

Inaccurate Ideas About Sugar. The place of sugar in the diet deserves more objective consideration than it has been given of late, declared Sidney Cantor, American Sugar Refining Co. All too frequently the approach is emotional, he said, and not infrequently is based on ideas which are quite inaccurate. Food faddists recognize the fears which sometimes grow up and take advantage of them to line their own pockets.

Physiologically, said Dr. Cantor, the carbohydrate portion of the diet furnishes energy, accomplishes specific functions, spares protein, and enables the body to maintain metabolism of fats on a proper course. Economically it is possible that fat and protein consumption will fall to a minimum level with carbohydrates making up the remainder. Psychologically, sweets are a natural and satisfying part of the balanced diet. It is only when they are used as substitutes for other gratifications that the use becomes unhealthful.

Sugar has a proper place in the balanced diet, he declared, and the practice of pinning specific ills to it is not likely to be a fruitful approach. The important thing is to determine the mechanism by which diseases such as obesity and dental caries operate and treat them fundamentally rather than in the fashion which seems to be prevailing in some quarters today.

Cereal Fortification with Amino Acids. Combinations of available foods can give the needed or desired balance in a diet, where one of the foods alone may not furnish it completely, pointed out J. S. Andrews, General Mills. This can be done effectively in the case of cereals by supplementing with milk. One reason for the failure of good growth on a strictly cereal diet, he said, is the composition of cereal proteins, which have certain amino acid deficiencies that make them inadequate for human requirements. In cereals, he said, the most important deficiency is lysine. Such deficiencies may be furthered by methods employed in milling and baking, where striving for flavor and appearance, as in the browning of crust, involves practices not conservative to lysine.

The addition of 0.2% lysine can approximately double the quality of the protein, he related, but this is economically impractical today and even at prices announced for the future when lysine will become commercially available, such a step would be far more costly than is the addition of thiamine, riboflavin, niacin, and iron. He expressed the opinion that in view of the good quality protein in the American diet, addition of lysine to flour is not likely to add anything to the public health picture in this country.

Changes in Milk Industry. A change

is needed in the basic economics in the milk industry, according to H. E. O. Heineman, Pet Milk Co., who pointed out that while the industry is selling increasing amounts of nonfat solids and the state of mind of the public generally is decreasingly favorable to high-fat products, the industry is buying its milk on a butterfat content basis. Many of the actions of the industry in the past have been related to the emphasis on fat content; this is changing rapidly. There is a

great need to bring cattle breeding into line with nutritional trends, he declared.

For the first time in history, reported Dr. Heineman, the per-capita consumption of margarine is greater than that of butter; but the total fat content of the products is less per capita than it was 15 to 20 years ago. The rise in consumption of buttermilk, skim milk, cottage cheese, and low-fat ice cream indicates increased acceptance of low-fat or nonfat milk products, he observed.

Relation of Nutrition to Disease In Farm Animals Analyzed

CHICAGO.—A record-breaking gathering of more than 1500 delegates to the 45th annual conference of the American Feed Manufacturers Association were told recently that there is much uncharted ground in the world of nutrition as related to disease in domestic animals. The technical program sponsored by the AFMA Nutrition Council was composed of three individual papers, each relating the prevalence of disease in a given species of farm animal to problems of nutrition.

Diseases in dairy animals, according to W. E. Petersen of the University of Minnesota, may result from deficiency of vitamins A and D or, more frequently, from certain mineral deficiencies. Milking cows in particular have large phosphorus requirements, said Petersen, and the shortage of phosphorus in the bovine diet is common in large sections throughout the country.

Phosphorus deficiencies must usually be acute before easily recognizable symptoms appear. A somewhat less common deficiency, but one that is more easily recognized, involves iodine. The most common symptom of iodine deficiency is the bearing of goitrous calves; the deficiency is easily and inexpensively corrected by furnishing the animals with iodized salt. Trace mineral deficiencies are less well understood, and are presently recognized only when the deficiency becomes so acute as to render symptoms unmistakable, Petersen said.

Swine Disease. In swine, it has been shown experimentally that all amino acids must be present for protein synthesis, and they must be present in the right proportion, said Frank Thorp, Jr., of Michigan State College. In this respect swine differ from cattle, since the latter are able to synthesize

Some of the speakers at the AFMA meeting who discussed the relationship of nutrition to disease in farm animals. Frank Thorp, Jr. (left), Michigan State College; W. E. Peterson, University of Minnesota; John C. Hammond, O. A. Newton & Sons Co.; and J. P. Delaplane, Texas A&M College

