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Health

Why Your Vitamins Aren't Working

Rebecca Ruiz, 02.17.09, 4:00 PM ET

With promises to boost health and prevent chronic diseases, supplements can seem like an over the counter cure-all. Consumers more than buy into that notion: Vitamins accounted for roughly one-third of the \$23.7 billion spent on supplements in 2007, according to the *Nutrition Business Journal*.

While a handful of studies have demonstrated a strong link between certain supplements and positive health outcomes, there's still limited clinical evidence to support the notion that they are critical to excellent health. In fact, much of that \$23.7 billion could have been a waste of money, according to recent research.

In Depth: Why Your Vitamins Aren't Working

In a study released last week in the *Archives of Internal Medicine*, researchers found that multivitamin use in post-menopausal women neither increased nor decreased risk of cardiovascular diseases or common cancers. And last fall, a major study of almost 35,000 men found no link between vitamin E and selenium supplements and prostate cancer prevention.

Dr. Marian L. Neuhouser, the lead author of the multivitamin study and an associate member of the Fred Hutchinson Cancer Research Center in Seattle, says that while fruits, vegetables and whole grains have been linked to good health and prevention of cancer and cardiovascular disease, that doesn't mean vitamins extracted from those food groups will have the same effect.

Scientists still aren't sure why studies of supplement use don't always mirror what we know to be true about dietary vitamin intake--that it's essential to good health. One reason is that it's very difficult to separate cause from effect. Healthier people tend to take vitamins, but that's not enough proof to establish a definitive link between supplements and optimal health.

"Each consumer needs to decide their own health practices," says Neuhouser. But "they're missing a lot if they think [vitamin] substitution will do the trick."

What the Body Needs

The body requires 13 vitamins and 15 minerals to function properly. Among the necessary vitamins are B6, which maintains brain function; biotin, which is essential for metabolism; and A, which is critical to the maintenance of healthy teeth and bones.

A deficiency in any of these 13 vitamins--which is rare in the U.S.--can cause a range of health problems, including depression, anemia and diminished immunity. An average eater who fills his or her plate mostly with fruits, vegetables and whole grains should meet the daily recommended intake of vitamins, says Dr. John W. Erdman Jr., a professor of food science and human nutrition at the University of Illinois at Urbana-Champaign.

Even skipping leafy greens one day or apples and bananas the next won't adversely affect your health--provided this doesn't become a chronic habit. (Children, pregnant or lactating women and the elderly, however, can be more vulnerable to vitamin deficiencies.)

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Despite the fact that a balanced diet provides the right amount of vitamins and minerals, millions of Americans consider supplements as an insurance policy against poor eating choices, chronic disease and chance. At least half of all Americans purchase supplements, according to the Council for Responsible Nutrition, a trade association that represents industry suppliers and manufacturers.

Do Vitamins Work at All?

Unfortunately, there isn't a clear-cut answer as to whether vitamins help one's health. Dr. Andrew Shao, the association's vice president of scientific and regulatory affairs, admits that the science of vitamin use can be confusing at times.

"No one study is the final word," he says, referring to Dr. Neuhouser's results. "It's always evolving, and the results in one trial don't erase the evidence." Some research has demonstrated benefits, according to Shao, including a 2003 study that linked multivitamins to reduced heart attack risk and a 1998 study that linked multivitamins to reduced colon-cancer risk.

Still, several academic reviews, including a major National Institutes of Health conference in 2006, have yet to identify convincing evidence for widespread supplement use--except for in a few cases. Vitamin K, which is essential for coagulation, is routinely given to newborn infants to avoid bleeding problems. Pregnant women receive doses of folic acid and other important vitamins for fetal development.

"There are some recommendations," says Dr. Erdman, "but no one says you should take a one-a- If you liked this day."

Dr. Neuhouser also suspects that missing bioactives--compounds like anti-oxidants and isoflavonoids that are thought to act synergistically with vitamins and minerals in food--might be the culprit. Researchers are currently trying to understand what role these compounds play in making naturally occurring vitamins powerfully effective.

The bottom line, says Dr. Patsy Brannon, a professor of nutritional sciences at Cornell University, is that consumers should add vitamins and minerals to their diet with fruits, vegetables and whole grains. She doesn't oppose supplement use, but says consumers should avoid self-prescribing and familiarize themselves with when a dose becomes toxic.

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Vitamin use, Brannon says, shouldn't exceed 100% of the recommended daily intake, which is determined by the Department of Agriculture.

"It's always an interesting issue," Brannon says of counseling people on whether to take supplements. "You can choose a multivitamin with just 100% of the daily allowance, but you'll be getting those nutrients anyway."

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