

Food Science 120: Introduction to Food Science
Assignment #2: Food Processing
Value: 20 points

Current issue: Defining Processed Food

Key Course Objectives

1. Describe the basic scientific concepts regarding food composition, processing, additives, regulations, and safety
2. Explain how the functionality of food can influence food processing and quality
3. Identify and analyze current issues and their implications for food processing

Context

Consumers have become skeptical of processed foods. The industry is responding by integrating new technologies to address consumer concerns while simultaneously preserving the benefits of traditional food processing.

Read the following article

Kinder, Gentler Food Processing. Authors: VM Balasubramaniam, AE Yousef, J Wan A Husain. December 2016.

Answer the following questions

1. What are the goals of food processing? In other words what are food manufacturers trying to accomplish when they process foods?
2. What are the advantages and disadvantages of using heat (thermal) to process foods in the context of these goals?
3. What is the ESL thermal process? What is its advantage over traditional methods of food processing (sterilization and pasteurization)?
4. How have the factors that consumers use to make food purchasing decisions changed? How has this change in values influenced how manufacturers process food?