

Fats: A Concentrated Energy Source

6

Facing Fats

Activity A

Name _____

Chapter 6

Date _____ Period _____

Fill in the chart below describing types of fat, the prevalent types of fatty acids they contain, and their states at room temperature. Then answer the questions at the bottom of the page about triglycerides and other lipids.

Type of Fat	Prevalent Type of Fatty Acid	State at Room Temperature
1. beef fat		
2. corn oil		
3. olive oil		
4. soybean oil		
5. lard		
6. tropical oils		
7. peanut oil		
8. butter		
9. safflower oil		

10. Why would a manufacturer want to use hydrogenation? _____

11. Are trans-fatty acids better for you than saturated fatty acids? Why? _____

12. What is a phospholipid? _____

13. What foods contain lecithin? _____

14. Why are emulsifiers used? _____

15. Name two uses for cholesterol in the body. _____

16. Which has more cholesterol—vegetable oil or animal fat? Why? _____

What's My Job?

Activity B

Chapter 6

Name _____

Date _____ Period _____

Fill in the chart by listing six functions that lipids perform in the body. In the second column, give an example of each function.

Function	Example
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.

Each "clue" below describes a part of a process involving lipids in the body. Match each clue with the appropriate term.

- | | | |
|-------|--|---------------------|
| _____ | 1. If fat is needed by the body, I break it down for immediate use. If fat is not needed right away, I convert it back to triglycerides for storage. | A. bile |
| _____ | 2. I act as an emulsifier, breaking fat into tiny droplets that can be suspended in digestive fluids. | B. bloodstream |
| _____ | 3. I am supplied by the pancreas to break triglycerides into glycerol, fatty acids, and monoglycerides. | C. body cell |
| _____ | 4. I serve as a transport line through which lipids pass on their way to the body cells. | D. chylomicrons |
| _____ | 5. With my protein and phospholipid coat, I can carry fat but be absorbed by the lymphatic system. | E. enzymes |
| _____ | 6. Fat mixes with bile inside me. | F. fat cells |
| _____ | 7. I pick up cholesterol from around the body and transfer it to other lipoproteins, who return it to the liver. | G. HDL |
| _____ | 8. I carry triglycerides and cholesterol made by the liver to the body cells so they can use them. | H. large intestine |
| _____ | 9. I store a limitless supply of triglycerides and send fatty acids through the bloodstream to other body cells for fuel. | I. LDL |
| _____ | 10. I absorb chylomicrons before they enter the bloodstream. | J. lipoproteins |
| _____ | 11. I produce bile and cholesterol. I also process returned cholesterol as a waste product for removal from the body. | K. liver |
| _____ | 12. I carry cholesterol (not triglycerides) through the bloodstream to the body. | L. lymphatic system |
| _____ | 13. I am one of four special combinations of fat and protein that help transport fats in the body. | M. small intestine |
| | | N. VLDL |