

## Chapter 9: The Complex Carbohydrates: Starches, Cellulose, Gums, and Pectins

### Review Topics

#### Be able to:

- **Describe** characteristics of the four categories of complex carbohydrates.
- **Identify** the functions of complex carbohydrates in food preparation.
- **List** five physical properties of starch and liquid mixtures that affect the selection of starches used in food products.
- **Compare** the advantages and disadvantages of the three main methods used to add starches to sauces.
- **Analyze** the role of starches in a nutritious diet.

#### Terms

- |                    |                        |                       |
|--------------------|------------------------|-----------------------|
| ▪ polysaccharide   | ▪ gelatinization       | ▪ stability           |
| ▪ macromolecule    | ▪ gelatinization point | ▪ opacity             |
| ▪ starch           | ▪ slurry               | ▪ translucency        |
| ▪ polymer          | ▪ sol                  | ▪ modified starch     |
| ▪ amylose          | ▪ paste                | ▪ cross-linked starch |
| ▪ amylopectin      | ▪ gel                  | ▪ cold water paste    |
| ▪ granules         | ▪ junction             | ▪ beurre manie        |
| ▪ cellulose        | ▪ retrogradation       | ▪ roux                |
| ▪ carbohydrate gum | ▪ syneresis            | ▪ ketosis             |
| ▪ pectin           | ▪ viscosity            | ▪ ketone bodies       |