

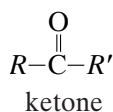
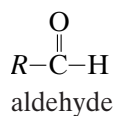
**FIGURE 14** Many common odors and flavors come from aldehydes and ketones.

## Aldehydes and Ketones

Aldehydes and ketones contain the *carbonyl group*, shown below.



The difference between aldehydes and ketones is the location of the carbonyl group. **Aldehydes** are organic compounds in which the carbonyl group is attached to a carbon atom at the end of a carbon-atom chain. **Ketones** are organic compounds in which the carbonyl group is attached to carbon atoms within the chain. These differences can be seen in their general formulas, shown below.

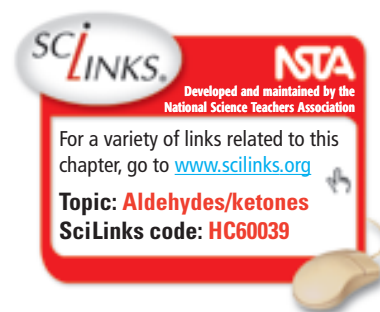
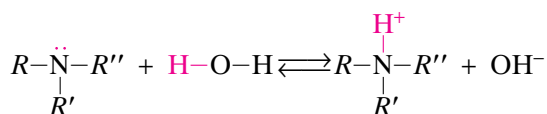


Aldehydes and ketones are often responsible for odors and flavors. **Figure 14** gives some examples.

## Amines

**Amines** are organic compounds that can be considered to be derivatives of ammonia,  $\text{NH}_3$ . Amines are common in nature. They often form during the breakdown of proteins in animal cells.

The unshared electron pair on the nitrogen atom makes amines act as weak bases in aqueous solutions, as shown below.



### extension

#### Chemical Content

Go to **go.hrw.com** for more information on functional groups.

**Keyword:** HC60RGX