



VITAMIN NEWS



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FURTHER COMMENTS ON VITAMIN A

The A. M. A. Journal of December 29, 1934 carried an article by Drs. Shibley and Spies, calling attention to their work in which it was found that Vitamin A failed to produce the expected results as a protective agent against colds, in particular, and was not as valuable a prophylactic against other infections as it had been considered by other investigators.

This report needs analysis before acceptance. The specific action of Vitamin A that relates to infections is its ability to insure an epithelial integrity that will prevent the mechanical entrance of germs. Colds and influenza are believed to be caused by a filterable virus so the ability of Vitamin A to protect against the entrance of these infective agents may be of little or no value in those particular infectious diseases.

Vitamin A deficiency in test animals, however, is particularly effective in reducing the resistance to pus germs - with resulting infections of sinuses, tonsils, mastoid, etc. Here we have visible microorganisms to deal with, and not a filterable virus that can penetrate openings too small to admit germs that can be seen in the microscope.

The resistance of the organism to a filterable virus is not dependent at all upon the first line of defense - the epithelium - nor is it dependent upon the second line of defense - the phagocytes, but upon the third line of defense - the rapid development of immunity. As Sajous has stated, we depend upon vitamin intake for the defensive agents that are needed to produce specific immunity, and it is the experience of every physician who has used our product, "Catalyn", that it ordinarily causes immunity to be developed at a far more rapid rate than normally is possible. Vitamins B and C are chiefly instrumental in this effect. Sajous even went so far as to state that in his opinion Vitamin C and Erlich's complement were identical. It is, therefore, evident that immunity may be impossible without Vitamin C, and without "C", the third line of defense is non-existent.

As it has been demonstrated that the number (and probably the activity as well) of the phagocytes is limited by vitamin deficiency, we begin to realize the all-important part vitamins play in protecting us from microbic attack. The integrity of each of the three lines of defense is dependent upon an adequate vitamin supply.

We consider the findings of Drs. Shibley and Spies also illustrative of the fallacy of using vitamin concentrates standardized by animal tests in clinical research. The real and only way to test a vitamin that is supposed to prevent colds is to use it to treat colds in human subjects. According to their method of testing, the products used by Drs. Shibley and Spies

did not contain therapeutically useful amounts of Vitamin A. That would be our conclusion, rather than that Vitamin A were not of benefit for the diseases under consideration, for there is too overwhelming a volume of evidence supporting the affirmative side of that question.

We are also inclined to accept this explanation for the failure of these investigators to find their Vitamin A concentrates of benefit, because of the consistent failure of the product to protect against respiratory infections in children, or in reducing the incidence of otitis media and scarlet fever.

It is more than probable that a widespread reduction in the supply of Vitamin A such as occurred during the World War (mainly because of butter substitutes) was the basic reason for the influenza epidemic that spread over the entire civilized world. The paucity of other high vitamin foods and the attendant low intake of all vitamins, no doubt, was an aggravating factor. Infective agents are known as a general rule to increase in virulence in proportion to the lack of opposition by the normal defensive factors of the subjects affected. A person with low resistance may develop a severe attack of influenza, for instance, and thereby infect another subject who normally would resist the disease and fail to contract it from a person suffering from a less virulent form. That is how epidemics get under way.

The severity of the cold and influenza epidemics noticed in some of our large cities recently has caused some observers to suggest that possibly the general irradiation of milk may be responsible, because of the attendant destruction of Vitamin A. There is no doubt but that the practice of irradiating foods indiscriminately has become more or less a commercial racket, and further investigation of the real facts is imperatively necessary.