

Take a Positive Approach

 ${f A}_{ ext{MONG}}$ developments generally given high rank among good things in our scientific progress are the vitamins. They have been a positive contribution beyond argument in most areas of the world. The misery that was wrought by diets deficient in vitamins C and B₁ and nicotinic acid, for example, are well known but difficult to picture clearly by well-fed people. Today each of those deficiencies can be prevented or remedied by addition to the diet of a relatively small amount of one of the chemical compounds mentioned. Ascorbic acid relieves scurvy, thiamin makes beriberi disappear almost magically, and niacin is a sure remedy for pellagra. Throughout the modern world those chemicals are added to food that is consumed, without supervision, by millions of people. The large amounts going down the public gullet were indicated by C. G. King in a recent report before the American Association for the Advancement of Science (page 6).

Yet today this class of materials is under attack. Not the vitamins—but chemicals added to food. The fact that a chemical compound called a vitamin is eagerly devoured and insistently demanded in foods such as bread, while at the same time "chemicals in foods" are condemned, is a significant commentary. The word "chemical" still connotes something revoltingly inedible. The average citizen probably would be shaken if told by a white-coated man holding a test tube that he was sprinkling his breakfast food and charging his coffee with a pure chemical. He could profit by some educational information and probably would like it.

In the shadow of ignorance, there is a campaign against chemicals in foods. It involves not only quacks and cranks but also conscientious people. There may even be commercial interests of such a shabby level of integrity as to encourage sentiment against "chemicals in foods" in their own competitive interests. Carried on blindly, the movement could hinder seriously our progress in nutrition by discouraging food research.

It is of prime concern to our public health that folly is not committed—either by commission or omission. Certainly the greatest of care must be taken to avoid the use of food materials in concentrations or quantities that are harmful. But we must not, in ignorance, kill progress in nutrition.

The responsibility for the present state of the situation is debatable, but the eventual results are much less so. It is not out of order to suggest that the food industry, in its lack of attention to the right kind of public education, has missed a sound and worthy investment. Miss Mary Baker, consultant of Battle Creek, Mich., told the AAAS that the homemaker's life has been made much easier by science. But Miss Baker entered a plea that the homeWALTER J. MURPHY, Editor

maker be given some understanding of what she is using. In the darkness of lack of information the perverter of truth or the preacher of sensational half-truths works most effectively.

The problem exists for the agricultural chemicals industry as well as for food additives. Only recently an article published in a technical journal advanced a theory which implied that DDT has caused the increase of a host of diseases including heart trouble, cancer, and poliomyelitis. It was the basis for sensational newspaper stories.

Legal and regulatory matters involving chemicals in food call for the entrance of the lawyer into the picture. Most lawyers are no more trained in science than scientists are trained in law. Fred Bartenstein, a lawyer, said before the AAAS: "The scientist and lawyer will have their individual responsibilities—to understand each other's problems and to work for understanding, clarity of vision, honesty, and perspective." Much more thought needs to be given to the philosophy involved in modern interrelationships between technical and scientific fields and law. The recent gift by Edwin H. Armstrong of \$50,000 to Columbia University to be used for the study of that subject deserves high praise. Let us hope that it is the start of more serious consideration of this area of thought.

The Committee on Definitions and Standards of Identity for Food, of the National Research Council, according to R. R. Williams, its chairman, is recommending that questions of safety of new materials be settled scientifically rather than by quasi-court procedure. This is a logical step in legal-scientific relationship.

Another form of concrete action is a program of public education. There is no need for the food industry to be forced into a position of defensive embarrassment any more than there is for the agricultural chemicals industry to be in such a position. The positive contributions are infinitely greater than the negative. The public is aware that it benefits by scientific advancement but has too little understanding of how it benefits. Education and information are urgently needed. Powers that are monstrous lie in the use of ignorance.

Here is an outstanding example of an opportunity for profitable cooperation between the chemical industry and the food industry. Both formally and informally, its members should work together to understand each other's individual and mutual problems. That need has been a part of the basis for establishing the JOURNAL OF AGRI-CULTURAL AND FOOD CHEMISTRY and shall continue to be an active part of its policy. We urge a strong and positive approach on the part of the industries concerned.