

# What Physicians Can Learn from Consumers of Dietary Supplements

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**BACKGROUND.** Many Americans consume dietary supplements, including vitamins, minerals, herbs, and amino acids. Government regulation of dietary supplements is limited, and patients typically do not consult with their physicians regarding the use of supplements.

**METHODS.** We conducted a qualitative study to describe patients' decisions about the use of dietary supplements and the communication they have with their physicians about such use. Four focus groups of customers from 3 local suburban health food stores were interviewed.

**RESULTS.** The customers in the health food stores we investigated were motivated to pursue wellness and wanted to take responsibility for their health. They would welcome a partnership with their physicians, but generally believed that physicians are closed-minded and have little knowledge about dietary supplements. These consumers determined the effectiveness of dietary supplements through personal study and subjective experimentation.

**CONCLUSIONS.** The health food store customers in our study were self-informed consumers who did not consult their physicians about their use of dietary supplements, because they did not believe that physicians were knowledgeable about or interested in supplements. An open-minded patient-centered approach would help physicians provide better care for patients who use dietary supplements.

**KEY WORDS.** Vitamins; physician-patient relations; decision making; focus groups. (*J Fam Pract* 1999; 48:459-463)

Submitted, revised, February 16, 1999.

This paper was previously presented at the 1997 Wisconsin Primary Care Research Forum and Eleventh Annual Wisconsin Research Network Meeting, October 24-25, 1997, Appleton, Wisconsin.

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**D**ietary supplements include vitamins and minerals, herbal products, tissue extracts, proteins and amino acids, and a variety of other products. With approximately 50% of the adult population taking at least one supplement during a given year, the business of selling them has grown into a multibillion-dollar industry.<sup>1,2</sup> Government standards for dietary supplements are very limited, and manufacturers are not required to demonstrate safety or efficacy.<sup>3</sup> An evidence-based review of the literature shows that current dietary supplements vary from safe and effective<sup>4,5</sup> to unsafe or ineffective,<sup>6,7</sup> and for many products the published data is insufficient to make any decision about their safety and efficacy.<sup>8</sup>

Physicians and patients should communicate openly about dietary supplements to obtain a better understanding of their efficacy and to help in recognizing adverse reactions. Eisenberg and colleagues<sup>9</sup> have shown that patients do not typically communicate with physicians about their use of alternative medicine. In a previous quantitative study,<sup>10</sup> we showed that customers of health food stores have an above-average education, identify a personal physician, have medical insurance, often take pharmaceuticals, and are motivated to be healthy, but they do not consult with their physicians before using dietary supplements. In another study, more than 50% of the patients in a typical family practice used dietary supplements, and they often did not discuss this with their physicians.<sup>11</sup>

We wanted to understand patients' decision-making processes and their reluctance to consult with their physicians about dietary supplements. How do patients choose a product and determine its efficacy and safety? Why do they choose not to discuss this choice with their physicians? We chose a qualitative methodology using focus groups of consumers of dietary supplements that would allow an in-depth exploration of these questions.

## METHODS

We explored the research questions using focus group qualitative methodology.<sup>12</sup> Three health-food store owners in suburban Milwaukee recruited customers to participate in the focus groups. For a 3-week period, the owners asked their customers if they would be willing to participate in a focus group sponsored by physicians from the Medical College of Wisconsin. They were told that the physicians wished to learn more about dietary supplements and their benefits.

During the focus group interviews, the facilitators presented open-ended questions and responded to individual comments by requesting expansion, concurrence, or disagreement from the other group members and used prompts as needed. The focus group methodology used is described in the works of Krueger and Morgan.<sup>12,13</sup>

We read and analyzed the transcripts separately using an editing analysis style methodology described by Miller and

Crabtree.<sup>14,15</sup> Major categories were identified and data saturation occurred with the third focus group. In joint sessions, the investigators arrived at 3 major themes from analysis of the data.\*

## RESULTS

Of the 33 participants, 23 were women. The ages ranged from 18 to 65 years, and most (23) were in the 30 to 59 years range. All were white. Twenty-six (79.0%) had some college education. Seventeen (52.0%) were either college graduates or had a postgraduate degree. All of the participants took at least 2 dietary supplements. Twenty-four (73.0%) took more than 5 supplements per day, and 12 (36.0%) took more than 10 per day. Three major themes regarding the use of dietary supplements and patient-physician interactions emerged from the analysis of the focus group interviews: wellness, consumer experimentation, and empowerment (Table).

### WELLNESS

The focus group participants generally began taking dietary supplements because they felt motivated to be healthy or because they had been unsuccessful using conventional medicine to treat their chronic illnesses. The decision to use supplements as part of an effort to prevent illness was often stimulated by a growing awareness of the lifestyle practices that might contribute to overall health. The participants were often concerned about health problems associated with aging, either because of personal experience or because they had seen someone close to them suffer. Those in the focus group with chronic illnesses had the perception of enhanced wellness and improvement of their condition through the use of dietary supplements. Some participants with chronic illnesses continued their use of conventional medicines, and some did not.

Another motivation for using supplements stemmed from a concern about their diet, that the food supply could not adequately support their nutritional needs. In addition, many participants believed that using natural dietary supplements was safer than using pharmaceuticals. The use of supplements for almost all of the focus group participants, however, was not regarded as a "magic bullet," but as part of a strategy to maintain health that included proper diet, exercise, and stress management.

The participants were generally not concerned with the safety of the supplements they were taking. They believed they had great freedom in experimenting with supplements because they were natural, and thus not harmful, but most did acknowledge the need for moderation. Several participants recognized that some products, such as megadoses of fat-soluble vitamins, could be dangerous. Many felt that not using supplements was more of a risk to their health than using them.

The participants generally perceived that physicians overprescribe pharmaceuticals. Several study subjects expressed concerns about what they believe is an interdependent relationship between the medical, pharmaceutical, and insurance industries, that excludes alternative medicine. Many of the participants believe that this situation is gradually changing, however.

Although some of the participants would buy the least expensive product, overall cost did not seem to be a concern for most of them. They felt that their health was worth the cost. At the extremes were one participant who said the cost of his supplementation approached a monthly car payment, and several younger students who said that they had to be cautious about the use of supplements because of their cost.

### EXPERIMENTATION

Customers generally determined the effectiveness of dietary supplements through a process of trial and error. First, the participants would read about the supplement and discuss it with others. After obtaining the basic information, they would take the supplement, and if they perceived it to be beneficial, they would continue to take it.

Common factors in the consumers' evaluation of a supplement included assessing how they felt when using it, what their energy level was, and how many times they were sick compared with other people during seasons of common illnesses like colds and influenza. They stressed being attuned to their bodies as a mechanism for evaluating supplements. This included such things as good sleep patterns, fewer colds, regular bowel movements, healthy nails, clear vision, mental acuity, and lack of body aches.

The participants expressed concerns about the large amount and poor quality of information about dietary supplements, and difficulty finding reliable data. They often consulted with the managers and workers in health food stores. The participants generally trusted information written by physicians, and a few said that they looked for medical studies. However, there was great concern about the reliability of and contradictions present in the current popular reading material about supplements. The participants also seemed to recognize a lack of quality control among the manufacturers and distributors of dietary supplements, but they disagreed about the need for more government regulation. They did express a desire for more guidance in the decision-making process.

### PHYSICIAN-PATIENT COMMUNICATION AND PATIENT EMPOWERMENT

Participants' experiences with their physicians regarding supplements were usually described in negative terms. They commented that many physicians are closed-minded about the usefulness of supplements and have poor knowledge of supplements and nutrition in general. Many participants felt they were treated badly by physicians who did not want to discuss supplements, and some reported arguments about the usefulness of such products. The best

\*For a more detailed explanation of our methods, see the *Journal's* Web site at [www.jfampract.com](http://www.jfampract.com).

## TABLE

## Typical Comments from Focus Group Participants

Topic	Comments
<b>Wellness</b>	<p>I just take whatever I can to be healthy or stay healthy.</p> <p>I had lots of allergies and migraine headaches. My traditional doctors gave me antibiotics frequently...and codeine (for migraines). My holistic medical doctor changed my diet and gave me supplements...I got much better.</p> <p>We definitely do not get what we need from food.</p> <p>I would go the natural route before I would ever go with a synthetic thing offered to me by a doctor.</p> <p>The whole picture is total health and taking care of yourself, eating right, exercising, getting enough rest, and keeping the stress down.</p> <p>I'm better off taking a supplement than what I would get from prescription drugs.</p> <p>They (physicians) should look at the natural options.</p> <p>Why would doctors tell you to take dietary supplements when they can write out a prescription for drugs and get a kickback from the drug companies?</p> <p>The only way they know how to heal is with a prescription.</p> <p>Without energy, without feeling good, I can't work, and I can't function, can't be a good wife, a good mother. I can't be any of those things, and that's the most important thing to me.</p> <p>Actually, at one point I was spending more money on that stuff than I was on food.</p>
<b>Experimentation</b>	<p>You read which ones (supplements) are good, and it's a matter of trying them.</p> <p>I know in medicine (doctors say)...take this and we'll see what it does in a couple of days...well, why not take the herbs and see what helps...it's a matter of taking it.</p> <p>I felt more of a feeling of well-being or more capable of handling everyday stress (if the supplement was effective).</p> <p>I'm just wondering if there could be a group or somebody who could find out the facts, what we can believe, where the truth is in all of this.</p>
<b>Physician-Patient Communication and Patient Empowerment</b>	<p>They shouldn't be so quick to prescribe drugs and antibiotics.</p> <p>They should require for a medical degree that you take a course in nutrition.</p> <p>He (physician) said it doesn't make any difference...what you put in your mouth or what you drink...he was extremely rude.</p> <p>I respect a professional opinion, but you're still letting someone else do your thinking for you.</p> <p>I think doctors should be more into prevention.</p> <p>If family practitioners would be more trained...in nutrition and...preventive maintenance, your initial consult... talk about...basic diet...how do you take care of yourself, how can we as a partnership make sure you don't come and see me often.</p> <p>Doctors have training and can diagnose what is wrong...if that same doctor could go into alternative methods... that would be heaven.</p> <p>If a family physician would know everything that is out there, then they could evaluate your situation and try to lead you to the best answer, which may not necessarily be a nutritional supplement.</p> <p>Medical schools (need to) do a better job of screening who is going to become a doctor...we need more humanitarian (doctors)...a lot of them are only interested in real estate and apartments and stuff like that.</p>

experiences were usually characterized by ambivalence, wherein the physician said to continue using a supplement if the patient felt comfortable with it. On the positive side, one participant described how his physician worked with him to treat his high LDL level using a dietary fiber supplement.

The participants acknowledged the value of physicians' diagnostic skills and expressed a desire for a partnership with their physician that emphasized disease prevention. They hoped that more physicians might combine their conventional medical practices with knowledge of alternative treatments, such as dietary supplements, and improve their knowledge of nutrition. They also emphasized the need for physicians to be better listeners, remain open-minded, and be more humanitarian.

## DISCUSSION

In many ways, the health food store customers in this study were ideal patients. In addition to the motivation to be healthy, they were educated, well read about health matters, and wanted to maintain responsibility for their own health care. Physicians would be well served by acknowledging this in a positive manner. The physician and patient could then ideally enter into a healthy dialogue about the patient's use of dietary supplements and other modalities to achieve wellness. By rewarding patients with open-mindedness, patient-centeredness, and scientific information, the physician empowers the patient and strengthens the physician-patient relationship.

Evidence-based medicine—randomized double-blind placebo-controlled studies—remains the gold standard by which effective treatments can be determined. Nevertheless, Stead<sup>6</sup> recently estimated that physicians are able to use evidence-based medicine only 25% of the time. The other 75% of medicine is empirical, and often based on trial and error (ie, the personal response of the individual patient). Physicians often say, "Try this and see if it helps. If not give me a call, and we will try something else." Evidence-based medicine is important, but it is time-consuming and often lags behind discoveries that individuals and groups may make through trial and error. For example, consumers' use of large doses of vitamin E has to a large extent been validated as having some effectiveness in the prevention of heart disease,<sup>17</sup> prostate cancer,<sup>18</sup> and Alzheimer's disease.<sup>19</sup>

These customers of health food stores generally determined the effectiveness of a given dietary supplement through an experimentation method that is quite subjective. However, it should be acknowledged as having some validity. We may not know if the patient's feelings of wellness are due to placebo effect or have a biomedical basis. An important objective has been accomplished if the patient feels better, regardless of the mechanism. Astin<sup>20</sup> has shown that relief of symptoms is one of the 2 most important reasons patients choose alternative medicine

modalities.

Despite their desire for more guidance regarding dietary supplements, focus group participants did not often seek advice from their physicians. The fact that most participants felt uncomfortable discussing their use of supplements with their physicians, and some even stopped visiting their physician, is important information for health care providers. Physicians should welcome an open dialogue about supplements and be able to disagree with patients' beliefs without being disagreeable. The participants in this study wanted reliable information about supplements amidst a lot of confusing claims. They wanted a partnership with their physicians, who they hoped would be more knowledgeable about dietary supplements and nutrition in general. Unfortunately, the majority of medical schools in the United States have been teaching very little about the medicinal use of herbs and dietary supplements. Many physicians, therefore, are not very knowledgeable about this topic, and some may be prejudiced about the use of such products.

## LIMITATIONS

This study was limited to a small population of health food store customers who volunteered to participate in the focus groups. The participants are not necessarily representative of the general population. However, they demographically resembled other consumer populations who made use of alternative medicine as well as allopathic medicine.<sup>2,9,10</sup>

## CONCLUSIONS

Minimally, physicians should respect their patients' right to take supplements, acknowledge this right, encourage continued physician-patient communication, and have a willingness to learn about supplements—even from their patients. The participants in our study expressed respect for the medical profession's diagnostic and technologic skill. Good relationships are clearly possible. Physicians who are open-minded, patient-centered, and willing to allow patient experimentation with dietary supplements without condemning their efforts are likely to be able to form good therapeutic relationships.

## ACKNOWLEDGMENTS

The authors would like to acknowledge the Wisconsin Research Network for its financial support, the Medical College of Wisconsin for providing support for a medical student summer research project, and Chris McLaughlin for her editorial work.

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