

Discussion of "A Study of Nutritional Factors"

HAROLD J. NOYES, B.S., Ph.B., M.D., D.D.S.

Chicago, Illinois

In times such as these when scientific data are so rapidly accumulated and the reports of contemporary investigation constitute such a vast body of literature, it is imperative we have, from time to time, summaries of existing knowledge. We are indebted to the Northern California component for such a resumé and to Dr. Hahn for his part in its preparation and its presentation to us here today. They have, from their studies of the past year, distilled the findings of a very large number of investigators, giving us, in a few minutes, the substance of years of labor by the workers in this field.

It was extremely interesting to me, and I think significant, to note that although the clinical manifestations of some of the conditions we are now associating with these dietary disturbances were detected by acute observers a great many years ago yet the principle body of knowledge has been developed within the last twenty years and much of it, particularly with respect to rationalization, within the last decade. We must, therefore, accept these findings with extreme appreciation for the labor of these workers and with intelligent reservation for the refinements and correlations which they will provide, as these studies continue. And, similarly, we must proceed with some caution in our recommendations to patients lest in our zeal for benefit in one respect we do damage in another.

Dr. Hahn referred to the properties of Vitamin C and the relationship which has been suggested with regard to dental caries. These studies have been extremely interesting. As yet the exact mechanism for the therapy has not been determined, and in the meantime the over enthusiastic administration of large quantities of orange juice has occasionally produced irritation of the mucosa of the gastrointestinal tract in children, causing a diarrhea, which, in some instances, has been a difficult problem to handle.

The importance of the delicate and extremely complex relationships which surround the Calcium-Phosphorus balance was appropriately brought to our attention. Appreciation of the facts recently learned about these substances is only equaled by our interest in perplexities that they present. While we can, through the benefits of certain experiments, estimate the quantitative

requirements of these elements, yet their intricate relationship with certain tissue functions, especially the endocrine group, is still very mysterious. It is very interesting to study the work of Hamm in this connection.

There is considerable danger in placing any imperical standard with view to its widespread application. We can be greatly assisted by the use of averages and normals when we are studying a group or in the determination of general principles, but we must remember than when we deal with our patients we are confronted with a single individual. Our recommendations must be made entirely with respect to the operation of his particular body economy. In the same way that two cars of the same make and model develop individuality, burn varying amounts of fuel, and require unlike quantities of oil, so two children may require different quantities of food substances or different forms of the same food. While we may say that a particular make of car will require a given quantity of oil, when all the cars of that make and type are tabulated, we may burn out a bearing if we proceed to apply the rule without caution or individual investigation. The age, sex, hereditary background, the damage through previous or existing disease, the requirements due to the present environment and manner of administration, as well as degree of cooperation, all enter the picture when we make ourselves responsible by giving definite advice. I am sure that these matters were in the mind of the authors of this paper but they are of sufficient importance to warrant emphasis.

I have had occasional experiences in prescribing a dietary regime and a few of these were encouraging. The above matters must receive consideration and the reports of foods consumed must be extremely accurate. It is possible in some instances to obtain the required cooperation. Failure to differentiate between level and heaping tablespoons, the size of tumblers, the amount consumed between meals or from the neighbors is often enough to modify the results for it is not alone a matter of quantity or an adequate supply but, as was brought out in discussion of the importance of acid and alkali residue and calcium-phosphorus balance, the proportion has an equal bearing.

The suggestion that the orthodontist include nutritional knowledge in his equipment is indeed well taken. I believe he should act whenever possible in a consulting capacity with the dentist and pediatriation or physician, sharing a mutual responsibility in a common problem.