"Don't take your vitamins"? So not!

written by Dr. Ronald Hoffman | October 23, 2013

An op-ed in the June 9 New York Times by Dr. Paul Offit has the vitamin world in a tizzy. After a snarky introduction ripping on singer Katy Perry for advocating supplements to her fans, Offit writes:

"Nutrition experts argue that people need only the recommended daily allowance—the amount of vitamins found in a routine diet. Vitamin manufacturers argue that a regular diet doesn't contain enough vitamins and that more is better. Most people assume that, at the very least, excess vitamins can't do any harm. It turns out, however, that scientists have known for years that large quantities of supplemental vitamins can be quite harmful indeed."

Because of its prominent placement in the influential *Times*, the article put reasonable supplement enthusiasts, like this patient of mine, in a quandary. She sent an email to me saying:

"Hi Dr. Hoffman,

There was an interesting article in the *NY Times* yesterday about Vitamins and particularly focused on A, E and C. It is pretty clear that beyond their recommended doses they can be harmful. What is your opinion on this subject? I am thinking about forgoing my Multi and rethinking my whole protocol."

First of all who is Dr. Paul Offit? According to Wikipedia, he is "an American 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."

But he also is a committed and avowed foe of "alternative medicine" whose legitimacy he challenges. He is author of a book *Do You Believe in Magic? The Sense and Nonsense of Alternative Medicine*. Here is a quote from a lecture announcement for his book tour:

"Americans love alternative medicine, and they are paying a high price for that devotion. From regular visits to acupuncturists, chiropractors and naturopaths to the daily ingesting of homeopathic remedies, Chinese herbs and megavitamins, the use of alternative therapies has become a \$34 billion-a-year business. Fifty percent of Americans use some form of alternative medicine, with 10 percent using it on their children. Celebrities routinely hawk their benefits. But, does any of it really work?"

In Offit's opinion, no. He has even called for the abolition of the National Center for Complementary and Alternative Medicine (NCCAM), the division of the National Institutes of Health entrusted with investigating the efficacy of natural medicines, citing it as a waste of taxpayers' money.

He also is a vociferous opponent of "vaccine deniers," repeatedly asserting

that vaccines are harmless and rejecting claims that they might, in some cases, be associated with neurological damage—including autism—in susceptible children. He even wrote a book about entitled Autism's False Prophets: Bad Science, Risky Medicine, and the Search for a Cure.

Some have accused him of a conflict of interest because he has made millions from royalties associated with the rotavirus vaccine. An investigative report by CBS News reporter Sharyl Attkisson reveals strong ties between the vaccine industry and the medical community and public health officials that are responsible for regulating it. By means of direct payments as well as "educational grants," they exert pervasive influence.

Offit has been widely quoted as saying that "babies can tolerate 10,000 vaccines at once."

Offit has now turned his attention to vitamins and supplements. His recent op-ed in the *Times* offers him great product placement for his upcoming book entitled *Do You Believe in Magic: The Sense and Nonsense of Alternative Medicine*. Previews of the book promise that it will reveal how "alternative medicine—an unregulated industry under no legal obligation to prove its claims or admit its risks—can actually be harmful to our health. Even though some popular therapies are remarkably helpful due to the placebo response, many of them are ineffective, expensive and even deadly."

So, suffice it to say, I think you'll agree that Offit has a pretty clear and relentless agenda, which ought to put his objectivity in question. While I'm a proponent of vitamins and supplements, I'm a ravenous consumer of scientific information, both pro and con, and try to make sense of all the conflicting data so that consumers can make intelligent choices.

Also, I have experience administering supplements of all kinds to thousands of patients, many of whom report excellent results, and I've seen few downsides. Plus, I take lots of supplements and consider myself an ongoing "science fair project" to evaluate their safety and efficacy. If there's been a downside, how come, at the age of 60 when many people are taking multiple medications, I take none and can do 12 consecutive chin-ups, 3 sets of 40 push-ups and won my age division in a recent Olympic-distance triathlon?

But Offit's points are nonetheless worth considering. Certainly, while there are thousands of studies that substantiate the benefits of supplements, a few recent studies have come up short.

One in particular that Offit relies upon is the Iowa Women's Study that showed harms from taking supplements. There are many excellent critiques of that study, but here are the major points:

- 1. The study was based on participants' recollections of supplements they took many years before, which are notoriously unreliable
- 2. The majority of the "harms" seen in that study were due to inappropriate dosing of iron and copper, nutrients that don't necessarily need to be supplemented in post-menopausal women
- 3. The quality of the supplements used was unclear—discount multis taken

- without supervision cannot be equated with targeted supplementation dispensed under guidance from nutritional professionals
- 4. Many of the conscientious vitamin-takers also were taking estrogen pills, which could account for the finding of a slight increase in heart risk

Other studies marshaled to demonstrate the "danger" of antioxidant supplements are beset with methodological problems. In one oft-cited study, Finnish smokers were unexpectedly found to have increased risk of lung cancer when taking synthetic beta carotene. Why? Many of them were alcoholics, and it's thought their impaired liver function, combined with the effects of cigarettes, converted the beta carotene into a cancer-promoting PRO-oxidant.

But what does a study like this have to do with the potential protection afforded to healthy non-alcoholic non-smokers who take modern formulations of high-quality MIXED carotenoids, which more accurately embody the protective effects of fresh fruits and vegetables?

When it comes to vitamin E, certain studies have cast doubt on its efficacy. But virtually all these studies were performed using cheap, poor quality dalpha tocopherol, something I abandoned by the early 1990s; I now use mixed tocopherols rich in gamma tocopherol.

With due respect to Dr. Offit's contributions to vaccine science, he is overreaching when he appoints himself the arbiter of the legitimacy of supplementation and alternative medicine. The pity of it is that the injudicious placement of his article on the respected (by some) op-ed pages of the New York Times credibilizes an indiscriminate "poisoning of the well" for hundreds of millions of Americans who derive enormous benefits from supplements. They just can't wait for conventional medicine to rescue them from all their maladies.