HOW TO READ A MULTIVITAMIN LABEL By Dr. Stephen Chaney

Biography of Dr. Stephen Chaney: Dr. Chaney received his BS Degree in Chemistry from Duke University and his PhD in Bio-Chemistry from UCLA. He is currently a Professor in the Dept of Bio-Chemistry & Bio-Physics and Dept of Nutrition at the University of North Carolina Chapel Hill where he teaches first year medical students and runs an active Cancer Research program. He's published over 90 papers in Peer Review Medical Journals and has written two chapters on nutrition that are in one of the leading Bio-Chemistry textbooks that are used by medical students today.

Choosing a good multivitamin isn't easy. Everyone claims theirs is the best! Many of them have exotic juices and exotic claims to go along with them. And nobody is minding the store. The food supplement industry is essentially unregulated. Unless the product kills people the FDA can't take it off the market.

So what should the conscientious consumer do? It's just like shopping for processed foods in the supermarket. You need to become a good label reader. Here are my tips for reading a multivitamin label:

Start with the Basics:

- 1. Ignore flamboyant product names. Extravagant terms like "extra strength" or "meganutrition power" are used to sell the product and usually are empty catch words. Ignore the name and study the label instead.
- 2. Look for nutrient amounts. Some companies will list a source such as blue green algae or juice powder concentrate, but neglect to provide the amounts of any of the nutrients they claim to supply. How can you choose wisely if you aren't told what you are getting?
- 3. Make sure amounts are listed by percent of the Daily Value or DV, not just in mg or ug amounts. Very few consumers have memorized the DV amounts of all 24 nutrients. Labels should inform consumers of the percentage of each nutrient the supplement provides. This allows you to (1) compare amounts supplied by competing products, and (2) to determine whether the supplement provides nutrients in proper portion to one another.
- 4. Check to make sure that all 24 nutrients with established DV's are listed on the label. Count them. If it is a multi without iron, there should be 23.

If a product does not contain adequate amounts of some of the 24 nutrients, often the manufacturer will neglect to include these nutrients on the labels.

For example, if a multi doesn't contain zinc, rather than list a zero, the manufacture will simply leave zinc off the label.

5. Don't be misled by "inflated" labels. Some supplements inflate the label by adding a lot of useless ingredients. One good example of a useless ingredient is pure-amino benzoic acid, or PABA. PABA is a good sunscreen on the outside but useless on the inside. Bacteria can metabolize PABA into folic acid, but humans cannot.

Dr. Steven Chaney: <u>Do Not Be Fooled. There is a Difference</u> Who Do You Trust with Your Health?

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It's really hard to know who to trust in the food supplement industry.

Everyone claims that their product is backed by solid science. But most companies rely on "borrowed science" or "marketing science" to back their product.

What do I mean by "borrowed science"? Simply put, they are citing references that show that an ingredient in their product has a desired effect. They aren't actually doing studies with their product.

Why is that important?

In some cases the reports are simply wrong. There have been several times that Shaklee's Scientific Advisory Board has recommended that Shaklee do their own studies before marketing the product.

Shaklee did. The product didn't work, and they never marketed it. Examples include chromium picolinate and policosanol. In each case studies showing that those ingredients didn't work were eventually published. In the meantime many other companies were making lots of money marketing products that didn't work.

Shaklee won't do that. They don't rely on borrowed science. They only market products that have been proven to be both safe and effective. That's part of the Shaklee Difference.

So what do I mean by "marketing science"?

By that I mean that when most companies actually do a clinical study with their products, they design the study solely with marketing in mind. They don't really care about the science. They just want to be able to make a marketing claim.



Again this is where Shaklee stands head and shoulders above their competitors. They often design their studies in such a way that they actually advance scientific knowledge.

The vitamin D study that Shaklee presented at the annual National Lipid Association meeting in Miami is a perfect example. Several previous studies had suggested that vitamin D lowered the risk of heart disease, but nobody knew quite why.

Shaklee's scientists hypothesized that vitamin D might have a beneficial effect on HDL levels (which reduces the risk of heart disease) and metabolic syndrome (which increases the risk of heart disease). Shaklee worked with Dr. Kevin Maki of Provident Clinical Research in Glen Ellyn IL to test that hypothesis.

Shaklee's Landmark study had already shown that people taking Shaklee supplements on a regular basis generally had adequate levels of vitamin D in the blood. Shaklee took blood samples from attendees at their New Orleans conference so that the study would have a large number of subjects with adequate vitamin D levels.

Dr. Maki recruited a number of non-Shaklee supplement users from local clinics so that the study would also contain a significant number of subjects with low levels of vitamin D in their blood. The results were striking! HDL levels increased as the blood levels of vitamin D increased and markers of metabolic syndrome decreased as blood levels of vitamin D increased.

This study cannot be used for marketing purposes because a claim that Shaklee supplements increased HDL levels would be a health claim. However, this study did advance the science around vitamin D and heart disease risk.

We now have a better understanding of how vitamin D reduces heart disease risk. This is what I call "real science" as opposed to "marketing science", and it is also part of the Shaklee Difference.

Dr. Maki said: "Results from population studies suggest that a low serum vitamin D concentration is an independent risk factor for cardiovascular mortality, but this is the first study to evaluate the relationship between vitamin D status and cardiovascular risk factors in a group that includes a large number of vitamin D supplement users."

As I said before, it's really hard to know who to trust in the food supplement industry.

Above, I talked about the kinds of scientific studies many food supplement manufacturers use to market their products. Below, I want to turn my attention to where those "studies" are published (or not published).

Let's start with the studies that aren't published. Some companies will tell you that "Our scientists have shown..." My questions are:

- 1) If their scientists hadn't "shown" that the product worked, would they still have a job tomorrow? I never trust studies that are not run by an independent scientist at a major university or research organization.
- 2) If the study was really well designed, how come it was never published? If the study was valid, it should be able to stand up to the rigors of peer review that are required for publication in scientific journals.

But just because a company tells you that their study has been published doesn't mean that it's a valid study. There are "advertising journals" that will publish any study that you submit as long as you pay them enough.

After I first mentioned that fact several years ago, I received an email that I thought would be worth sharing with you (The names have been changed to protect the not-so-innocent).

"You mentioned that many supplement companies will say they have published research in medical journals when in fact the information is published in an advertising journal with a medical-sounding name.

I know for a fact that this is true. Let me tell you of a personal experience in 1998.

Because of my pharmaceutical and vitamin manufacturing industry background, I have always had to be somewhat of a "sleuth" to uncover which manufacturers are truthful. Because of many industry secrets I uncovered during that previous career, I guess I have become a skeptic.

Anyway, in April 1998 an acquaintance of mine here in town participated in a Wellness Expo I organized for my chamber of commerce. She represented XXX encapsulated powders that claim to be concentrated fruits and vegetables.

She claimed her products had been clinically tested and gave me a copy of a reprint to read entitled "American Medical Review, April 1996, Volume 2, Issue #4" that listed 4 articles on the front cover but when you opened it there was only a one page article about XXX. No author, no footnotes, no reference information. Poorly written!

It claimed studies had been done by "an independent laboratory" and "a prominent pathologist" but didn't give names, etc. When I told her this was weak information, she said, "Well, look at the name! It's a medical journal! It must be accurate information!"

So, I called the phone number for this American Medical Review. The receptionist answered the phone "MAK Enterprises." **MAK turned out to be the initials of the publisher** Mark YYY.

Through my sleuthing, I actually got to talk to Mark (he thought I was a potential advertiser) and he told me the **American Medical Review was an advertising journal. NOT A MEDICAL JOURNAL.**

If I were looking to publish an article about my company and would agree to his prices and terms, I could publish my proposed article (of course I had made this whole thing up to get him to talk to me).

The sad thing is so many companies intentionally mislead their employees, their independent distributors, and their consumers all the time, just to make a buck."

Her email says it all!

By the way, you don't have go to the lengths that she did to distinguish between a real scientific journal and an advertising journal.

The National Library of Medicine keeps an online database of all scientific journals in the medical area (where clinical studies would be published) called PubMed. Just Google "PubMed". You'll find it.

If the journal isn't listed there, it's probably an advertising journal.

Dr. Stephen Chaney, PhD