

Product Quality

Nutri-Spec Is Only For the Smart, Informed Consumer

You are a smart consumer if:

You know the difference between a biologically active nutrient and one that has very little impact on physiology.

You know the difference between a nutrient that is absorbed and one that is flushed down the toilet.

You know the difference between a tablet that is like a rock and one that dissolves for easy absorption.

You know that one nutrient, if taken in excess, can deplete the body of other nutrients.

You know that a nutrient taken in excess with respect to other nutrients can push a person's body chemistry into one or more of ten different metabolic imbalances.

Only buyers intelligent and as informed as you are can appreciate the rare treasure you have in ACTIVATOR, Mighty Mins, and every other Nutri-Spec product.

*** Biological Activity of Nutrients**

If you think you understand all the advantages and benefits of NUTRI-SPEC supplements as explained in the Activator brochure, then test yourself with this short quiz:

Question #1:

Thiamin pyrophosphate differs from common thiamine hydrochloride (vitamin B1) in that:

- a. It is the **biologically active** coenzyme form of vitamin B1.
- b. It demonstrates potent vitamin activity at much smaller doses.
- c. It is much more expensive.
- d. It is found in Activator and not in other “professional” vitamin-mineral-trace mineral products.
- e. All of the above.

Question #2:

Pyridoxal-5-phosphate differs from common pyridoxine hydrochloride (Vitamin B6) in that:

- a. It is the **biologically active** coenzyme form of vitamin B1.
- b. It demonstrates potent vitamin activity at much smaller doses.
- c. It is much more expensive.
- d. It is found in Activator and not in other “professional” vitamin-mineral-trace mineral products.
- e. All of the above.

Question #3:

Zinc Methionate differs from zinc as amino acid chelate (or worse, as the toxic zinc picolinate) in that:

- a. It is the **biologically active** coenzyme form of vitamin B1.
- b. It demonstrates potent vitamin activity at much smaller doses.
- c. It is much more expensive.
- d. It is found in Activator and not in other “professional” vitamin-mineral-trace mineral products.
- e. All of the above.

Question #4:

Chromium as polynicotinate differs from chromium as amino acid chelate in that:

- a. It is the **biologically active** coenzyme form of vitamin B1.
- b. It demonstrates potent vitamin activity at much smaller doses.
- c. It is much more expensive.
- d. It is found in Activator and not in other “professional” vitamin-mineral-trace mineral products.
- e. All of the above.

Do you see that we could go through nearly the entire list of ingredients in Activator paraphrasing choices a,b,c,d and e in question #1, and, that the correct answer would always be “e, All of the above?”

Have you actually read the label of Activator? Have you ever challenged it in an ingredient-by-ingredient confrontation with other products that claim to offer a broad base of nutritional support?

NO CONTEST.

The big, big, big idea here is that the biological activity of the nutrients in your NUTRI-SPEC products is absolutely unmatched.

So, when you see B vitamin precursors instead of the active coenzyme form of B vitamins, and when you see minerals and trace minerals in forms that are either poorly absorbed or have limited biological activity, then why even look further at the junk you hold in your hand?

*** Proportions of Nutrients**

There is another problem with common trash supplements that is probably just as significant as the low bio-activity of the nutrients provided, and that has to do with the **proportions between the various nutrients** supplied.

Suppose you see a label listing 6000% of the recommended daily allowance of this nutrient, and 1500% of the recommended daily allowance of that nutrient -- ultra mega doses of cheap vitamins, in no particular proportion to one another, and completely out of proportion with the amount of minerals and trace minerals supplied? That product is an absolute disaster as a multiple supplement. But remember, most people have no way of knowing that more is not better.

They look at a label in a health food store that features 50-100 milligrams of all the B vitamin precursors, while Activator offers just a few milligrams of the true B vitamins. Unless educated to the truth, they will likely believe they can get more for their money at the health food store than from Nutri-Spec.

To help someone grasp this concept of quality over quantity, you can also inform them of the **poor absorption of those mega doses of B vitamins**. Every vitamin has an absorption curve, which is a graph of the percent of different size doses that the GI tract can absorb.

As an example, consider Vitamin B1. The absolute maximum quantity of Vitamin B1 that a human being is capable of absorbing is 4 milligrams. Up to a little less than 2 milligrams almost 100% of the dose is absorbed. After 2 mg the absorption percentage drops off dramatically to the point where anything above 4 milligrams is not absorbed at all.

So, ask yourself, what do you think of a company that would put more than 4 milligrams of Vitamin B1 in each dose of its product. Is that company ignorant of vitamin absorption basics? Or, is the company simply using cheap B vitamins as a lure to increase sales from an uninformed public? Either way, the company is as trashy as its product.

The [*Activator brochure](#) uses vitamin C as an example to illustrate the problems **with over-supplementing with any nutrient**. Just as many paragraphs could be written about any of the B vitamins or any of the minerals or trace minerals illustrating the damaging effects of supplementing with too much of one nutrient in proportion to all the others. **

So --- the point of all this is that no multiple anywhere delivers the quality of nutrition found in Activator and in Mighty Mins, and, that all NUTRI-SPEC tablets and capsules are just that thoughtfully created.

Absorption and Dissolution Characteristics

In any discussion of product quality, the most fundamental point of consideration must be the dissolution characteristics of the product. Obviously, it makes absolutely no difference what nutrients are in a product if that product does not dissolve in the GI tract in time for those nutrients to be absorbed.

Most vitamins and minerals have a very narrow window of opportunity for absorption, consisting of a few feet in the upper jejunum. Clearly, if a tablet reaches that point of the intestine without completely disintegrating, the vitamins and minerals it contains will pass right on through, unabsorbed, and totally wasted.

The tragically comical truth about most supplements is that they are totally worthless, regardless of what beneficial nutrients they may contain, simply because the tablets have such a substantial coating that the product does not dissolve nearly in time for nutrient absorption.

NUTRI-SPEC main consideration is nutrient availability, therefore they use only the thinnest vegetable protein glaze or gelatin that will hold their products together. You are thus assured ...

THE BEST DISSOLUTION CHARACTERISTICS IN THE INDUSTRY ---

For most companies the primary consideration is shelf life. They want their product to look exactly the same after sitting on the health food store shelves or a doctor's office shelves for 3 years as it did the day it was made. To achieve that, of course, they have to encase the capsule or tablet in extremely stable **excipients**. The problem is that such a heavy coating precludes the dissolution of the product in time for its nutrients to do any good.

Are pill makers and nutrition distributors really so ignorant as to not know the essentials of product dissolution and nutrient absorption? Sadly, the natural food industry is perhaps the dirtiest in the world; the manufacturers and

distributors don't give a hoot about the efficacy of their products --- \$\$\$\$ is all that matters to them.

While NUTRI-SPEC uses the absolute minimum number of excipients, those excipients are essential to assist nutrient flow such that nutrients do not clump together, and that each capsule or tablet contains exactly the number of milligrams of every nutrient listed on the label. The judicious use of excipients increases the quality of your products while decreasing the costs.

One such excipient that Nutri-Spec uses is magnesium stearate. Many false claims have been made against this excipient. For an in depth look at their fallaciousness go to: <http://www.nutri-spec.net/nl/of/2008-07.html>

There are many excipients used in the nutrition industry that are toxic, and there are many others that inhibit nutrient absorption. NUTRI-SPEC carefully avoids all of those, even though they might give our products longer shelf life, or make them cheaper to supply.

One such excipient is di-calcium phosphate, which inhibits absorption of mineral nutrients. Another example is microcrystalline cellulose, widely used in the nutrition and pharmaceutical industries. Ingested over a period of years, it can cause micro infarcts and thus tissue death throughout the body. Cellulose is indigestible, but in microcrystalline form the cellulose particles are so small they are passively absorbed into the blood. There is no way to metabolize or to eliminate the cellulose, so it accumulates in the body to the point it can block small blood vessels. Carrageenan is another common excipient that will cause tissue damage over time.

As you can see, when comparing other companies' supplements to NUTRI-SPEC, many of those products can be eliminated from consideration based on poor nutrient availability or toxic excipients --- before you even look at what nutrients might be offered.

Do understand, however, that in minimizing the coating for maximum absorption that there is a chance of some discoloration of the products, especially when exposed to high temperatures. The risk of discoloration is compounded by the use of the most biologically active form of all the nutrients provided. The problem here is that many of these nutrients attract moisture from the air, and of course, that "sponging" of moisture from the air is accelerated any time the temperature is elevated.

To avoid discoloration and insure that you get the full benefit of your amazing products it is strongly recommended that you put your NUTRI-SPEC supplements in the refrigerator as soon as you get home.

Now, let us take the next step and discuss what **nutrients** to be commonly found on labels are a sure tip-off that the product is cheap trash. We need to make you really understand the difference between NUTRI-SPEC products and some of the garbage that masquerades as professional supplementation.

In a qualitative comparison of your NUTRI-SPEC products with other “professional” supplements sold to doctors, there is more to consider beyond excipients and dissolution characteristics. Not only commonly used excipients, but even some nutrients, are widely used that interfere with the absorption of nutrients.

One extremely common example is magnesium in oxide form. Magnesium oxide is without a doubt the most common form of magnesium used in supplements. Is there a problem with magnesium oxide? --- Yes, a problem so huge that any product containing magnesium oxide should be immediately discarded. You see, magnesium oxide causes an extremely alkaline condition in the upper GI tract. Why is that a problem? Many minerals and trace minerals, including magnesium, calcium, copper, manganese, and iron, need an extremely acid environment in which to be absorbed. Absorption of these minerals and trace minerals occurs very high in the jejunum for obvious reasons --- that is immediately below the acid stomach and before the alkalizing secretions of the bile duct take full effect. There is literally only a few feet of the upper jejunum where absorption of these minerals and trace minerals must occur --- now or never.

When a product contains a substantial quantity of magnesium oxide, the acidification necessary for absorption of these mineral nutrients never occurs, and they are wasted. Why, then, do supplement suppliers use magnesium oxide? Simply --- it is cheap and stable. Do these nutrition companies not know the problems GI alkalization by magnesium oxide? Ask them. All I can tell you is that if you see magnesium oxide on a product, the peddler of that product is either ignorant or dishonest. In either case, you do not want to be dealing with that kind of company.

- **Absorption over shelf life ...**
- **Quality over quantity ...**
- **Ideal proportions over unbalance ...**

... that is what Nutri-Spec guarantees.

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***Disclaimer:** The statements above have not been evaluated by the FDA. No statement shall be deemed as making a diagnosis or providing a treatment, cure, or prevention of any disease.*