

Questions and Answers

Common Cold: Prevention and Treatment With Ascorbic Acid Not Effective

Q Our local newspaper carried a national press item from the West Coast about Nobel prize winner Dr. Linus Pauling, who advocates large doses of ascorbic acid (vitamin C) for the prevention and treatment of the common cold. Is there any scientific evidence to support his contention? Is it safe for an adult to take large doses of ascorbic acid daily?

MD, Pennsylvania

A We have received a number of inquiries about the efficacy of large doses of ascorbic acid in the prevention and treatment of the common cold. These inquiries stemmed from a book entitled *Vitamin C and the Common Cold* by Linus Pauling in which he recommends taking 1 to 5 gm of ascorbic acid daily for prevention and as much as 15 gm daily for treatment of upper respiratory infections. The scientific eminence of Professor Pauling, a Nobel Prize winner in chemistry, suggests that this recommendation should receive careful evaluation. However, in my opinion, there has been no acceptable scientific study with appropriate controls that shows that ascorbic acid will either prevent or ameliorate the common cold. Investigations from the literature reported by Dr. Pauling were inadequately controlled. He did not examine critically the clinical studies that were quoted. The other evidence that he cited was his own personal experience.

An acceptable study of the effectiveness of ascorbic acid against upper respiratory infections would necessitate having many hundreds of persons followed up over a long period of time and this has not been done. Professor Pauling admits this as he states the following:

So far as I am aware no large scale study involving several hundred or thousand subjects has been carried out to show to what extent the regular ingestion of ascorbic acid in large amounts is effective in preventing and ameliorating the common cold and associated infections.

Although ascorbic acid is water soluble and excessive amounts are excreted in the urine, large doses can have adverse effects. Amounts of 1 gm daily may cause diarrhea. Amounts of 4 to 12 gm daily, given for acidification of the urine in the management of certain chronic urinary tract infections, can lead to the formation of urate and cystine stones through precipitation. The possibility of other toxic effects has not been excluded, as no trials have been undertaken. My advice to patients is that there is no scientific evidence supporting the use of large doses of ascorbic acid in preventing or treating the common cold.

GRACE A. GOLDSMITH, MD
Tulane University School of Medicine
New Orleans

The answers here published have been prepared by competent authorities. They do not, however, represent the opinions of any medical or other organization unless specifically so stated in the reply. Anonymous communications cannot be answered. Every letter must contain the writer's name and address, but these will be omitted on request. All inquiries receive a direct mail reply.