In response to an editorial labeling multivitamins as useless and potentially harmful, nutrition experts conclude that multivitamins are a safe, inexpensive and effective method of filling nutritional gaps in the average, nutrient poor diet, and can potentially reduce the risk of some chronic diseases.

Experts respond to "Enough Is Enough" editorial on dietary supplements

In an editorial published several months ago titled "Enough is Enough", five medical doctors declared that dietary supplements were unnecessary, had no clear benefit, and might even be dangerous. Because of the controversial nature of the editorial, and because it was published in a respected journal, it received a lot of media attention.

In a new editorial published online in the same journal, *Annals of Internal Medicine*, four of the most respected names in public health and nutrition have responded and stated that decades of nutrition research and diet monitoring were ignored to come to the misleading conclusion. The experts, representing the Linus Pauling Institute, Children's Hospital Oakland Research Institute, Tufts University, and the Harvard School of Public Health reasoned that multivitamins help fill nutritional gaps, improve general health, may help prevent chronic disease, are generally harmless, and relatively inexpensive.

While nearly all nutrition experts agree that a balanced and nutritious diet is the best way to get essential nutrients, they also state that it is naive to ignore the fact that most people in the U.S. are not meeting recommendations for dietary intake of all vitamins and minerals and micronutrient inadequacies are more the rule than the exception.

Less than 7% of adults in the U.S. get the estimated average requirement of vitamin D and E from their diet; only 39% get enough magnesium; and only about half get the minimum recommended intake of calcium and vitamin A. Nearly three-fourths don't get enough vitamin K, and 98% don't get adequate potassium from their diet. The elderly, African Americans, obese individuals, and those who are ill or injured may have even more difficulty meeting minimum nutrient intakes.

In addition to simply filling in nutritional gaps and supporting normal health, the potential for micronutrients to help reduce or prevent chronic disease has shown promise. Recently, the Physicians' Health Study II, the largest randomized controlled trial on multivitamins ever conducted, found statistically significant reductions in both cancer incidence and the risk of cataracts among male physicians taking multivitamins regularly.

The new editorial also addressed the fact that concerns over increased mortality or harm from vitamins A and E have been based on extremely high use through supplements beyond

the dosages typically found in multivitamins. It is well-known that vitamin A (as retinol) should not be consumed long-term at levels above the Tolerable Upper Limit. But, in reality, only about 1% of supplement users exceed vitamin A upper limits through supplementation. The trials reporting that high-dose vitamin E supplements increase mortality have been since refuted by several more comprehensive studies.

The experts conclude – "To call the case closed; deny the value of further research; and label multivitamin and mineral supplements useless, harmful, and a waste of money is wrong, is not based on the established science for their primary indication, and misinforms the public and the medical community."

Frei B, Ames BN, Blumberg JB, Willett WC. Enough is enough. Ann Intern Med. 2014 Jun 3;160(11):807. doi: 10.7326/L14-5011.

