

Bias in Favor of Nutritional Supplements

G. Douglas Andersen, DC, DACBSP, CCN

Last summer, I struck up a conversation with a registered dietitian (RD) at a sports nutrition conference, following an interesting chain of events. Along with two others, a coach and an exercise physiologist, I had approached one of the speakers after his talk and began to ask him questions. He harshly blew off my first question, leaving me stunned. The others then asked their questions. I asked a second question, this time citing his research and two other recent papers; the speaker's response was the same.

At this point, everyone realized there was a problem. The next question was not directed to the speaker, but to me instead. As I began my answer, the speaker turned and rapidly exited the room. As soon as he was gone, the coach asked, "What was wrong with him? You know your stuff." Before I could answer, the RD said, "It was his name tag." "What?" said the psychologist. "After I asked my question," I said. "He glanced at my name tag and had an immediate attitude change." "I don't understand," said the coach. The RD answered, "He is clearly biased against chiropractors."

It was one of the last talks of the day, and as I walked to the car, I continued to converse with the dietitian. She said, "Speaking of bias, I feel that my education was biased against the use of supplements. Most of the people attending this conference seem so knowledgeable about supplements, especially positive studies that I was not aware of. I feel shortchanged." My response was, "Well, if it makes you feel any better, my training had a pro-supplement bias, and since I have been in practice, I get more exposure from representatives, companies and literature that has a positive spin." She asked, "So, what do you do about it?" "The most important thing is not whether your education was biased in either a positive or negative way," I said, "but that you are aware of it. You should also be aware of any bias your information sources may have. In my case, I subscribe to both conservative and progressive publications."

If you feel you may have a bias in favor of nutritional supplements, it will be easier for you to embrace nutritional supplements in the following categories:

1. a new supplement;
2. a new supplement formula;
3. a new supplement form; and
4. a new supplement use.

The following examples all took place this year:

A New Supplement

New supplements are often touted as cure-alls. Rarely will you encounter this type of product through a professional company catering to alternative health practitioners. In most cases, you will be exposed to these products through a multilevel approach: a TV, radio, or magazine advertising blitzkrieg. Recently, a product came across my desk that was given to me by a colleague, who wanted me to check it out and possibly endorse it. He said his patients really liked it. The literature provided by the company stated that this fruit extract was (according to the MD who endorsed it)

now his first-line therapy for gastritis, hiatal hernia, arthritis, fibromyalgia, low energy, mild depression, mild to moderate anxiety, mild to moderate asthma, irritable bowel disease, recurrent urinary tract infections, diverticulitis, sleep disorders, allergic rhinitis, neurodermatitis, eczema, seborrhea, otitis externa, and nonarthritic muscle or joint pain.

In the company handouts, it stated that the benefits of the juice of this tropical fruit were "validated through clinical studies." They also provided a research Web site that would supposedly describe these studies. I got on the site, typed in the name of the fruit extract, and hit "search." The result was 17 papers with very impressive titles. When I began to read them, I realized that in every case, they were in vitro laboratory studies, most of which tended to be of the cell culture variety. Using the same Web site, I typed in the fruit extract again, but this time, I also typed in each condition the MD spokesperson claimed the extract could be used for. In every case, when a search was done, the result was the same: No items found. I told my friend that if sales take off, the company better have a legal department.

A New Supplement Formula

Early in the year, a representative from a well-known company came to my office and asked me if I was interested in a new herbal-based product that was a better anti-inflammatory than any others on the market, due to unique combination of ingredients. "Yes," I said. "I am interested. Is there research behind it?" Her answer was, "Yes." I then said, "I will be happy to look at your literature, but I will disregard any research done on cell cultures in laboratories, studies on mice and rats, and proprietary in-house studies." She said that was fine, and gave me a very impressive four-page color handout with great charts and graphs. I scanned the handout and flipped to the back page. I then said, "No, thanks." Her facial expression indicated that my reaction was completely unexpected. I told her to look at the references, and went down the list: proprietary, proprietary, cell culture, cell culture, mouse, rat, rats and mice. I asked, "Would you want me to sell or recommend a product to your mother based on how well it works on a rodent, or based on a study performed by the company selling the product that was not published in a refereed journal?"

A New Supplement Form

A few weeks later, another representative came to my office. She was ready for me. She had a stack of handouts with references. As we went through her product line, she mentioned that she was selling a new form of a popular product. "The form everyone else uses is harmful," said the representative. "Oh really," I said. "Do you have evidence of this?" She said yes and gave me a handout. I read it and sure enough, there was a study that showed high amounts were harmful to rodents. As I continued to flip through her literature, I found another product they marketed that also contained the ingredient in question. This handout extolled the benefits of the ingredient. It listed over 10 studies, all of which were done on humans, and all showing various degrees of benefit, and all of which used the "harmful" form. When I pointed this out, her jaw dropped and she said, "I need to call my supervisor."

A New Supplement Use

Whenever you hear of a new use for a product, take it as a sign to put your skeptic hat on. Recently, a representative was telling me about the virtues of a product when he said, "Oh, and by the way, did you know that it also lowers blood pressure?" I thought to myself, "Wow! High blood pressure is a major problem." I said that I had not heard this product lowers blood pressure. Where is the data? He then gave me a literature sheet about the product. Sure enough, there were plenty of references for its intended use. As I scanned the literature, he pointed out a line and said, "See? It lowers blood pressure." Sure enough, it said that the product lowers blood pressure. "But this

statement has no reference," I said. "Not only that, it has no recommendation on a dose to lower blood pressure, nor does it explain how much it can lower blood pressure or how long it will take to lower blood pressure."

Comment

All of the above stories are true. DCs, their patients and other professionals are buying these products and others like them. I doubt anyone without bias (let alone a negative bias) would purchase any of these supplements for the reasons given at this time. A substance or product that in itself is not harmful, can still cause harm if it prevents or delays a safe and proven treatment. Many chiropractors and alternative practitioners are well-trained on how to recognize negative bias. It is this author's opinion that we must use this training and apply it to information with a positive bias as well. As for the examples cited, if I get any evidence supporting or refuting the claims made, I will write it up, and name names. In the meantime, an error based on bias is an error, regardless of whether the bias is positive or negative.

Editor's note: For more information on negative bias, see Dr. Andersen's two part series: Medical bias and supplements, part 1: multiple vitamins. Dynamic Chiropractic, March 20, 2000 (www.chiroweb.com/archives/18/07/02.html); part 2: vitamin C and kidney stones. Dynamic Chiropractic April 17, 2000 (www.chiroweb.com/archives/18/09/02.html).

G. Douglas Andersen, DC, DACBSP, CCN
Brea, California
www.andersEnchiro.com

OCTOBER 2004