EDITORIAL

Multivitamins in Medical Treatment

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itamins have been the face of wonder drugs since the late 1980s. It was thought that taking a daily extra dose of vitamins would protect against cancer, heart disease, kidney disease, diabetes, and several other diseases or disorders. Recent studies, however, have not only indicated that vitamins may be less effective in treating these maladies than originally thought, but have also found that taking a daily vitamin could be detrimental to one's health. Has the hype of supplemental vitamins officially died?

It was approximately forty years ago that biochemist Linus Pauling suggested the use of "megadose" vitamins, or orthomolecular therapy as it was termed, for the prevention and treatment of cancer. Ten years later, daily use of vitamin supplements became the new craze.1 These days, multivitamins are the most common dietary supplement taken in the United States, and many studies are done on the effectiveness of multivitamins and other individual supplements.² There is little argument for the nutritional value of vitamins. In a study published by the American Journal of Clinical Nutrition, the nutrient adequacy of 17 nutrients for those who take a daily multivitamin was shown to be 8 percentage points higher than those who did not take the daily supplement.² Additionally, physician and nutritionist Walter Willett, chair of the Department of Nutrition at the Harvard School of Public Health recommends taking a multivitamin because "there are a few nutrients that are marginal in many people's diets, even if they are very health conscious."3 Some of these nutrients include folic acid, vitamins B6 and B12, and vitamin D.

It seems that individuals who take supplements are already receiving much of their vitamins from the foods they eat. Therefore, taking multivitamins can cause the excess intake of several particular vitamins, such as vitamin A, iron, and zinc.2 There has been much speculation about whether this excess is as effective for reducing the risk of certain diseases as was originally thought. Dr. Harvey Simon, a physician and professor at Harvard Medical School and founder of Harvard Men's Health Watch, has abandoned the notion that vitamins could help prevent chronic illnesses like cancer and heart disease. According to Simon, not only do vitamins not prevent diseases, but they can actually cause more harm.4 A study by the University of Washington on the effect of vitamin E on lung cancer, for example, found that the relationship between increased vitamin E supplements and lung cancer was statistically significant. Another study, published in the Journal of the American Medical Association, found that in 47 randomized trials of antioxidant supplements, the use of vitamin E, vitamin A, and beta carotene increased the rate of mortality by 5 percent.1

Many in the scientific community support conclusions like Dr. Simon's. Pamela Mason, a London Health Service Information spokesperson explains, "(Vitamins) were never intended to be used to prevent chronic disease such as cancer."5 Additionally, the U.S. Department of Health & Human Services Agency for Healthcare Research and Quality issued a statement in 2003, published in the Annals of Internal Medicine, indicating that there was not enough scientific evidence to prove a connection between vitamin use and lower risk of cancer and heart disease.6

Physicians, nutritionists, and other experts do not deny the benefit of vitamins on health. As Marian L. Neuhouser, member of the Cancer Prevention Center at the Fred Hutchinson Cancer Research Center in Seattle, said, "we call them essential nutrients because they are."1 What the experts stress, however, is the maintenance of adequate nutrition through a balanced diet; one that will provide you with the necessary vitamins in appropriates concentrations. Even Walter Willett, advocate of the use of multivitamins, says on the topic of taking multivitamins, "It's a safety net that can fill nutrient gaps. It's not a replacement for a healthy diet."7 The best solution, at least for those who are able to maintain a balanced, healthy diet that is already full of nutrients and vitamins, would probably be to nix the multivitamins and replace it with only those supplements whose daily recommended values are not met by the average diet.

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