad, so we can make more sales.

But there's one important tidbit of information these misguided souls always seem to forget: We are a supplement company…we could sell ANY type of creatine we want. We have access to the same raw materials as every other company in the industry.

Come on, if all we cared about was becoming just another fat-cat supplement company, don't you think we'd be selling every last type of creatine out there and rake in the big bucks? Or…even invent our own version of it the way I explained earlier?

Hopefully, the fact that we **refuse** to speaks for itself.

You see, we've built All American EFX on the very premise that it be the company we wished was around back when we first got started. That is...before we wasted tons of cash on over-hyped snake oils.

And now that you have this information, I just can't see why you would ever use any other creatine but Kre-Alkalyn® EFX. It's the only one that makes sense.

In fact, the very reason we bought this company is because **the stuff flat-out works!**

Let me close by saying this: I sincerely hope you feel an overwhelming sense of power by knowing what you do right now.

Most important of all, I also hope it saves you a big fat pile of cash each month.

CREATINE: INDUSTRY INSIDER SECRETS REVEALED

12 Facts Every Consumer Should Know

Here's what's already being said about it:

"This is 35 pages of pure dynamite. And when it explodes, it's sure to send shockwaves through the entire Supplement Industry."

Who Should Read This Book?

- Anyone who buys creatine or creatine-based products
- Anyone confused about all the different types of creatine
- Anyone who cares about real-world results vs. saving a buck
- Anyone who is starving for credible information

This Book Answers Questions Like These...

- How is creatine actually made?
- What's the difference between all the creatines out there?
- Which form or type of creatine really is the best?

All American EFX® Get Noticed™

$19.95