

CHAPTER 6	Thought Lab 6.1: How Do You Take Your Macromolecules? Answer Key	BLM 6.1.3A
ANSWER KEY		

Answers to Analysis Questions

1. The chart should show three examples of foods, each primarily composed of a different macromolecule.
2. Your work should show clearly how the technologies used to preserve the foods function to reduce growth of bacteria or fungi and decrease the breakdown of fats (two main reasons for food spoilage cited in the introduction of the lab.)
3. Advantages might include effectiveness in inhibiting growth of microorganisms and fat decomposition (shelf life of the food); lack of harmful side effects to the consumer; preservation of nutrients, taste, and texture of the food.
4. Disadvantages might include long-term risks to health and physiological reactions or allergies to chemical preservatives. Some techniques are disadvantageous in that they alter the taste and texture of foods; some techniques also destroy certain nutrients.

Answer to Extension Question

5. Common preservatives include sorbate, benzoate, and nitrite compounds. These compounds extend the shelf-life of food by inhibiting (either slowing or preventing) the growth of microorganisms. They also preserve food quality, in terms of taste and perceived freshness. Side effects can include skin rash, difficulty breathing, or stomach upset for sensitive individuals. Be sure to use reliable sources for your research and cite all sources of information.