Buying beef by the side, quarter, or in wholesale cuts requires much more consideration than buying meat at the retail market. You also spend a large amount of money at one time and expect the purchase to provide a major portion of your family’s meat needs for many weeks. For these reasons, carefully consider quantity purchases of meat in terms of cost, quantity, quality, and family needs and preferences.

When buying beef in quantity, you should understand the terms used in selling beef:

- **Carcass** - includes the entire carcass (both sides) and weighs approximately 550-625 pounds
- **Side** - one half of the carcass; includes hind and forequarter and weighs approximately 250-300 pounds
- **Hindquarter** - includes the loin and round and weighs approximately 150 pounds.
- **Forequarter** - includes the chuck and rib and weighs approximately 150 pounds

### Cost and Quantity

As a buyer, you should know the amount and cost per pound of take-home meat. Usually, meat distributors advertise and sell fresh beef on the basis of carcass, or hanging weight. This is an accepted selling practice, but it is often misunderstood. The carcass weight may be much greater than the amount of retail cuts obtained due to loss in bone, trim, and shrink during processing.

For example, if an advertisement reads “300 pounds of USDA Choice Beef, $1.30 per pound,” this means 300 pounds of carcass beef, not 300 pounds of usable retail cuts. Trimming the bone and fat away when cutting the carcass into retail cuts reduces the take-home meat considerably.

This cutting loss on a side of beef may range from 20 to 40 percent. Normally, the cutting loss will range from 25 to 30 percent. Therefore, a 300 pound carcass (side) would yield between 215 and 225 pounds of meat in retail cuts.

The cost per pound would be, for example:

\[
300 \text{ pounds of beef (carcass or hanging weight)} \\
\times 1.30 \text{ per pound} = 390.00
\]

Assume a 25 percent cutting loss:

\[
300 \text{ pounds} \times .25 = 75 \text{ pounds of bone fat, shrink, and other loss}
\]

\[
300 - 75 = 225 \text{ pounds of usable beef}
\]

\[
\frac{390.00}{225 \text{ pounds}} = 1.73 \text{ per pound of usable beef}
\]

Note: This price may or may not include cutting and wrapping, aging, and freezer storage costs.

### Using Yield Grades as a Guide

If you buy only retail cuts, you need not be concerned about yield grades, since these grades apply only to carcasses and wholesale cuts. But when buying carcasses or wholesale cuts, you should understand yield grades and try to buy beef that has been yield graded. You can find the shield-shaped yield mark stamped once on each quarter or whole sale cut. It is not rolled on the length of the carcass as is the quality grade shield.

Yield grades measure the amount of boneless, closely trimmed retail cuts from the high-value parts of the carcass: the round, loin, rib, and chuck. However, they also reflect differences in the total retail cuts. The following percentages are the expected yields of retail cuts by yield grade:

<table>
<thead>
<tr>
<th>Yield Grade</th>
<th>Yield Salable Retail Cuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≥ 79.8 or greater</td>
</tr>
<tr>
<td>2</td>
<td>75.2-79.7</td>
</tr>
<tr>
<td>3</td>
<td>70.6-75.1</td>
</tr>
<tr>
<td>4</td>
<td>66.0-70.5</td>
</tr>
<tr>
<td>5</td>
<td>≥ 65.9 or less</td>
</tr>
</tbody>
</table>

Obviously, you can afford to pay somewhat more for the higher yielding carcass. If no price differential is charged, you can get more for your money. Using the first example, compare the differences between a Yield Grade 2 and a Yield Grade 4.

Yield Grade 2 = 75.2 percent to 79.7 percent retail cuts

\[
300 \text{ pound carcass} \times 1.19 \text{ per pound} = 357
\]

\[
300 \times 77\% = 231 \text{ pounds of usable meat}
\]

\[
\frac{357}{231} = 1.54 \text{ per pound of usable meat}
\]
Yield Grade 4 = 66 percent to 70.5 percent retail cuts

300 pound carcass X $1.19 per pound = $357.00
300 X 68% = 204 pounds of usable meat

$357 \div 204 = $1.75 per pound of usable meat

$1.75 - $1.54 = 21 cents per pound more for Yield Grade 4

**Purchased Steer (or Home-raised) vs. Buying a Side of Beef**

A typical steer weighs approximately 1,000 pounds. After dressing (slaughter), the carcass weight is approximately 600 pounds. The 400 pound loss is in hide, blood, and inedible organs. The 600-pound carcass will yield an average of 70 percent retail cuts, or about 425 pounds. Use the following example to figure cost:

**Example of Purchased or Home-raised Steer**
1,000 pound steer x 70 cents per pound liveweight = $700.00
$10 fee for slaughter = $10.00
15 cents per pound for processing carcass
600 pounds X 15 cents = $90.00

**Total** $800.00

Total cost 300 pound side = $400.00

Examples of Buying a side of beef from the processor
300 pounds x $1.25 per pound = $375.00
300 pounds x $1.35 per pound = $405.00

**Study Questions and Activities**

1. Is it best to buy meat for your family in large or small quantities?
   Large___________ Small__________

   Explain the reasons for your answer in terms of cost for the quantity (carcass, side, hindquarter, or forequarter). Know the differences in these quantities of beef. Why did you select the large or the small quantity?

2. How many people are there in your family?

3. List the cuts of meat your family likes?

4. Call the local meat market, slaughterhouse, or grocery store and set up a tour of the meat market. Before you visit, study some of the terms used in selling beef: (a) Carcass, (b) Side, (c) Hindquarter, (d) Forequarter.

5. Explain what cost per pound of take-home meat means. Interview the butcher about the four types of quantity meat purchases and ask him/her to show these to you. Ask him/her about cutting loss on the different types of beef. Did the cost per pound include cutting, wrapping, aging, and freezer storage costs? Now, which quantity of beef would you purchase on these facts?

6. You are planning to freeze beef. Be sure you have freezer paper, which is moisture-vapor proof, freezer tape, a marking pencil, and a freezing bulletin from your County Extension educator. Learn the answers to these questions and practice freezing meats.
   - What is the drugstore wrap?
   - How long can you store beef? Ground beef? Organ meats?
   - What happens if the meat is stored too long or the paper comes off the package?

7. Conduct an experiment with small pieces of meat. Place one strip on a piece of waxed paper and put it in the freezer. Wrap the second piece in freezer paper, using the drugstore wrap. Store 1 month. Panbroil both strips of meat in separate pans until done. Taste and describe the two meats for taste, appearance, and quality. Discuss your experiment with your county Extension educator.