



# The little secret causing big problems for so-called “integrative medicine”

## 5 reasons why CAM therapies may not work for you

When my big medical textbook first came out in 1995, I appeared on *Good Morning America* with hosts Charlie Gibson and Joan Lunden. They seemed genuinely interested in the book and in complementary and alternative medicine (CAM). But Joan quickly put me on the spot on live national TV by asking why acupuncture hadn't worked for her shoulder pain. She believed it would work. Indeed, it had worked for many of her friends. And she felt that it “should” have worked for her.

Of course, Joan wasn't the first person to have this question. Or to set his or her hopes on an alternative therapy only to be disappointed when it didn't work.

I have written and spoken for years to the CAM community about the need to develop scientific ways to predict who will benefit from a given therapy—and who will not. I have presented this concern to the Office of Alternative Medicine at NIH, to the “Bravewell” Collaborative for Integrative Medicine, to many CAM conferences, and to the Consortium of Academic Health Centers for Integrative Medicine. But it seems no one wants to admit to CAM's “dirty” little secret...

The reality is that not all CAM

therapies work well, or work at all, for everyone.

Now, this certainly doesn't mean that CAM is ineffective. Just the opposite, actually. But whether or not a particular therapy will work well for **you** is another matter entirely.

The good news is, there's a simple way to find out which therapies are more likely to be successful for you. More on that in just a bit. But first, let's go over some of the reasons why CAM sometimes seems to have “spotty” results.

### Five reasons CAM therapies may not work in integrative medicine

Western biomedical science has been actively testing CAM for over two decades. And research has proven that many age-old “alternative” and “folk” remedies aren't just based on superstition. There is real science behind many of them.

However, even remedies that have been proven effective in scientific studies (and in medical practice) aren't effective for everyone. After years of research, I've pinpointed five reasons for this phenomenon.

#### Reason #1: Specializing goes against core CAM principles

Let's face it—a lot of the practice of alternative medicine in the U.S.

has been “ego-driven.” And for good reason. For decades, these courageous practitioners have been working against tremendous ridicule, hostility, and even punishments and sanctions by the mainstream academic-government-industrial medical complex. All in a heartfelt effort to make the treatments they believe so strongly in available to the public.

However, despite their claims of holistic healing, the fact is many of these practitioners only offer their

*Continued on page 2...*

### In this issue:

Finding your emotional boundary type ..... 4

Selenium lowers diabetes risk..... 5

#### Mineral Medicine

The dangerous deficiency no one is talking about And how you can cure it with just a few sprinkles of salt ..... 6

There goes the sun: How to keep yourself safe from vitamin D deficiency this winter (and all year long) ..... 7

**Marc S. Micozzi, M.D., Ph.D.**, is a worldwide leader in nutritional and complementary/alternative medicine. He has had a distinguished career as a researcher and physician executive at the National Institutes of Health and Walter Reed National Military Medical Center in Washington, DC, and the College of Physicians in Philadelphia PA. He has published over 30 medical and trade books, and founded and edited the first scientific journal, and the first textbook, on complementary/alternative and nutritional medicine, now going into a 5th edition (2012) and continuously in print since 1995.

Dr. Micozzi's *Insiders' Cures* is published monthly by OmniVista Health Media, L.L.C., 702 Cathedral St., Baltimore, MD 21201 for \$74 per year (\$6.16 an issue).

POSTMASTER: Send address changes to Logical Health Alternatives, 702 Cathedral St., Baltimore, MD 21201.

Author: Marc S. Micozzi, M.D., Ph.D.  
 Publisher: Katherine Wheeler  
 Executive Editor: Amanda Angelini

All material in this publication is provided for information only and may not be construed as medical advice or instruction. No action should be taken based solely on the contents of this publication; readers should consult appropriate health professionals on any matter relating to their health and well-being. The information provided in this publication is believed to be accurate and sound, based on the best judgment available to the authors, but readers who fail to consult with appropriate health authorities assume the risk of any injuries. The opinions expressed here do not necessarily reflect the views of the publisher. The publisher is not responsible for errors or omissions.

Copyright © 2012 OmniVista Health Media, L.L.C., 702 Cathedral St., Baltimore, MD 21201. Reproduction in whole or in part is prohibited without written permission of the publisher.

own particular “brand” of alternative medicine.

And since they’ve been forced by the mainstream to fight for and defend their preferred techniques, these practitioners often lose perspective on their own limitations. In fact, the “specialized” approach we’ve adopted in this country for both CAM and mainstream medicine usually results in practitioners not having knowledge about, nor giving due respect to, other proven therapies.

Twenty years ago I undertook a thorough search to find the leading national “experts” on different alternative therapies to contribute to my medical textbook, *Fundamentals of Complementary & Alternative Medicine* (the new, 5th edition of which I’m working on now).

I remember some of these experts being a little argumentative because they didn’t understand why I needed to include different therapies. They were completely convinced that their own particular specialty was always the best choice. For everyone. For every problem. Under every circumstance. Meanwhile, they didn’t actually know much—if anything—about the other CAM therapies available.

There’s absolutely nothing “complementary” about this sort of attitude. And it goes against the very core principles of CAM. (Needless to say, those particular “experts” did not make it into the second edition of my medical text book).

But sometimes, even the practitioners with the best intentions simply don’t have access to all the information they need to offer the best, most complete care. Which brings me to my next point...

### **Reason #2: “Trade secrets” can be hard to come by**

Most CAM traditions also

include “trade secrets” (like clinical “pearls” of wisdom in the western biomedicine) that are passed down orally within families or communities of healers. These are techniques that can only be learned over time, working closely with the healing “masters.”

Acupuncture is a good example. In California, a physician can become a licensed acupuncturist via a six-week acupuncture course. But someone with this limited amount of training would never have the wealth of knowledge of a sixth-generation Chinese acupuncturist. (And as any resident of Chinatown will tell you, they would never go to one of these “six-week wonders” in a white coat.)

So sometimes, when acupuncture doesn’t work, it’s because the acupuncture practice or practitioner simply doesn’t draw on all the ancient knowledge that Chinese medicine offers to deal with “difficult cases.” (In fact, there’s an entire Chinese classical medical treatise on this subject. Unfortunately, many Western acupuncturists don’t even know about it, let alone refer to it.)

Of course, this lack of knowledge is unintentional. But there have been some deliberate changes to various CAM therapies in this country that may have negatively impacted their effectiveness.

### **Reason #3: Watered-down, Westernized, “adapted” versions may be less potent**

If you’ve ever been to China or India, you undoubtedly noticed that, in many cases, the cuisine is vastly different from the Chinese and Indian food you find in this country. Indeed, many of the traditional dishes of these cultures have been adapted and “watered down” to suit the American palate.

The same thing has happened

with some of the techniques used in traditional healing practices. Without question, there has been some “editing” of practices that may be considered too harsh or uncomfortable in the west.

Ayurvedic (traditional Indian) medicine is a good example. In the 1960s, the Maharishi Mahesh Yogi intentionally made some modifications to some traditional Ayurvedic practices in order to make them more palatable and “friendly” to the west. While this helped introduce the benefits of Ayurveda to the west, the good Maharishi left us with a less than fully potent set of practices.

Similarly, some of the more strenuous and uncomfortable aspects of Yoga have been omitted in Western practice. And while it makes Yoga more accessible and attractive to the mass markets as an exercise, it clearly limits its potency as a therapy.

#### **Reason #4: Limited access = limited healing**

Another way we limit the potency

### **Why too many research studies cast doubt on CAM**

Speaking of getting “watered down,” this phenomenon occurs frequently when mainstream scientists set out to research age-old healing traditions with modern medical research studies.

These studies “shoe-horn” healing modalities that are meant to be tailored to each individual. Squeezing them into completely artificial circumstances which don’t accurately evaluate the potential of these sorts of therapies.

The fact is, most modern research studies are designed to test drugs, not healing.

of CAM in the west is by offering it only on an outpatient basis.

One or two short treatments per week can’t always achieve the benefits of the sort of residential care CAM programs available in other cultures (equivalent to “hospitalization” in the western sense). These natural “cure” programs aren’t limited to a single CAM technique. Instead, they address every part of a patient’s well-being. Sleep, exercise, diet, and other aspects of health—in addition to specific healing therapies.

So, while we acknowledge the benefits of CAM in helping to “manage” many chronic conditions, we are not able to observe the full curative powers of many of these therapeutic programs.

But there’s one more factor to consider in explaining the apparent “ineffectiveness” of some CAM therapies. And this one may very well be the most important of all.

#### **Reason #5: Treatment effectiveness depends on your unique personality type**

CAM simply does not work in the “one size fits all” mold of pharmaceutical-based Western medicine. CAM emphasizes that each person is an individual, and should be treated individually.

So, how do you find out which therapies will work for you? Well, it all starts with taking a closer look at your unique personality type.

#### **Put your personality to the test**

You’ve probably heard of the Myers Briggs scale. Many corporations use this personality test (using the science of “psychometrics”) to help determine whether someone is best suited for a particular position in the workplace.

After years of reviewing the research, I have found that a variation

of this sort of personality testing can also help predict who will respond best to what types of therapies.

The first step is to pinpoint your emotional boundary type.

Working with a psychometrics researcher, Michael Jawer, I’ve published two books about this, *The Spiritual Anatomy of Emotion and Your Emotional Type: Key to the Therapies that Will Work for You*. You can find both of these books at your local bookstore or on my website, [www.DrMicozzi.com](http://www.DrMicozzi.com).

Together, Michael and I developed what we call a “personality boundary survey.” But rather than classifying your personality type, taking this survey can help you determine your emotional boundary type. Which, in turn, can help you determine your individual style of healing.

This survey is based on the original Boundary Questionnaire (BQ) developed by Ernest Hartmann, M.D., a researcher at Tufts University, starting in the 1980s. The full version consists of 146 questions grouped into a dozen categories.

The box on page X offers our own shorter, 18-question version of the full survey. These questions will give you a good sense of your overall boundary or emotional type. (You can find the full version in my book *Your Emotional Type*, co-authored by Michael Jawer, which is available at [www.DrMicozzi.com](http://www.DrMicozzi.com) or through your local bookstore.)

It’s important to note that you may be “thin” boundary in some respects, and “thick” in others. Moreover, where you fall on the boundary spectrum is not fixed for life. You may develop thinner or thicker boundaries as you get older as a result of your unique personal experiences. You can also become thicker or

*Continued on page 4...*

## Finding your emotional boundary type

Please note: There are no “right” or “wrong” responses. Consider these statements merely as prompts intended to get a feeling of where you are at this time in your life. Please rate each of the statements from 0 to 4 (0 indicates “not at all true of me”; 4 indicates “very true of me”). Try to respond to all of the statements as quickly as you can.

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. My feelings blend into one another.  | 1 | 2 | 3 | 4 | 5 |
| 2. I am very close to my childhood feelings.  | 1 | 2 | 3 | 4 | 5 |
| 3. I am easily hurt.  | 1 | 2 | 3 | 4 | 5 |
| 4. I spend a lot of time daydreaming, fantasizing or in reverie.  | 1 | 2 | 3 | 4 | 5 |
| 5. I like stories that have a definite beginning, middle and end.   | 1 | 2 | 3 | 4 | 5 |
| 6. A good organization is one in which all the lines of responsibility are precise and clearly established.   | 1 | 2 | 3 | 4 | 5 |
| 7. There is a place for everything, and everything should be in its place.  | 1 | 2 | 3 | 4 | 5 |
| 8. Sometimes it's scary when one gets too involved with another person.   | 1 | 2 | 3 | 4 | 5 |
| 9. A good parent has to be a bit of a child, too.   | 1 | 2 | 3 | 4 | 5 |
| 10. I can easily imagine myself as an animal or what it might be like to be an animal.  | 1 | 2 | 3 | 4 | 5 |
| 11. When something happens to a friend of mine or to a lover, it is almost as if it happened to me.   | 1 | 2 | 3 | 4 | 5 |
| 12. When I work on a project, I don't like to tie myself down to a definite outline. I rather like to let my mind wander.                                 | 1 | 2 | 3 | 4 | 5 |
| 13. In my dreams, people sometimes merge into each other or become other people.  | 1 | 2 | 3 | 4 | 5 |
| 14. I believe I am influenced by forces that no one can understand.   | 1 | 2 | 3 | 4 | 5 |
| 15. There are no sharp dividing lines between normal people, people with problems and people who are considered psychotic or crazy.                       | 1 | 2 | 3 | 4 | 5 |
| 16. I am a down-to-earth, no-nonsense kind of person.   | 1 | 2 | 3 | 4 | 5 |
| 17. I think I would enjoy being some kind of creative artist.   | 1 | 2 | 3 | 4 | 5 |
| 18. I have had the experience of someone calling me or speaking my name and not being sure whether it was really happening or whether I was imagining it. | 1 | 2 | 3 | 4 | 5 |

### Obtaining your score

To obtain your score, simply add up the scores (0-4) for all questions—except for questions 5, 6, 7, and 16 which should be scored backward (i.e., for these questions an answer of “0” is scored as 4, “1” is scored as 3, “2” is scored as 2, “3” is scored as 1, and “4” is scored as 0).

Scores below 30 are considered definitely “thick” and scores above 42 are considered definitely “thin.” See where you are on the spectrum on page 5.



**Thin.....MIDPOINT.....THICK**  
**Hypnosis      Acupuncture      Biofeedback      Guided Imagery      Stress Reduction      Meditation & Yoga**

thinner depending on the medications you're taking or how tired you happen to be. Still, as a general personality trait, your boundary type won't vary too much from day to day, or year to year.

**The right treatments for your individual emotional type**

In true complementary fashion, the real secret to getting effective CAM treatment for any ailment is to look at all the tendencies together. What CAM therapies work best for that particular condition? Then which of those therapies work best for you?

Unfortunately I just don't have the space to get into all of the details here. (Much more is available in my book with co-author Michael

Jawer Your Emotional Type which is available at [www.DrMicozzi.com](http://www.DrMicozzi.com) or your local bookstore.) But here is a quick glance at seven top therapies and where they fall along the boundary spectrum (above):


This picture shows the treatments that are most specific to THIN boundary conditions on the left, with those most specific to THICK boundary conditions on the right.

In terms of general treatments for your boundary type, the most strongly specific treatments for thick personality boundaries (in this order) are: Guided Imagery, Relaxation & Stress Management, Meditation & Yoga.

For Thin boundary types, hypnosis is the therapy of choice (if it's effective for your particular condition), followed by acupuncture.

Biofeedback is equally specific for thick or thin boundaries.

These seven therapies are well-established, safe, and effective treatments that are already widely available. Of course, there are many others to choose from, and you can find more detailed information in my book.

In the meantime, before you consider using any complementary or alternative medicine therapy, find out your emotional boundary type first and tell your health practitioner. 

**THICK BOUNDARY.....MIDDLE.....THIN BOUNDARY**  
**0                      9                      18                      27                      36                      45                      54                      63                      72**

**NEWS BRIEF**

**Selenium lowers diabetes risk**

Years ago, I spent some time in the People's Republic of China, researching the use of selenium to prevent cancer. I'll tell you more about what we found in a future issue of *Insiders' Cures*. But today, there's some different selenium news I want to share with you. Researchers recently discovered that this mineral can significantly reduce the risk of one of today's biggest epidemics—diabetes.

One thing I especially liked about this study was that it didn't rely on dietary questionnaires to determine the subjects' selenium intake. If you have been reading my *Daily Dispatch* e-letter, you know these sorts of questionnaires, which require people to recall what they eat, are notoriously faulty.

But this study measured selenium content in the subjects' toenails. Which is a much more accurate way to determine long-term exposure to this mineral. And the researchers found that those with the highest concentrations of selenium have a 25 percent lower risk of diabetes.

On the flip side, possible selenium toxicity is a rare but real concern. Excess levels of selenium in the blood can lead to a condition called selenosis. Symptoms include stomach problems, hair loss, and nerve damage. To avoid side effects and potential toxicity, it's best to keep your selenium intake at or below 400 mcg per day.

For most people, the best way to obtain optimal levels of selenium is, once again, to choose healthy foods. Brazil nuts are a rich dietary source of selenium. Tuna, cod, turkey, chicken, and eggs are also good sources.

## Mineral Medicine

# The dangerous deficiency no one is talking about And how you can cure it with just a few sprinkles of salt

Last month, I mentioned an increasing trend of iodine deficiency in this country. This problem certainly isn't as publicized as vitamin D deficiency (as we discussed in the previous article), but it can be just as dangerous.

Iodine is a critical component of hormones necessary for normal thyroid function and metabolism. But iodine also has other important functions in virtually every cell in the body—especially glands such as the adrenals and the pancreas.

The most well-known effect of iodine deficiency is goiter. When you don't get enough iodine, the thyroid can't produce enough thyroid hormone. When thyroid hormone is deficient, the pituitary gland in the brain sends more thyroid stimulating hormone (TSH). TSH makes the thyroid gland grow in a vain attempt to produce more thyroid hormone. And, eventually, you develop the enlarged thyroid of goiter.

Goiter has thankfully become rare in this country. But that doesn't mean iodine deficiency has gone away.

Just the opposite, in fact.

Thanks to inadequate government dietary recommendations, history may be repeating itself. The risk of iodine deficiency—and all of its consequences—is back with a vengeance. And, unfortunately, it's even more widespread than it was years ago.

### The No. 1 cause of preventable brain damage

Goiter is only one of the problems caused by insufficient iodine intake.

Deficiency has also been linked with fatigue, reproductive disorders in women, and prostate, breast, ovarian, and uterine cancers.

Prolonged iodine deficiency also has severe effects on the normal development of the brain and nervous system. In fact, according to the Centers for Disease Control, iodine deficiency is “the number one cause of preventable brain damage.”

The key word here is “preventable.” Indeed, iodine deficiency is easily preventable...if you don't follow the government's dietary recommendations.

### Iodine deficiency makes a raging comeback

Sources of iodine have traditionally come from the ocean, where sea salt is naturally “iodized.” So historically, only people living inland and at high altitudes were especially susceptible to iodine deficiency. In the US, the Great Lakes region and the Appalachian mountains were at highest risk. (In fact, these areas were once known as the “Goiter Belt.”)

To combat this problem, salt manufacturers began adding iodine to common table salt.

But once again, so-called government health “experts” have sabotaged the health of millions of people by scaring them away from salt. Their misguided efforts to restrict salt intake are based on the premise that salt plays a role in hypertension. Not only is this notion completely unproven (as I told you in my *Daily Dispatch* “The Great Salt Scam”), it is probably

contributing to the dangerous resurgence of iodine deficiency, particularly in young women.

This sad situation presents a hazard not only to this young generation but to the next generation as well. Which now risks being born to an epidemic of iodine-deficient (and otherwise malnourished) young women.


### The easiest ways to get the iodine you need

In this instance, the government RDA is actually correct. Unfortunately, their other recommendations may be keeping people from reaching it.

The U.S. Institute of Medicine's (IOM's) recommended dietary allowance (RDA) of iodine is as follows:

- Adults and adolescents: 150 mcg/day
- Pregnant women: 220 mcg/day
- Lactating women: 290 mcg/day
- Children aged 1-11 years: 90-120 mcg/day
- Infants: 110-130 mcg/day

The World Health Organization's recommendations are similar, although they recommend 200 mcg/day for pregnant and lactating women and 50-90 mcg/day for infants younger than 1 year.

The good news is, protecting yourself from iodine deficiency is very easy to do. This is one instance where you don't even need to rely on a supplement. You can generally get all the iodine you need simply from eating salt-water fish and seafood (which is also very healthy in many other respects). And of course, iodized salt. 

# There goes the sun: How to keep yourself safe from vitamin D deficiency this winter (and all year long)

Last month, I explained how the recommended doses of most nutrients are grossly inadequate. At least when it comes to providing optimum levels that can help protect you from today's chronic illnesses. And the example of vitamin D is a dramatic illustration of this shortcoming.

Currently, the Institute of Medicine (IOM) recommends 600 international units (IU) of vitamin D daily for adults up to age 70. After age 71, the IOM recommends increasing intake to 800 IU. And a 2011 report by the IOM still holds that most US individuals get "enough" of these 2 nutrients through diet and sun exposure.<sup>1</sup>

Yet, other current estimates indicate that at least 30 percent and as much as 80 percent of the U.S. population is vitamin D deficient.

And inadequate levels of vitamin D can have some dire consequences. Chronic, debilitating—even deadly—conditions, such as osteoporosis, multiple sclerosis, diabetes, high blood pressure, and cancer (just to name a few).

The good news is there are some easy, effective steps you can take today to make sure your vitamin D levels are healthy. I'll explain more in just a moment. But first, let's review some of the reasons vitamin D deficiency is reaching epidemic proportions. And why it should be one of your top priorities—particularly this time of year.

## Less sunlight, less vitamin D

To a great extent, your vitamin D level depends on sunlight. Your skin synthesizes vitamin D when it's exposed to the sun's ultraviolet B rays.

However, there are a few problems with this process.

First, if you live in northern latitudes, your skin doesn't make any vitamin D from November through March—no matter how much sun exposure you get. And by "north" I don't just mean New England... Any latitude above Atlanta is considered "north" for these purposes.

In these areas, the angle of the sun in the sky is too low during the fall and winter to allow ultraviolet B light to penetrate the atmosphere. But even in the late spring, summer, and early fall, UVB from the sun only penetrates the atmosphere and reaches the earth's surface between 10 a.m. and 3 p.m. So that five-hour window is your only opportunity to "naturally" increase your vitamin D levels.

Knowing this, you might expect that vitamin D deficiency would be a problem in northern latitudes. And, indeed it is.

In Bangor, Maine, researchers found nearly 50 percent of girls ages 9 to 11 years were deficient at the end of winter. And nearly 20 percent remained deficient at the end of summer. At Boston Children's Hospital, over 50 percent of adolescent girls and black and Hispanic boys were vitamin D deficient year round. In another study in Boston, 34 percent of whites, 40 percent of Hispanics and 84 percent of black adults over age 50 were found to be deficient.

However, vitamin D deficiency is also a national problem. A study published a few years ago in the *Archives of Internal Medicine* found

that at least 75 percent of adults nationwide are vitamin D deficient.<sup>2</sup> And the problem has only gotten worse over the past 40 years.

You see, these days, thanks to a concerted campaign by dermatologists, most people avoid what little vitamin-D-producing sun exposure they can get.

## The great SPF scam

Years ago, scientists made an association between sun exposure and increased skin cancer risk. Skin cancer is very detectable (since

*Continued on page 8...*

## Too much of a good thing?

Of course, the big concern with higher doses is the risk of vitamin D toxicity. This always strikes me as more than a little ironic. The medical establishment doles out dangerous and expensive drugs like candy. Yet they're constantly—and vehemently—concerned about the potential "risks" of physiologic levels of natural substances such as vitamins (and even sunlight).

The fact is, it's practically impossible to reach "toxic" levels of vitamin D. Especially from too much sunlight. (Sunlight actually destroys excess vitamin D that is made in the body.)

The only time vitamin D can cause problems is in cases of chronic disorders such as histoplasmosis, sarcoidosis, or tuberculosis. In these instances, blood levels of vitamin D above 30 ng/ml may cause dangerously high levels of calcium in the blood and urine. But there are really the only cases in which supplementation should be avoided.



naturally it occurs on the surface of the skin). But rather than taking a sensible approach—just focusing on early detection and treatment of skin cancer—dermatologists began urging people to block out the sun entirely. And today there's an entire industry built around products that increase your "sun protection factor" (SPF).

A sunscreen with SPF of 8 absorbs 92.5 percent of the sun's UVB rays. Doubling the SPF to 16 absorbs 99 percent. So while these products might protect you from sunburn, they also essentially shut down your body's vitamin D production. (I addressed this topic in more detail in the Daily Dispatch "Fresh off the Banana Boat.")

With all of this in mind, some of the sunniest spots on earth "down under" are adjusting their attitudes and recommendations regarding sun exposure. Both the Australian College of Dermatologists and the Cancer Council of Australia, as well as the New Zealand Bone and Mineral Society, have concluded that we need more of a balance between avoiding skin cancer and achieving enough ultraviolet light to maintain adequate vitamin D levels and help avoid other cancers.

As in all things involving nutrition, achieving a balance is really the right goal and guide for optimal health. Going to extremes against sun exposure has left far too many people in dire straits when it comes to getting the vitamin D they need to stay healthy.

The fact is, in the summer months, most people should go outside in the sun between 10 a.m. and 3 p.m. in order to get the many benefits of sunlight. It's best to expose the entire body (wearing just a bathing suit) for 15-20 minutes at least three times per week. (A bit more for African-Americans, since on average, the natural skin pigmentation is roughly equivalent to an SPF of 8 to 15.)

And it should go without saying

that this sun exposure should be done *without sunscreen*. (Although, since you don't absorb much UVB above the neck anyway, it is a good idea to protect your face and head with a hat and sunglasses.)

Of course, these recommendations are for the summer months. And, right now, fall is just beginning. With a long, dark winter coming our way, what can you do to protect your precious vitamin D stores over the cold months ahead?

Well, one option is to get UVB exposure from a tanning bed. (Three times per week.) But this isn't always practical.

Unfortunately, neither is getting your vitamin D from food.

### **Even "fortified" foods fall short**

There is essentially little or no active vitamin D available from regular dietary sources. The most common sources are fortified foods like milk and orange juice. But one glass of milk or fortified orange juice only contains about 100 IU of vitamin D. So you would need to drink quite a bit of it to reach even the RDA amount (which, as we've already established, isn't optimal). Again, not very practical.

Salmon does contain available vitamin D. But it must be wild caught salmon. These fish feed on phytoplankton and zooplankton, which make their own vitamin D. Farmed salmon, on the other hand, are fed food pellets with little nutritional value. As a consequence, they have only 10 percent of the vitamin D of their wild counterparts.

But salmon isn't an adequate source of vitamin D by itself. A 9 oz. serving contains just under 1,000 IU. A good start, but I don't know how many people that would be willing or able to eat that much on a daily basis.

So the best solution for maintaining adequate vitamin D levels is to take a quality nutritional supplement.


Which brings us back full circle, to the question the so-called government health "experts" can't seem to answer correctly...

### **How much vitamin D do you need?**

If all you want to do is prevent outright deficiency, by all means, stick with the 400-600 IU RDA of vitamin D. Just don't expect it to do much more than protect you from rickets. But if you want to make sure you're getting all the protective benefits this nutrient has to offer at optimal levels (prevention of MS, osteoporosis, cancer, etc.), you'll need much more.

Currently, experts here in Boston, where vitamin D deficiency is a serious problem, recommend 1,000 IU daily for both children and adults. Still, some experts view even this dose as too low. In fact, many physicians are beginning to recommend much higher supplement doses. Often 2,000 IU per day. And given that people metabolize nutrients differently, it's not unreasonable to recommend as much as 5,000 IU per day for some people (based upon medical evaluation by a physician knowledgeable of the problem).

There's also a pharmaceutical-grade preparation of vitamin D available. Of course, you will need a doctor's assistance not only to get it, but to administer it as well. One caveat about this particular preparation: It comes in 50,000 IU doses. So the therapeutic regimen isn't the same as a daily vitamin supplement. In this case, you would take 50,000 IU once per week for 8 weeks to treat deficiency. After that, the dose is 50,000 IU every two weeks to maintain vitamin D levels.

Whatever approach you choose, it's important to work with a physician knowledgeable about nutrition. One who understands your needs as an individual and can help you tailor a supplement program that will help you reach optimal vitamin D levels safely and effectively. 

*Citations available online at [www.DrMicozzi.com](http://www.DrMicozzi.com)*