THE LONG AND SHORT OF NUTRITION

By Professor HENRY A. MATTILL
STATE UNIVERSITY OF IOWA

Modern nutrition was getting under way about the time of World War I; it is about as old as the science of aviation. The origins of both can be dated somewhat earlier, but in the intervening years of gradual development the few voices that were raised in high prophecy were drowned out by the derision of scoffers. Many of the classical nutritionists who had dealt with protein and calories snorted at the simple techniques of the new school as representing a bankruptcy of brains. “Anybody can feed animals, anybody can do vitamin work.” It may be admitted that anybody could have done some of it, that some of it should perhaps not have been done by anybody, but to-day it stands justified. Not only has the “importance of little things” in the diet been revealed, but remarkable progress has been made in the understanding of how these little things work. With the growth of the concept of vitamins there have been amazing advances in the study of enzymes, some of which contain vitamin components in the molecule or require them as co-enzymes. Through the jungle of cellular oxidation trails are gradually being blazed; the uninstructed traveler can not yet readily find his way, but the paths are being cleared and markers and guide-posts are being placed. The new vantage points thus provided have suggested new approaches to the study of the metabolism of all the foodstuffs, in particular, of minerals and of protein.

Discoveries in physics, in theoretical and organic chemistry and the new techniques growing out of them have furnished new tools for the solution of old problems. They have also created new problems, and have raised more questions than they have answered. Levene once said, “so long as life continues the human mind will create mysteries.” But we can also

1 From an address on the Annual Sigma Xi Day at the University of Rochester on February 22, 1944.

Science 99 (2583), 521-544.