JOURNAL OF
Agricultural and Food Chemistry

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Food Production Has a Technical Future

THE AMERICAN FOOD MARKET is a phenomenon. Its size and character have proved the estimates made 20 years ago to be generally low. Furthermore, it is attracting an increasing percentage of the increasing per capita income of the United States. This is contrary to what would be expected on the basis of accepted economic principles.

Not only has the percentage of income spent for food increased, but nutritional qualities have improved and sanitation and service are better. The American public has developed some sense of the importance of good nutrition to the extent that this appears to influence food buying habits. It is encouraging. The level of education is rising. Recently, in AG AND FOOD (Oct. 14), Robinson presented evidence that the level of nutrition of a family bears a relationship to the degree of education of the homemaker. Scientific research is increasing the knowledge of nutrition and related sciences quite rapidly. Technical development is bringing some of that knowledge into use. Then, it does not seem an unbased assumption that there will be a continued or even increasing demand for scientific and technological work in the food industry, and that the fruits of such work may find their way into the diets of our people.

Also surprising is the observation that the average purchaser expects and demands more sanitation and convenience in food. A significant part of the increase in income being spent for food can be accounted for in the cost of these services. That cost is constituting an increasing percentage of food cost; however, not only is it making possible a better fed nation, but also it is giving us a higher standard of living in terms of something other than money. Much of the advance has been made possible by technology.

An important segment of the industries which are a part of our food production line is the packaging industry. In this issue (page 978) are discussed advances in food packaging technology. We see that the progress in materials and techniques has brought a great revolution since the start of World War II. The food store today is very different from that of a generation ago. The progress has not all been in appearance. Modern preparation and packaging of food gives better retention of nutritive value, more sanitary handling conditions, and often better retention of flavor. No other country in the world is so well served by its food industry as is the U. S.

The public has come to expect this service and to expect constant improvement. Competition and public demand make progress imperative. Food processors are giving more attention to the growing of crops. Growers are making greater use of technical advancements in fertilization and crop protection. The agricultural chemicals manufacturer, the food processor, and the nutritionist constantly are working in closer collaboration. From the first consideration of soil care and preparation through the final steps in packaging of the processed material, science and technology are finding increasing applications, and a relation of any length in the food chain is found closer to the other than previously.

The man beginning his career in the field, the executive guiding his company, and all others concerned with the production of food should contemplate the change of the past few years and look to the future with this in mind. Food production means more than merely conversion of a harvested crop into an edible material—it begins before the seed and ends on the plate. Those who take cognizance now of this interrelated chain of steps will be leading a basically important and vigorously growing industry 10 years hence. It will be a highly scientific and technical industry and the people guiding it will need breadths of technical background. Today's food industry and tomorrow's industrial leaders must take heed of this spreading integration of technology.

The Agriculture Yearbook

THE U. S. DEPARTMENT OF AGRICULTURE was founded as a service organization for the collection and dissemination of information. While many action functions have been added, it still is a very important factor in our economy through its dissemination of information. In fact, our agriculture certainly could be improved through greater attention to the information made available by the USDA.

The "1953 Yearbook of Agriculture," devoted to plant diseases, is an example of a valuable and useful collection of information which fairly cries for greater attention. American farmers are an educated group, but they cannot be specialists in every area where they need knowledge. In the 1953 yearbook, they have the services of a host of specialists writing for them on plant diseases, a subject of vast importance to the farmer.

Secretary Benson, in the introduction, mentions an estimated loss of $3 billion a year caused by plant diseases and the tragic aspect that most of this loss could be prevented by application of existing knowledge. The farmer now finding himself in a less than optimum economic situation needs every available aid to efficiency.

The usefulness of this book goes beyond the farmer alone. Many others who deal with farms and farming and with plants not on the farm can find useful assistance. We have spoken before on the need for better understanding of agricultural chemicals by dealers and salesmen. Here is a handbook which can give those people background in a collected form. Home owners and gardeners face the problem of plant diseases. Here is assistance. The yearbook of agriculture is a valuable book. It deserves to be in more libraries and more frequently off the shelf.