

Orthomolecular Medicine on the Internet

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Hundreds of millions of people daily search the Internet for health information. What, exactly, are they getting? A 0.12 second Google search of over 4 billion webpages with the keyword "health" gets you over 200,000,000 results. The United States government holds the number one and number two spots, www.healthfinder.gov and www.nih.gov. Both are US Department of Health and Human Services websites.

At Healthfinder, self-described as "your guide to reliable health information," it says: "Our Web site is built on a selection process that begins by evaluating the reliability of organizations as providers of health information. Only after we carefully review an organization do we choose information from its Web site for our health library." There follows a directory of what they consider "reliable." Try a search for "orthomolecular." You will find nothing at all. But with a site search for "supplement," Healthfinder's number two listed link will then take you directly to the Food and Drug Administration's Adverse Event Reporting webpage where you get the following bold-faced, large-print offer: "Report an Illness or Injury Associated with a Dietary Supplement" with this accompanying text:

"FDA can be contacted to report general complaints or concerns about food products, including dietary supplements. You may telephone or write to FDA. If you think you have suffered a serious harmful effect or illness from a dietary supplement, your health care provider can report this by calling FDA's MedWatch hotline at 1-800-FDA-1088. . . Consumers may also report an adverse event or illness they believe to be related to the use of a dietary supplement by calling FDA . . . FDA would like to know when a product causes a problem even if you are unsure the product caused

the problem or even if you do not visit a doctor or clinic."¹

With supplements, perhaps anecdotal evidence is of value after all, provided the anecdotal reports are negative.

Censorship by Selection

What does "reliable" or "carefully selected" or "the best" really mean? On the medical Internet, it seems to mean selection that purposefully excludes orthomolecular medicine. The power of selection might seem similar to censorship. Is their a medical blacklist, and if so, is orthomolecular medicine is on it? Consider this. One major referral site (number 5 out of 200,000,000 health websites retrieved by Google) is www.healthweb.org This is a more or less non-governmental resource. "HealthWeb is a collaborative project of the health sciences libraries of . . . over twenty actively participating member libraries. This project is supported by the National Library of Medicine." That means taxpayer money pays for it.

"The HealthWeb project was conceived in 1994, with the following expressed goals (one of which is) to develop an interface which will provide organized access to evaluated non-commercial, health-related, Internet-accessible resources. . . The interface will integrate educational information so the user has a one-stop entry point to learn skills and use material relevant to their discipline."²

I call your attention to the words "non-commercial" and "one-stop."

At HealthWeb, a search for "orthomolecular" brings up nothing. So I tried a search for "vitamin." The response? May I quote: "Sorry, your search retrieved no results." So I tried it again, several times, just to be sure. Zero.

Without a single response for "vitamin," it is difficult to accept this website's prominently displayed assertion that it is "Linking you to the best in health information."

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Surely, somewhere on this planet's electronically searchable Internet, information about vitamins is rightly to be considered to be a part of health. Or so one would think.

So I tried one of HealthWeb's displayed "nutrition" links and here is the "non-commercial" website it sent me to www.ific.org. Would you like to know a bit more about who that is?

"About the International Food Information Council (IFIC) Foundation (April 25, 2004)" IFIC's mission is to communicate science-based information on food safety and nutrition to health and nutrition professionals, educators, journalists, government officials and others providing information to consumers. IFIC is supported primarily by the broad-based food, beverage and agricultural industries . . . to help translate research into understandable and useful information for opinion leaders and ultimately, consumers."³

This, in my opinion, indicates that the Washington, DC based IFIC is essentially a lobbyist organization. It claims "partnerships" with such groups as the Food Marketing Institute and the Institute of Food Technologists. A glance at their page for journalists confirms this.⁴

"The best," "reliable" and "carefully selected" are all indications of editing. When the entire discipline of orthomolecular medicine is excluded, it is censorship by selection.

Now back to Google, where there is no evidence of editorial restriction. A Google search for "nutrition" will bring 21,000,000 responses in 0.14 seconds. "Vitamin" will get a Google response of 9,200,000 in 0.13 seconds. A search for "orthomolecular" will bring up 45,000, but bear in mind that many of the sites found are anti-orthomolecular.

Pharmaceutical medicine's presence on the internet is very strong, although less dominant than its presence on TV and in the print media. At the largest and most frequented "health" websites, information about orthomolecular medicine is entirely absent. Therefore, when the layman searches for nutritional therapy, they often get false or

misleading information from pharmaphilic (drug-loving) internet sources. Of course, the conventional medical sites say this very same thing about alternative sites. The public is understandably confused, and seeks answers with every internet search. Based on my website's 25,000 hits a day, and the attendant email correspondence I receive, I think the public is earnestly looking for clarification of contradictory nutritional research.

People have heard many a mega-nutrient factoid, myth or outright falsehood from their friends, their doctors, or the media. It is truly odd that the public has been warned off the very thing that can help the most: nutritional supplementation. As Ward Cleaver once said to his son, Beaver: "A lot of people go through life trying to prove that the things that are good for them are wrong."

Let's turn to the official website of the American Dietetic Association, www.eatright.org. Here is what the "world's largest organization of food and nutrition professionals"⁵ currently states about supplements:

"Dietary supplements cannot make up for poor food choices. They have not been proven to boost energy or prevent or cure diseases."⁶ Such a statement is remarkable indeed. Cure and especially prevention of disease by vitamins is thoroughly established and repeatedly demonstrated by decades of well-controlled studies, literally numbering in the thousands. At its website, the American Dietetic Association also states, "If you need a multivitamin/mineral supplement, be sure to check the "Supplement Facts" panel and select a product that provides no more than 100 percent of the Daily Value for vitamins and minerals."⁷

So the American Dietetic Association's published stance remains that, with precious few exceptions, 100% of the government standard is all that people need to take in a supplement, if they even need a supplement at all, which they probably don't. This cannot help but confuse any web surfer who has ever heard the name "Linus Pauling."

Accentuating the Negative

Negative reporting sells newspapers and pulls in the web traffic. The old editors' adage is "If it bleeds, it leads." Pharmaceutical companies lobby government and feed the media to get the "wonder drug" positive spin. They have been remarkably successful in so doing, in spite of the 106,000 patients killed annually by their products when properly prescribed and taken as directed.⁸

Here's one way for anyone to quickly see how safe vitamin therapy is. Invite an Internet or Medline search for "vitamin death." What will be found is information on how vitamins prevent death. The *Merck Manual* states there have been two fatalities from vitamin A overdose.⁹ This grand total of two spans many decades of use. There has been a total of one single death from vitamin D overdose. That death was due to side effects of medication.¹⁰ There have been zero deaths from any other vitamin.

Non-fatal "vitamin danger" allegations are almost entirely without scientific foundation. For example, "Harmful effects have been mistakenly attributed to vitamin C, including hypoglycemia, rebound scurvy, infertility, mutagenesis, and destruction of vitamin B₁₂. Health professionals should recognize that vitamin C does not produce these effects."¹¹

Since vitamin myths persist, the facts of orthomolecular medicine must be presented in straightforward, memorable terms, such as:

"The number one side effect of vitamins is failure to take enough of them."

"Negative vitamin studies use low doses. Positive vitamin studies use high doses."

"There is not even one death per year from vitamins."¹²

I think that all orthomolecular medicine websites would do well to have a section entitled, "If you have been told that vitamins are harmful, please read this." However, it is best to avoid being bogged down in refutation, for as Abram Hoffer, M.D., says, "All attacks on supplement

safety are really attacks on supplement efficacy." Instead, remembering that patients' needs come first, accentuate the positive by repeatedly citing successful orthomolecular studies.

Two More Needs

Because people's primary concerns are with their own illness, or that of a family member, when they search on the internet, they also frequently have two additional purposes.

First, people seek dosage information. Outside of the patient-doctor relationship, the only prudent practitioner response to such Internet inquiries consists of suggested references to the scientific literature, or to well-written, interpretive books and articles. There is much to be said for free public access to orthomolecular medical papers. Although many are now posted on the Internet, more need to be made available electronically.

Second, people also commonly seek a practitioner. It is not easy for the public to locate an orthomolecular physician. One of my most common emails is a request for "a natural health practitioner near where I live." It is practical and expedient for every orthomolecular practitioner to have his or her own website. Individual practitioner websites make location searches easier. Practitioner websites are easy, economical, effective, educational, and essential.

Every Practitioner a Publisher

Rather than merely introduce a private practice, a practitioner website can post informative, practical articles for free reading. When asked, many authors and publishers will allow your website use of their work with attribution. Sources not granting permission may still be linked to. This means you refer your readers to existing articles at the source's own website by inserting a hyperlink. When you write and post your own work, other websites can and will link to you. This increases website traffic, search engine placement and

readership. Journals reach many thousands; the Internet reaches hundreds of millions.

Before committing to writing an original article, it makes sense to see what is already out there, and link to it. If you find yourself saying the same thing to everybody, there is your first article. Then, try to limit your idea to one page. As Strunk puts it in *The Elements of Style*: “Omit needless words.” There are few speeches, movies or monographs that would not benefit from being shorter. President Calvin Coolidge is remembered not for his presidency but for his brevity. Then, if your article requires another page or two, go ahead.

If you do not yet have a literary style, good. Just keep it short and to the point. That alone is good style. When Will Rogers began his career as a columnist, his terrible spelling and grammar became his style. He was also brief and to the point. An American president delivered his Gettysburg Address in three minutes; the speaker before him spoke for two hours. Which speaker's name do you remember?

The general reader needs simplification and clarification. Therefore, never use a big twenty-dollar word when a short word will do. There is a hidden benefit here. The shorter your word, and the shorter your sentences, the less education the reader has to have to understand you.¹³ One in five Americans is functionally illiterate.¹⁴

Effective writing can be aptly summarized by the “KISS” rule: Keep it Simple and Short. Write about something you know well. When in doubt, use case histories. Make the idea stick. Let your personality and humor come through. Use short, succinct sentences. Select nontechnical, simple words. Remember: everybody wants brevity; everybody needs references; everybody loves anecdotes. Use the problem-based approach; in other words, What's the matter? Put yourself in the reader's place. The best formula may be as simple as Case histories + References = Understanding.

Don't be afraid of simplification. Any-

one can take a plain idea and make it complicated; just look at government. It takes real talent to take a complex idea and make it simple. It is a gift for the writer, and a relief to the reader. Always go for the bottom line. When in doubt, summarize. The trick is to “sum it up” without “dumbing it down.”

Articles Made Better

Here's the crux of what I learned as an educator: Get their attention. Tell them what you are going to say. Say it with examples. Finally, tell them what you said. Behaviorist B.F. Skinner said that all learning is the mastery of a very large number of very small steps. SUNY biology Professor John I. Mosher, whom I studied with for over two decades, reminded me a long time ago to put myself in the student's seat and deliver the kind of presentation that I myself would want to listen to. When you write your articles, put yourself in the reader's position and keep asking yourself what is most important. Then put that down on paper.

Cite your sources. Literature citations substantially contribute to an article's academic credibility. Professor Mosher chose to describe this in terms of baboons. Sometimes a potential rival challenges the leadership of a baboon troop's dominant male. The issue is generally decided by a form of majority vote. If most of the baboons stand behind the challenger, he takes over. If most stand behind the current leader, he remains in charge. Dr. Mosher said it is about the same with bibliographical references: try to get as many as you can to back you up.

Proof read and edit your work. Now that corrections are so easy on a computer, they are all the more essential. Re-read your work for style and flow, not just for typos. Have your family read your articles. Go out of your way to have your kids read your articles. If they get the point, you made your point. What the public needs is nontechnical translation and interpretation. To demystify medicine is to gain a grateful patient. A problem-centered focus on the

illness, not the theory, will immediately engage and help motivate the reader. The key to health communication may be problem-based articles.

Websites Made Better

Most health websites have a product presence. This is surely one excuse used by orthodox medicine to dismiss the rest of a website's content. The first thing critics seek to do is to discredit a practitioner or writer via his or her product affiliation. A non-commercial stance builds both web traffic and credibility. The public and the critical media can spot a vested interest a mile away. Avoid financial conflicts of interest. Omit product names. Use a clear disclaimer: "I have no financial connection to the supplement or health products industry." Or, if you do, say so and say why. An educational, non-commercial stance is the most respectable. Again, always put yourself in the reader's place: what kind of website would you yourself trust? Then, strive to present exactly such a website.

Some specific recommendations for orthomolecular websites include:

Model your website on other practitioners' sites. An Internet search (with Google, Lycos, Yahoo, or other search engine) will provide many excellent examples, with more being added all the time. Include links to important articles at other websites. This is a good way to begin if you have not done a website before. Post papers you have authored, or chapters from a book you have written. Periodically send out a free email newsletter that is also free of any advertising. Provide a recommended reading list, with annotations as to why each book is especially worthwhile.

I think this approach is sound. My orthomolecular website, DoctorYourself.com, was begun in 1999 and averaged about 30 hits a day. In 2004, the site receives 25,000 hits a day.

What Remains to be Done

An increased orthomolecular medicine presence on the Internet, and in media reporting, requires action.

"Feeding" the press is practiced by all professions. Put the media on your email newsletter mailing list. As practitioners need technical journals, so the press and the public need non-technical orthomolecular information.

I think an Orthomolecular News Service, like AP, Reuters or UPI, would be a good idea. It could furnish practitioners, the public and the media with headlines, abstracts, reviews, commentary, and journal-quality articles, all keyed directly to the layman. This is already being done by the pharmaceutical-surgical branches of healthcare. It is time for orthomolecular medicine to make itself heard.

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