

## The Future of Medicine

In my 55 years as a physician, I've seen my share of what modern medicine can do. During the 40 years when I was a pediatric surgeon, I saw 95% mortality rates for congenital defects transformed into 95% survival rates because of what surgery can accomplish. As U.S. Surgeon General, I saw effective prevention and treatment techniques beat back the mortality from tobacco use and AIDS. And now, as an 85-year-old, my life has been prolonged and kept active by wonder drugs unknown to my parents. So it's been somewhat surprising in this era of triumph for modern medicine to see the rapid growth of alternative/complementary medicine, which is used by as many as one in three Americans. Although most of those still refrain from informing their regular physicians about that use, there is a growing tendency among physicians to acknowledge and even embrace certain forms of alternative/complementary medicine.

Changes in the use of the terms "alternative" and "complementary" suggest the shape of this shift. At first, it was called simply "alternative medicine," reflecting a dissatisfaction with regular medicine as well as a cultural rebellion against the biomedical community. In more recent years, several studies indicate that there has been a shift from "alternative" therapies to "complementary" therapies, adopted not in opposition to regular medicine but in alliance with it. And increasingly those who use one of the many forms of complementary medicine are not treating a specific medical problem. Rather, they are practicing prevention in ways they find more congruent with their philosophical values or lifestyle.

Now I think we may be seeing another refinement, one that is taking us from "complementary" to "safe and effective." For some people, the appeal of alternative medicine lies in its alternative stance, and as some of these therapies enter the mainstream, some of these individuals may seek other alternative practices. But more and more Americans are demanding greater certainty from alternative or complementary products as an increasing number of press reports document health problems resulting from certain natural products and complementary practices. Thus, the baby-boom health consciousness that led to the resurgence of alternative/complementary medicine now turns toward solutions that rest more heavily on science. We went through a somewhat similar passage a century ago, when dissatisfaction with regular medicine and a growing consumer market in health products led to the widespread use of a variety of nostrums and patent medicines; some no doubt helpful, some merely enjoyable, and some downright dangerous. At that time, journalists and the public pressed for scientific research to support proper branding and safety, culminating in the Pure Food and Drug Act of 1906. Much later, evidence of effectiveness was added to the list. Some among the sellers and buyers of health products objected at first to the intrusion of research-based evaluation into the health market, but soon both came to profit from increased consumer confidence in those health products.

For too long, the natural health products industry has kept its distance from medical research and from clinical medical practice, focusing instead on the short-term marketing advantages derived from keeping herbal and nutritional remedies exempt from any Food and Drug Administration (FDA) review of efficacy. A wiser approach would be for the natural products industry to work with medical research, including the FDA, so that consumers and medical practitioners could be warned about potential harm and assured that the claimed health benefits were really there. Although the growth in the use of alternative/complementary medicine is likely to continue, recent surveys and market data confirm a growing American concern about safety. In this new climate of national wariness and concern for personal safety, those interested in selling and buying natural products associated with complementary medicine will be better off in the long run if reliable research is able to certify their safety and efficacy. As America's baby boomers become senior citizens, the health care system needs the relief provided by effective prevention of disease and disability. There is a potential role for some complementary therapies and natural health products in preparing us to meet the challenges of the 21st century. But it can only be played if that industry and its proponents are prepared to meet real scientific and regulatory tests of safety and effectiveness.

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