

# **THE BEST SUPPLEMENTS FOR YOUR HEALTH**

**Revised and Updated - 2014 Edition**

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## **Part One: How To Choose and Use Supplements: Chapter Four**

**(Last Revised: January 2014)**

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*\*The revised and updated version of this book is being provided in digital format. Each Chapter will be*

*presented as a separate PDF file.*



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# PREFACE

As pharmacists, we (Don Goldberg and Arnie Gitomer) have a healthy respect for drugs and their benefits. When we were in pharmacy school, however, there was still a great deal of awareness that a large number of the drugs listed in the pharmacopeia were derived from natural sources. A substantial amount of the curricula back then was devoted to subjects such as pharmacognosy, the study of natural substances, particularly plants, that are used in medicine. Over the years, however, courses of this type have been dropped from most pharmacy schools.

Why? Advances in chemistry enabled the pharmaceutical industry to synthesize ever more powerful drugs. We were less dependent on natural products as sources of lifesaving therapeutic agents. Instead, we looked to the chemist's lab bench.

There were good reasons for this movement away from natural products. Supply problems were alleviated. Greater potency could be achieved. The drugs were more easily standardized, and they could often be made available in a more reproducible, convenient form.

And we cannot ignore the economic incentive. A drug derived from a natural substance cannot be patented. A synthesized chemical drug, on the other hand, can be patented, giving the pharmaceutical company an opportunity to recoup the cost of Food and Drug Administration approval, and earn a handsome profit for seven or more years.

As is usually the case, unfortunately, there is no such thing as a free ride. Along with this increased potency comes increased toxicity and the potential for undesirable side effects. When deciding on the treatment for a health problem, a choice has to be made. We have to evaluate the benefit versus the risk of the various options available to us. Killing a fly with a shotgun blast will work, but using a fly swatter might work equally well, without such extensive collateral damage.

In our opinion, the medical establishment became enamored with high-tech, high-powered solutions to many of the health problems facing us today and lost sight of the fact that more gentle, less toxic alternatives were available. There are times when a fly swatter is actually all that is needed.

And even better, put screens on the windows! In other words, prevention—prevent the fly from entering in the first place. Too often, I will hear a patient complaining that "the doctor gave me this prescription, and now I feel worse than I did before." Or the doctor says, "Your blood pressure is a little high—have this prescription filled!"

According to recently released medical guidelines, almost everybody should be taking a "statin" drug to bring their cholesterol levels down to the recommended levels. Is elevated cholesterol or heart disease caused by a deficiency of "statin" drugs? Is arthritis caused by a deficiency of aspirin?

It has been said that we are experiencing an increase in diabetes of almost epidemic proportions. Heart disease, obesity, and cancer are rampant. Is this because we have not yet developed newer or more powerful drugs? Of course not.

Instead, these serious health problems are related to changes in our lifestyles and environment. We do not eat healthy food, we do not get enough exercise, and we are exposed to pollutants and toxins that did not exist in our grandparents' time. We live longer, but not healthier.

It's easy to respond with an admonition to just eat the right foods, prepared properly, get more exercise, and move out of the city. This would be fine, and it is an appropriate goal to strive for, but it's obviously a goal that cannot be achieved by the average person.

We consider nutritional supplements and herbal medicines to be a valuable compromise, or a bridge, between the two extremes—unrealistic lifestyle changes and reliance on miracle drugs. These agents can provide us with the healthy components of foods in quantities that might be difficult or impossible to get through diet alone. They also provide those natural agents that, when ingested at higher levels, exert therapeutic action with fewer side effects than more powerful, synthetic drugs. They offer a convenient and effective way to augment our diet with agents that have been shown to ward off the onset of aging, cancer, heart disease, Alzheimer's disease, osteoporosis, birth defects—nearly all health problems.

The benefits of nutritional supplementation are now being recognized not only by the general public, but also by the medical community. Interest in these alternative "remedies" is at the highest level ever. Everybody is looking for more information on which supplements to use and how to use them. Factual answers to these questions can

be hard to find. Unfounded and exaggerated claims are easy to find. That is why we are writing this book.

The information we provide is designed to help you distinguish fact from hype. We want to help you choose the best supplements for your health.

# HOW TO USE THIS BOOK

This book is not intended to be used as a replacement for professional medical advice. Instead, it is meant to help you understand the benefits associated with the use of nutritional and herbal supplements and advise you about how best to use these supplements.

The book is divided into two parts. In Part One, we will discuss what nutritional supplements are and the reasons for taking them. First, we will take you through a series of steps that will help you choose the right type of supplement. We will then teach you how to tailor a supplement program to your own unique health needs. And we will review how to best use the supplements you have chosen. We will also teach you how to tell the difference between a good supplement and a bad one, and how to separate unfounded marketing hyperbole from sound nutritional advice. We suggest you read through Part One in its entirety.

In Part Two, we will present information on specific dietary supplements. We have drawn this information from a variety of sources, including those listed in the bibliography. Some of the information is based on recent scientific study and some is based on traditional and historic usage patterns. We have tried to indicate the degree of reliability when appropriate.

In Chapter 5, we provide information on individual nutrients and herbs. Representative products are provided as well, with educational and evaluative annotations when appropriate.

In Chapter 6, we provide a selection of popular combination remedies designed for specific health conditions. Representative products are listed, with ingredient information when possible.

The mention of specific products is for educational purposes only and is not an endorsement. Similar products are available from numerous additional sources. By providing you with examples and pointing out their strengths and deficiencies, we hope to enable you to make better decisions when evaluating which products to purchase on your own. To make it easier for you to find those products and categories that pertain to your personal needs, we have provided a "Therapeutic Cross-Reference." Additional references and Internet links can be found on our website, [www.bestsupplementsforyourhealth.com](http://www.bestsupplementsforyourhealth.com).

## **CHAPTER FOUR: Too Good to Be True?**

We have already given you some examples of things to watch out for when shopping for nutritional supplements in the section on choosing which brand to purchase. Here are some additional pointers.

### **What a Deal! Or Is It?**

Watch out for discounts that are not as impressive as they seem. For example, “Buy one and get another at half price” is not as impressive a deal as it might sound at first. If the cost is based upon list price, then this deal translates to 25 percent off list. That does not sound nearly as impressive as it did at first, does it? Especially when the store down the street has the same or similar products on sale at 30 percent off list price. And you have to buy only one bottle, not two.

Another common ploy is to put a big poster in the window touting a large discount, perhaps “40 percent off.” Only when you read the fine print or go into the store do you discover that this discount applies only to selected items or only to the store’s house brand.

Watch out for deals that cost. A chain of health food stores makes you an offer. You can purchase a special membership card that will enable you to purchase supplements at a 20 percent discount one day a month. The card costs twenty-five dollars, but you will certainly recoup that after just the first month or two. What a deal.

Or is it? The other health food stores in the area carry similar products, if not a wider selection, at everyday discounts of 20 percent off list price. And they frequently run specials, with discounts of 30 percent to 40 percent off list price. And you do not need to buy a card to obtain these larger discounts. We still cannot figure out why people are so willing to pay for the privilege of getting less.

### **Something to Hide?**

Watch out for product labels that contain proprietary blends of ingredients. As far as we are concerned, there should be no such thing. During a time when efforts are being made to bring increased accountability and credibility to the nutritional-supplement industry, there is no excuse for not listing the actual composition, both quantitatively and qualitatively, on the product label.

For example, there is a line of herbal supplements with formulas designed for a wide variety of disorders that bear ingredient statements in this format:

*Amount Per Serving:*

*Proprietary Blend: St. John’s Wort Extract 0.3% (leaves/stems), L-tyrosine, Kava Kava Extract 30% (root), Ginkgo Biloba Extract 24% (leaves), Royal Jelly Extract 3x, Siberian Ginseng Powder (root).*

We do not approve of products that do not list the quantity of active ingredients on the label.

### **Multilevel Marketing or Pyramid Schemes**

Watch out for claims made by those involved in multilevel marketing. Why? Because the claims are almost always exaggerated and unfounded.

There is an inherent thread of deception that runs through most multilevel-marketing programs. Deception is necessary for several reasons. The products being promoted are by necessity substantially more expensive than similar products being sold through normal retail channels. This is because there is the need to support so many additional levels of discounts and commissions. To justify these higher prices, exorbitant claims of uniqueness,

efficacy, and superiority are made by people who have no responsibility for what they say. They are “independent contractors.” If you have ever tried to obtain substantiation for any of the claims being made by these representatives from the actual company, you know what we are talking about.

In fact, whenever you are presented with testimonial after testimonial in support of a product, you should be very suspicious. And this is primarily what you get with multilevel marketing. You are also typically told about the team of Nobel Prize scientists who developed the product, the billions of dollars the company made last month (after all, how can there be any doubt of the integrity of the product or the program when so much money is being made?), reminded about Mom and apple pie, and bombarded with buzzwords such as natural, environment, and organic. You, of course, are also told about the great amount of money you can make if you buy into the program.

And this leads to the second reason why deception is involved. The fact is, you are not really buying products when you get involved with multilevel marketing. Instead, you are buying into the business plan, the opportunity to get rich quick at other people’s expense. The organizers or recruiters sit you down and delude you into thinking that it is easy to recruit people into level after level of distributors, each of whom is paying you a portion of their sales proceeds. It rarely works out that way.

**THE PHARMACIST SAYS:** What is multilevel marketing? Some would have you believe it is merely a way for people to pursue the American dream, empowering the average person to sell directly to others, bypassing the evil, wicked, bad, and nasty conventional retail sales infrastructure. But that is not the case. You can do that without getting involved in multilevel marketing. What differentiates this from other sales methods, including direct sales, is that you are buying into an opportunity to participate in a modified pyramid scheme. In its pure sense, pyramid schemes, or Ponzi schemes, are now illegal. Here is how it works: Participants buy into the program. The money from new participants is distributed to the previous participants, or those higher up in the ever-expanding pyramid. The more people you recruit, the more money you make. And the new recruits go out and recruit new people, who buy in, and they in turn recruit more people ... until you start to run out of new recruits. At that time, the pyramid collapses. Those who were lucky enough to have risen to the upper part of the pyramid laugh on their way to the bank and those at the bottom of the pyramid suddenly wonder where their money went.

To avoid the illegality of a Ponzi scheme, the recruits have to obtain something tangible in return for their initial investment, something other than an opportunity to participate in the pyramid. So they do. They get a starter kit, for example, or a business plan. All they have to do now is go out and pitch the product and entice the prospective recruit with the lure of easy wealth. It’s so easy. Talk to ten people. Three of them will buy into the program. You get a commission on their sales. For every ten people with whom each of those three talk, three more will buy into the program. You also get a commission on their sales. That’s twelve people now downline from you. And for every ten people with whom each of these folks talk, three will sign on. You, of course, get a commission on their sales as well. That adds an additional twenty-seven downline people feeding you commissions, for a total of thirty-nine. And it just keeps on going. There can be as many as five levels of commissions involved. What are you going to do with all that money? You will have to buy a bigger home, so that you can have a larger garage to accommodate your new cars. One for each day of the week.

Of course, it rarely works out that way, does it? There is nothing wrong with the American dream. And there is nothing wrong with direct sales, door to door, over the Internet, or whatever. But when it involves false and misleading claims, deceptive promises and the lure of easy money, that’s another story. Selling product is fine, but selling an opportunity to participate in a modified pyramid scheme is not our idea of the American dream.

It’s not as bad as it used to be. At least the products sold by many of the larger multilevel marketing companies are decent products with honest labels. If you read the label, dismiss the false and misleading information being provided by the distributor, and don’t mind paying more than you have to for a product,



go ahead and do so.

## **Radio Infomercials**

Watch out for advertising in disguise. In magazines, they put a heading at the top of the page warning you that it is an advertisement. On the radio or television, the disclaimer is often not that obvious.

If you read the biographical information on the cover of this book, you will see that two of the authors, Don Goldberg and Arnie Gitomer, host a two-hour radio program every Sunday afternoon in New York. When we hear some of the infomercials that air on the radio, we are embarrassed to be associated with this industry. It is a shame that such blatant misinformation is allowed to be broadcast.

What is an infomercial? It is a block of radio time, usually thirty minutes, purchased by people who have a product to sell. They, apparently, can say anything they want to. And they say it well. If you don't listen carefully, and if you are not knowledgeable about the subject matter, it is easy to be impressed with their pitch.

But the facts are rarely as they make them out to be. For example, does the fact that a couple of scientists received the Nobel Prize for discovering the effect of nitrous oxide on blood vessels really mean that those same scientists are endorsing an herbal impotency cure?

It all boils down to what we have said over and over again. If something sounds too good to be true, assume it is too good to be true!

If we told you that peppermint schnapps cured impotency, baldness, cancer, halitosis, Alzheimer's disease, and athlete's foot, would you believe us? Would you pick up the phone and order a bottle? Well, people do it. And they must do it in large numbers because these ads and infomercials go on and on.

Do you really believe that Maud, who couldn't get out of bed because of her severe case of "arther-itis," rubbed this miracle cream on her back and the very next morning was able to jump out of bed and start training for the New York marathon? And she was so impressed, she gave some to her husband, Howie, who had been confined to a wheelchair for the past three years. And, you guessed it, the next day Howie threw away his cane and rejoined the bowling team. Is this wonderful or what?

How many of you noticed the comment "results may vary" at the end of the commercial?

Do you want to lose weight? Just take a few spoonfuls of this miracle liquid (no mention is made during the commercial as to what it contains, by the way) before bedtime and when you wake up in the morning, "You are well on your way to losing weight!"

What does that mean, "well on your way to losing weight"? Does that mean that this miracle liquid causes you to lose weight overnight while you were sleeping? Or does it mean that if you follow the rest of the program—reduced calorie intake, increased exercise, etc.—you will maybe then lose weight?

What about the "second-grade schoolteacher" who invented the cure for the common cold? We have the highest respect for second-grade schoolteachers, but why would we believe that a second-grade schoolteacher was successful in inventing a cure for the common cold when the leading pharmaceutical scientists throughout the world have yet to do so?

## **Grow Your Vitamins?**

Watch out for people who can turn lead into gold. There are some companies that sell products containing vitamins that are supposed to be different from others. These vitamins have been somehow grown or cultured with food or yeast, and incorporated into these organic plant cells. And as a result of this, the vitamins are supposedly changed, altered in some way such that they are no longer the same as "regular" vitamins. They are better, more potent, better assimilated, more politically correct.

In Chapter 2, we explained the ploy used to "fortify" brewer's-type yeast. B vitamins would be dumped into a yeast culture and the resultant mixture of yeast and B vitamins would be co-dried. The product would be called

fortified brewer's-type yeast and have very high potencies of the various B vitamins. The high potency, of course, was due to the added vitamins. Companies would put this "yeast" into their vitamin products and mention only "yeast" on the label's ingredient panel. But they would list the high potencies of the B vitamins. The consumer would be misled into thinking that the vitamins came from the yeast, rather than from the regular, synthetic vitamins that were added to the yeast.

The "food-base," "cultured," or "grown" vitamin supplements are variations of this same approach. That's okay up to a point. We firmly support the inclusion of as much natural food concentrate and food isolates as possible into a supplement program. Foods, especially fruits and vegetables, are rich sources of beneficial phytonutrients—flavonoids, polyphenols, etc.—and the more the better.

But that is all these products are—mixtures of regular vitamins and minerals with yeast or other food concentrates. The vitamins have not been altered in any way.

This culturing process does not change the vitamins. The vitamins are not incorporated into the yeast or food cells and somehow made more potent. A mixture of food concentrate and vitamins is formed, dried, and incorporated into the supplement. That's all. And as long as we accept that for what it is, no harm is done—except remember that there is only so much space in a tablet or capsule. The more of that space that is taken up by the food concentrate, the less the space that is available for the actual vitamins and minerals. It is difficult, if not impossible, then, to have a high-potency vitamin or mineral supplement of this type.

There is an exception to this situation. Certain trace minerals can indeed be assimilated by plant cells in higher than normal levels. Perhaps the best example of this is selenium. A selenium-enriched yeast culture has indeed been developed and commercially produced. This is an exception, as plants usually are genetically limited in how much of a given nutrient they can utilize.

Our main concern regarding these types of products is that there is a tendency to mislead consumers into thinking they are getting more than they really are. Overspending is one thing, but if a woman takes one of these "food-grown supplements" with only 75 milligrams of calcium, for example, thinking that this will have the same effect as 1,000 milligrams of regular calcium, there is a serious problem. As we said before, food concentrates are fine. But they should be taken as an adjunct to an appropriate nutrient supplement, not as a replacement for it.

**THE PHARMACIST SAYS:** There is a Cal Mag Whole Food Complex Dietary Supplement that supplies 75 milligrams of calcium as a "Bio Grown Food-Cultured Nutrient." Do not be misled into thinking that 75 milligrams is anything other than 75 milligrams. Seventy-five milligrams of calcium, whether "food-cultured" or brewed in a witch's cauldron, is not equivalent to 1,000 milligrams of calcium.

## **What's That Smell?**

Watch out for what's not there. A few year's ago, there was a very popular powdered protein supplement being sold in health food stores and advertised on the radio. It was originally packaged in a large plastic bottle and later in a fiber can. The front of the label said it was soy protein with papain and bromelain (enzymes). There was no mention of any type of flavoring. On the back side of the label, the ingredient listing showed only the following: "Soy Protein Isolate, Papain, Bromelain." Again, there was no mention of any flavoring agents.

But there was a distinct vanilla odor associated with the product. Without even opening the bottle, you could smell the vanilla. Where was that vanilla odor coming from?

Well, in spite of the fact that there was no mention of it on the label, the product contained vanilla flavoring. You did not have to be a genius to realize that something was not right. The product was obviously mislabeled.

Why did the manufacturer mislabel the product? There is no way for us to know, of course, except the fact that the source of the odor was vanillin, or artificial vanilla, rather than natural vanilla flavoring might have had something to do with it.

We discussed the problem of identifying quality brands back in Chapter 2. This is a good case in point. You have

to look for clues, and very often the clues are easy to spot. You pick up a product from the store shelf and it smells of vanilla. You see no mention of vanilla on the label. Voila, the product is mislabeled and you have reason to wonder about the general integrity and competency of that particular brand.

## Why Does It Fizz?

Here is another example. If you look at the label on a jar of one particular brand of buffered ascorbate powder currently on store shelves, you might notice several things. You will notice a lot of space devoted to statements explaining what is not in the product. You will also notice that it bears a full disclosure label, indicating no hidden or inactive ingredients. The ingredient listing is provided as follows:

Vitamin C (triple recrystallized) 1,584 mg  
Potassium (as ascorbate) 99 mg  
Calcium (as ascorbate) 40 mg  
Magnesium (as ascorbate) 16 mg  
Zinc (as ascorbate) 600 mcg

Everything sounds good so far, but under the directions, you are told to mix one rounded half-teaspoon with 4 ounces of liquid.

Now, you notice one more thing. You are instructed to wait for effervescence to stop before drinking.

What effervescence? Mixing various mineral ascorbates with water will not result in effervescence. Instead, you need to have some type of bicarbonate present. There was no mention of ingredients on that “full disclosure label” that would lead to effervescence. Does it contain potassium (as ascorbate), as the label claims, or does it instead contain potassium bicarbonate? Is this true as well for calcium bicarbonate, magnesium bicarbonate, and zinc bicarbonate? Does it contain citric acid? Should I have to guess? Or should it be clearly stated on a full disclosure label?

Now, this particular label may or may not be legal in the strictest sense. That’s not the point. Perhaps the implication is that after the reaction is completed (the chemical reaction between the bicarbonate and the acid when stirred into water), all that you have left is vitamin C and mineral ascorbates. But full disclosure labeling should be just that.

This is especially true when there are competing products on the market that contain fully reacted ascorbates. These other buffered vitamin C products do not rely on the acidic vitamin C reacting with the mineral ascorbate after being stirred into water. They provide the vitamin C in an already-reacted, fully buffered form, as a true mineral ascorbate.

For more information on buffered vitamin C products, refer to Chapter 5.

## Just the Facts, Please

One product on the shelves tells you everything except what you need to know—at least, not directly. The product is labeled as follows:

***Triple Strength Bromelain***  
500 mg  
2,000 G.D.U. per gram  
*The highest potency proteolytic...*  
Serving Size: 1 tablet  
Amount per Serving: Bromelain Powder (2,000 G.D.U./g)...500 mg

Okay, now what you really want to know is what is the bromelain potency in one tablet? The answer is 1,000 G.D.U., but you would have a hard time figuring that out without a calculator, wouldn't you? To explain, the label is saying that the bromelain powder in the product contains 2,000 G.D.U. per gram, but only 500 milligrams of that powder is used in one tablet. Since 500 milligrams is .5 gram, one tablet contains only 1,000 G.D.U. of bromelain activity. When comparing products, you have to read the label very carefully. See Chapter 5 for more information on this.

THE PHARMACIST SAYS: G.D.U. stands for Gelatin Digesting Units, which is a commonly accepted measure of the potency of proteolytic (protein-digesting) enzymes. Another unit that you may see on labels is M.C.U., which stands for Milk Clotting Units. The advantage of labeling activity in units is that it is easy to compare the potencies of products.

## Fluff

Watch out for fluff. What do we mean by fluff? Here are examples:

“Biochemically formulated”

“Fully bioactive”

“100% vegetable, energized formula”

“Hand-crafted in small batches in an exclusive alchemic process...”

“Our own unique super-oxygenated, energized, structured distilled living water”

“These powerful tinctures are electromagnetically infused with color frequencies known to heal the organ or system.”

“Nutrients that are hydroponically farmed (grown on nutrient activated in water)”

“The inherent benefits of Vital Food Factors not found in ordinary vitamins and minerals”

Fluff sounds impressive but means nothing. The more fluff we see on a label, the more suspicious we should get.

## Unregulated Dietary Supplements and Hidden Ingredients

There is a big difference between the claim that nutritional supplements are unregulated and the claim that they are poorly regulated.

There is a persistent tendency among those in the news media, and especially those with a bias against supplements, to talk about unregulated nutritional supplements.

In a recent example, there was an article in the January 30, 2002, New York Times titled “U.S. Athletes Must Guess on Supplements.” In this story, the various Olympic organizations were criticized for sending “mixed messages” to Olympic-caliber athletes. On the one hand, the Olympic organizers accept endorsement money from various companies that manufacture and sell nutritional supplements. On the other hand, they tell athletes, according to The New York Times, “Do not take a vitamin and put it in your mouth, period.”

Why so harsh an admonition? Why advise the most highly trained athletes in the world to not avail themselves of the health benefits of optimal nutrition? The reason, according to various Olympic officials and news reporters, is that supplements are unregulated, and may contain hormones, steroids, and their precursors. They claim that these substances are not listed on the product labels and, therefore, the athlete may inadvertently end up with blood levels of prohibited substances sufficient to disqualify him or her from competition.

The Times article quoted Frank Shorter, who is now chief of the United States Anti-Doping Agency, as saying,

“The people who are manufacturing this stuff have no reason not to lace it.” It also quotes The American Bobsled Federation as saying it “does not believe that the athletes should bear the burden of an unregulated supplement industry that can not guarantee all ingredients are identified on its labels.”

As if there still might be any question as to whether or not the problem is due to a lack of regulations, the Times also stated the following:

“F.D.A. approval is not required to market supplements, which are considered foods and not drugs, under the Dietary Supplement Health and Education Act of 1994.”

The implication is obvious. Supplement manufacturers can include undeclared ingredients in products with impunity because the products are unregulated, or not subject to FDA approval.

This is not true. Supplements are regulated, just as foods are regulated. All ingredients must be declared on the label. Unapproved food ingredients cannot be included in the product, let alone not declared on the label. Drugs cannot be hidden in foods or nutritional supplements. Doing so is illegal, and the FDA has full authority to prevent and prosecute those who break the law.

The regulatory status of dietary supplements is clearly set forth in the law, and the authority of the Food and Drug Administration as the enforcers of the regulations is clearly defined. Why, then, does the media persist in stating otherwise? In another story published in The New York Times, “Drug Testing in U.S. Comes Under Fire from Olympic Officials,” published on September 26, 2000, the following statement is included:

“The supplements are classified as food, and as such, are not regulated by the Food and Drug Administration. Steroids can be sold in the supplements legally, even when not labeled, as long as no medical claim is made, said Dr. Don Catlin, who operates the Olympic drug testing lab at U.C.L.A. and is a member of the I.O.C.’s doping commission.”

How absurd! “Foods are not regulated by the Food and Drug Administration”? Perhaps the name of the agency should be changed to the Drug Administration?

“Steroids can be sold in supplements legally”? This is news to us, and we’re sure that it comes as a great surprise to the FDA. Why are we so worried about the high cost of prescription drugs? All we need to do, it seems, is stop by our local health food store and get our steroid medications there.

This type of misinformation is not limited to news organizations such as The New York Times. According to an article published in the Journal of the American Medical Association,<sup>1</sup> nutritional supplements are “by law not subject to FDA regulation.” Again, this is just plain false.

*(1 “Recent Patterns of Medication Use in the Ambulatory Adult Population of the United States,” Journal of the American Medical Association, January 16, 2002.)*

**As explained by the Council for Responsible Nutrition in its report “The Truth Must Be Told About Dietary Supplement Regulation” ([www.crnusa.org](http://www.crnusa.org)):**

In media coverage, it is often falsely claimed that dietary supplements are “unregulated” since passage of the Dietary Supplement Health and Education Act of 1994 (DSHEA). In fact, the 1994 law reaffirmed that dietary supplements are regulated like foods. They have been regulated as a category of foods since the current Food, Drug, and Cosmetic Act was enacted in 1938. They are not drugs and have never been regulated as drugs. Like foods, dietary supplements are required to be safe. There is a procedure requiring notification of the FDA before new ingredients are introduced into dietary supplements, and the agency has disapproved numerous ingredients on safety grounds. The FDA has authority to remove products from the market that are unsafe. In recent years, the FDA has in fact taken action against a number of dietary supplements.

Like foods, dietary supplements are required to provide full information to consumers through product labeling. This includes information such as nutrition labeling and ingredient labeling. The extensive



labeling regulations are codified in Title 21 of the Code of Federal Regulations. The law requires that all labeling for dietary supplements be truthful and not misleading, and the FDA has authority to take action against any false statements made in labeling. The DSHEA imposed some additional requirements on dietary supplements, requiring companies to notify the FDA when claims are made about beneficial effects on the structure or function of the body (“structure/function claims”).

Are there mislabeled dietary supplements being sold? Certainly. There are unscrupulous people in every business. But it should be kept in mind, however, that people often get what they ask for. This is true for the athlete who buys a miracle supplement, advertised in the back of a muscle magazine, containing herbs from Uganda mixed with Argentinian bull-testicle extract and guaranteed to build muscle, burn fat, increase endurance, improve sexual performance, and increase SAT exam scores by 500 points—to provide the benefits of anabolic steroids without the risks associated with taking anabolic steroids! It’s true for the college basketball player who blithely accepts unidentified capsules from some other player on the team bus. It’s true for the consumer who sends in money for miraculous arthritis cures advertised on the radio.

This tendency to issue blanket condemnations of the dietary-supplement industry because a small number of supplements may be mislabeled is irresponsible. The statement that dietary supplements are unregulated is blatantly false. Instead, what the Olympic officials and The New York Times writers probably want to say is that dietary supplements are poorly regulated.

The regulations are in place, and they are adequate to address the problems encountered by the Olympic officials. Perhaps the FDA does not enforce the regulations to their satisfaction. That may be the case, but that does not mean the products are unregulated. It may mean the regulations are poorly enforced. Do athletes really have to “guess on supplements”? No, they do not. Do they have to use a little common sense and resist the temptation to ingest products claimed to provide the benefits of anabolic steroids without affecting test results? Yes, they do. Should they err on the side of caution? Yes, they should.

Does this mean dietary supplements are unregulated? Of course not. Where was The New York Times and the various Olympic officials when the FDA removed tryptophan supplements from the market? What about the numerous instances of contaminated Chinese herbal imports that were seized and removed from the market? What about comfrey and chaparral, which may contain an ingredient that might be harmful to the liver? Or red yeast rice, which has been virtually removed from the market because the FDA considers it a drug rather than a food supplement due to the claims being made. When the FDA feels it is necessary, it has no problem enforcing the laws that are on the books.