Vitamin C Plays Many Roles

In May 1953, Fred R. Klenner, a North Carolina medical doctor, presented his paper "The Use of Vitamin C as an Antibiotic" at an AAN convention. Most medical doctors nowadays would cast the paper aside without bothering to read it, calling it hogwash, quackery, and stupidity. As infections become more persistent and virulent, it might be wise for doctors to look at vitamin C with open minds.

As he relates in his presentation, Klenner came upon vitamin C's antibiotic properties purely by chance. Sometimes in the early 1940s, he made a home visit to provide symptomatic relief to a man with viral pneumonia who had suddenly developed cyanosis. Since the man did not want to go to the hospital for oxygen therapy, Klenner gave him an intramuscular injection of vitamin C (2 g) to improve cellular respiration. Because this was "an old idea," Klenner was not surprised that "the characteristic breathing and slate-like color had cleared" within 30 minutes. What did surprise him, however, was the patient's condition 6 hours later, when he paid the man a second visit at 8 p.m. The patient was sitting on the edge of his bed, enjoying dinner. His temperature had decreased by 3°. This time, Klenner gave him a 1 g injection of vitamin C and continued doing so at 6-hour intervals for the next three days. "This patient was clinically well after 36 hours of chemotherapy [with C]."

Excited that ascorbic acid may give a new way to deal with viral infections, Klenner used it (oral doses, IM injections, and intravenous administration) on pediatric diseases like measles, chicken pox, mumps, encephalitis, and poliomyelitis. He found that "... definite clinical response is made evident by a climbing white blood count, drop in fever, and general all around improvement" with injections of a large-enough dose of ascorbic acid. Effective dosage depends upon the type and severity of the disease and body weight. Symptoms do not dissipate with too low a dose. Discontinuing C prematurely will cause a regression. Andrew W. Saul, PhD, editor-in-chief of Orthomolecular Medicine News Service, says: "For those unable to obtain intravenous vitamin C [the preferred route], it is essential to pay special attention to one of the most important aspects of vitamin C therapy, dividing the dosage improves absorption and retention of vitamin C." (his emphasis)

"Studies of ascorbic acid at the molecular, cellular, and clinical levels conducted by a host of scientists from a variety of disciplines have revealed that ascorbic acid plays multiple biochemical roles," explain public health scientists Fred and Alice Ottoboni in their 2005 article for the Journal of Orthomolecular Medicine. Ascorbic acid is more than an antioxidant. It stimulates the hexose monophosphate (HMP) shunt, a series of biochemical reactions that convert 6-carbon sugar (glucose) into 5-carbon sugars (ribose and deoxyribose). These sugars are needed to make RNA and DNA, necessary for creating new cells. Readily available RNA and DNA allow the body to quickly make phagocytic leukocytes, "the first line in host defense against pathogens." Leukocytes have an ascorbic acid content up to 80 times greater than the content of plasma. Another function of the HMP shunt is to produce NADPH, which is used by phagocytes to make superoxide, their weapon against invading pathogens. Glucose competes with ascorbic acid for insulin transport into cells (including leukocytes). Glucose also inhibits the HMP shunt. Consequently, the Ottobonis advise restricting sugar and carbohydrate consumption to get the most benefit from ascorbic acid supplementation.

Ascorbic acid is a necessary biochemical compound. Most animal species make their own from glucose. In humans, however, an enzyme necessary to make the conversion is inactive. Based on ascorbic production in other animals, scientists believe that humans would normally produce 2 to 4 g of ascorbic acid per day and "at least 15 grams per day under stress." (my emphasis)

"Vitamin C, in very high doses, has been used to successfully treat several dozen illnesses, with a published, peer-reviewed literature spanning the last 60 years," writes Saul. "... I never cease to be amazed at the number of persons who remain unaware that vitamin C is..."
the best broad-spectrum antibiotic, antihistamine, antitoxic and antiviral substance there is."


Book Advises on Preventing Food Poisoning

Several common food-borne microbes cause food poisoning. Symptoms, most notably vomiting and diarrhea, can be mild or severe; but the symptoms usually end quickly. Most food-borne pathogens are not lethal. Sometimes, however, these infectious bacteria leave the gastrointestinal tract and travel in the bloodstream to other areas in the body, where they cause more serious and long-term health problems. For example, strains of Campylobacter, a bacterium found in the intestinal tracts of many animals (particularly birds), can cause pneumonia, urinary tract infections, arthritis, endocarditis, cholecystitis, meningitis, pancreatitis, and other organ inflammations. The link between food-borne pathogens and how to prevent these infections is the subject of Beatrice Trum Hunter’s latest book, Infectious Connections.

Preventing food-borne disease is not high-tech, but it does require diligence. Frequent and thorough hand-washing with plain soap and hot running water cannot be overemphasized. In addition to hand-washing, cleanliness during food preparation includes cleaning cutting boards and utensils so that bacteria in raw animal foods do not contaminate vegetables or ready-to-eat foods. Many of the pathogens thrive at lower temperatures, so thoroughly cooking meat, fish, and poultry – the most common sources of food-borne pathogens – is a must. Even after cooking, bacteria will multiply if the temperature is right (between 40 °F and 140 °F), so leftover perishable foods need to be refrigerated soon after the meal. “The CDC rates poor personal hygiene of food handlers and preparers along with improper temperature control as the two most significant factors leading to food-borne illness,” Hunter writes.

Beatrice Trum Hunter is an award-winning author of more than 30 books on food issues and health. Infectious Connections is a well-researched and comprehensive look at food-borne infections and how to prevent them. The book, published by Basic Health Publications, costs $18.95 (ISBN 978-1-59120-244-8).

Lyme Guidelines Still Unchanged

The 2006 Infectious Diseases Society of America (IDSA) guidelines for the treatment of Lyme disease “require no revision,” according to a review panel’s announcement on April 22, 2010. The IDSA set up the review panel, under the guidance of an independent medical ethicist, as part of a 2007 antitrust settlement with Connecticut’s Attorney General Richard Blumenthal. The 2006 IDSA guidelines do not recognize the existence of chronic Lyme disease. Rather, the IDSA asserts that Borrelia burgdorferi, a bacterium transmitted to humans via tick bites, is readily cured with short-term antibiotic therapy (of less than one month). The International Lyme and Associated Diseases Society (ILADS), made up primarily of physicians who treat people with chronic Lyme, vehemently disagrees.

In assembling the 2006 Lyme guidelines, the IDSA “suppressed scientific evidence and ... excluded opposing views from [its] panel” according to the attorney general’s findings, which led to the settlement. Panel members held commercial interests in diagnostic tests, vaccines, and insurance. The exclusion of ILADS’s viewpoint left its doctors and their patients in no-man’s-land. Long-term antibiotic protocols and other treatments that do not follow IDSA guidelines are denied by insurers, and doctors who do not follow the guidelines are vulnerable to medical board censure. As a result, Attorney General Blumenthal threatened the IDSA with an antitrust suit.

The IDSA looks at the review panel decision as validation that chronic Lyme disease does not exist, but the controversy is bound to continue. The review panel “found that each [of the IDSA’s 69 recommendations stated in its guidelines] was medically and scientifically justified in light of all the evidence and information and required no revision,” according to panel chair Dr. Carol J. Baker. The