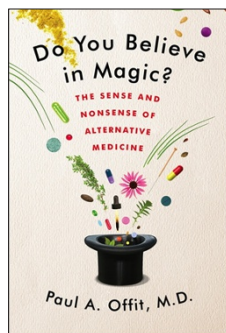


## A medical alternative



### Do You Believe in Magic? The Sense and Nonsense of Alternative Medicine

Paul A. Offit

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Reviewed by Rama Amara

As a child growing up in a small town in India, I witnessed both mainstream and alternative medicine in my daily life. The use of alternative medicine is common in India primarily because it is easily accessible and affordable. For example, when a small lump showed up on my forehead for unknown reasons, I was taken to an alternative healer who used a cream made from some tree leaves. The problem went away after few days and I believed that the medicine worked. The real question was what would have happened if I waited a few more days without the cream? *Do You Believe in Magic?* by Paul A. Offit teases out answers to questions like this. Reading this book is a real treat: it is unbiased, thorough and filled with a lot of very interesting details and scientific facts presented in a clear and concise manner. Personally, I felt that this book clarifies a lot of questions and confusion that many may have about alternative medicine.

Offit is chief of the Division of Infectious Diseases and director of the Vaccine Education Center at the Children's Hospital of Philadelphia. He is a pediatrician specializing in infectious diseases and an expert on vaccines, immunology and virology. He is the co-inventor of a rotavirus vaccine that has been credited with saving hundreds of lives every day, and he has written multiple books related to human health. These credentials make him a unique combination of doctor, researcher and communicator.

Offit's book includes a section on the current craze over vitamins and other supplements. He paints a picture of two-time Nobel Prize winner Linus Pauling as a man whose scientific triumphs were overshadowed by his insistence, despite scientific evidence to contrary, that vitamin C could fight colds and cure cancer. Offit describes how multiple research studies have shown that megavitamins and antioxidants have no significant health benefits and, rather, enhance the risk of various cancers when used in excessive amounts. Why is the US Food and Drug Administration (FDA) not doing anything about this? Offit feels it is because of money and politics and presents convincing evidence along these lines.

The book's most poignant moments are narratives of the victims of alternative medicine. For example, Joey Hofbauer was a little boy

who was diagnosed with Hodgkin's disease and who, instead of being administered lifesaving chemotherapy and radiation, was 'treated' with laetrile (made from apricot pits), pancreatic enzymes, coffee enemas and raw liver juice. A US National Cancer Institute (NCI) study would later show that laetrile given with a high dose of vitamins didn't improve or stabilize cancers, and patients in the study showed symptoms of cyanide poisoning. These treatments hark back to the early history of cancer therapy: in the early twentieth century, Albert Adams invented the Dynamizer, a boxed jumble of coils, which he claimed could diagnose cancer, and the Oscilloclast, which sent out specific vibrations to counter disease. Forty years ago, Stanislaw Burzynski used so-called antineoplastons that he isolated from human urine as a treatment for cancer, but later investigations by the NCI did not show any beneficial effects from these treatments.

Offit also talks about many studies showing no benefit of various alternative medicine treatments, including garlic's inability to lower cholesterol in adults with moderate hypercholesterolemia and saw palmetto's lack of efficacy for treating enlarged prostate. In an unbiased approach, he also talks about the health-improving effects of some alternative medicine agents, such as the ability of omega-3 fatty acids to prevent heart disease, the ability of calcium and vitamin D to prevent bone thinning in postmenopausal women and the ability of folic acid taken during pregnancy to reduce birth defects.

The author highlights the role of celebrities in supporting alternative treatments to cure aging, autism and Lyme disease. He talks about how celebrities such as Suzanne Somers paved the way for the growth of alternate medicines to treat menopause and aging, resulting in a \$6-billion-a-year antiaging industry. Defeat Autism Now is a group of clinicians who are dedicated to the notion that autism can be cured with vitamins and supplements and who believe that autism has many causes such as mitochondrial dysfunction, food allergies, heavy-metal poisoning, lack of oxygen to the brain and vaccines. Offit counters these ideas by pointing out that vaccines save the lives of thousands of children every year worldwide and discusses a number of well-controlled studies that definitively showed no relationship between vaccines and autism.

Offit's description of the placebo response that may underlie the benefits of alternative medicine is very interesting and informative. He offers a compelling explanation for why alternative therapies sometimes do heal and what physicians can learn from them. Offit highlights an interesting battle between two parallel universes: mainstream medicine, rooted in the belief that drugs have to be science based, thoroughly tested, and proven to work before the FDA approves them, and alternative medicine, whose practitioners think their treatments should be promoted with testimonials and sold on websites. Offit concludes that both mainstream and alternative healers have their place, and mainstream healers should not dismiss the placebo response and the power of warmth and sympathy as contributors to the healing process. Similarly, alternative healers should not offer placebos instead of lifesaving medicines, charge an exorbitant price for their remedies or promote therapies as harmless when they are not.

#### COMPETING FINANCIAL INTERESTS

The author declares no competing financial interests.

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