## **IFT Experiments in Food Science**

## STUDENT INTRODUCTION

Food Science and Technology is a diverse discipline that has been broadly defined as the application of science and engineering to the production, processing, distribution, preparation, evaluation, and utilization of food. Food scientists include chemists, microbiologists, engineers, research specialists, and quality control specialists, among others. Food technology begins with the raw agricultural products and relates primarily to the processing and preservation of commercial food products.

These experiments dealing with various aspects of food science were developed by the Career Guidance Committee of the Institute of Food Technologists to provide you, as a junior or senior high school student, with experience in a variety of scientific principles concerning foods and an appreciation of some of the unusual and interesting properties of food products.

A secondary objective is to give you a little understanding of what food science is not. There are three general areas of common misunderstanding:

- 1. Many young people confuse food science with food preparation in a restaurant. As you can see from these experiments, it isn't. Cooks and chefs need an entirely different type of training and education.
- 2. Others confuse food technology with nutrition and dietetics. Nutritionists and dietitians try to determine how much and what kinds of foods and nutrients we should have. Food scientists simply use this information in designing food processes to be sure that these needs are met in commercially available foods, including special dietary foods.
- 3. Still others confuse food science with home economics. This stems from the fact that many home economics curricula offer some course work in food science, food chemistry, and/or experimental foods. The main emphasis of home economics, however, is on food preparation in the home and in institutions such as hospitals and schools.

The Institute of Food Technologists provides career guidance materials and administers scholarships for undergraduate study in food science and technology.