Carbohydrates, Fats, and Proteins (pp. 192–199)

Foods Supply Nutrients

1. Put a check mark next to the best answer.
   The body needs nutrients to
   _____ a. regulate bodily functions.
   _____ b. promote growth.
   _____ c. repair body tissue.
   _____ d. obtain energy.
   _____ e. all of the above.

2. Select the three classes of nutrients that supply your body with energy.
   _____ carbohydrates
   _____ water
   _____ minerals
   _____ fats
   _____ proteins
   _____ vitamins

Foods Supply Energy

3. Put a check mark next to the correct answer.
   The chemical process by which the body breaks down food to release energy is called
   _____ a. nutrients.
   _____ b. metabolism.
   _____ c. nutrition.
   _____ d. calories.
Section 8-1: Note Taking Guide (continued)

Carbohydrates

4. Complete the concept map about carbohydrates. Use the words from the box below.

| sugars | vegetables | grains | starches | fiber | cereals |

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<table>
<thead>
<tr>
<th>a. simple</th>
<th>b. complex</th>
</tr>
</thead>
<tbody>
<tr>
<td>also known as</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>d. found in</td>
</tr>
<tr>
<td>found in</td>
<td>e. found in</td>
</tr>
<tr>
<td>f. potatoes</td>
<td>g. whole-wheat breads</td>
</tr>
<tr>
<td>and</td>
<td>and</td>
</tr>
<tr>
<td>h. fruits</td>
<td>j.</td>
</tr>
<tr>
<td>and</td>
<td></td>
</tr>
<tr>
<td>i.</td>
<td>k.</td>
</tr>
</tbody>
</table>
```

5. What percentage of your daily calories should come from carbohydrates?
   _____  a. 25 to 35 percent  _____  c. 45 to 65 percent
   _____  b. 65 to 80 percent
Section 8-1: **Note Taking Guide** (continued)

**Fats**

6. Compare unsaturated and saturated fats by completing the Venn diagram. Write similarities where the circles overlap, and differences on the left and right sides. Use the phrases from the box below.

<table>
<thead>
<tr>
<th>Unaturated Fats</th>
<th>Saturated Fats</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. usually liquid at room temperature</td>
<td>e. usually solid at room temperature</td>
</tr>
<tr>
<td>b. ________________</td>
<td>f. ________________</td>
</tr>
<tr>
<td>c. ________________</td>
<td>g. ________________</td>
</tr>
<tr>
<td>d. <strong>supply energy,</strong> form cells, maintain body, temperature, protect nerves</td>
<td></td>
</tr>
</tbody>
</table>

7. Why does the body need some cholesterol?
   ____ a. to make cell membranes and nerve tissue
   ____ b. to build up emergency reserves of fat

8. Why can too much cholesterol in the diet be harmful?
   ____ a. Too much cholesterol can damage the liver.
   ____ b. Too much cholesterol can lead to blockages in blood vessels.

9. Which of the following statements is true of trans fats?
   ____ a. Trans fats have many of the negative health effects of saturated fats.
   ____ b. Trans fats have few of the negative health effects of saturated fats.
Section 8-1: **Note Taking Guide** *(continued)*

**Proteins**

10. Complete the outline by adding important details about proteins.

I. Proteins

   Proteins are nutrients that contain nitrogen, carbon, hydrogen, and **oxygen**. Proteins play an important role in the growth and repair of **the body's tissues**.

A. Amino acids

   Small units that are **bound together chemically to form proteins**
   
   Absorbed into bloodstream and reassembled as necessary

   Proteins

B. Essential amino acids

   ______________________________________________________________

   ______________________________________________________________

C. Complete and incomplete proteins

   ______________________________________________________________

   ______________________________________________________________

D. Daily protein intake

   ______________________________________________________________

   ______________________________________________________________

E. Proteins for vegetarians

   ______________________________________________________________

   ______________________________________________________________