Ordinary milled rice requires 20–30 min to cook to a satisfactory culinary acceptability. In some instances, the rice is soaked, washed, and steamed, requiring a total attention time of about 1 hr. The relatively long preparation time has restricted rice consumption in the United States. Thus, effort has been directed toward development of quick-cooking rice to reduce the cooking time.

Various rice varieties yield cooked rice of different textural characteristics (Juliano and Sakurai 1985; Juliano 1990). Variations in recipes also have a significant effect on the texture, flavor, and acceptability of the cooked rice.

The quality of quick-cooking rice developed over the past few years has varied considerably. For example, instant rice has been utilized by reconstituting dehydrated rice as an emergency food in Japan. However, several disadvantages have been encountered with this rice: (1) the cooking method is not popular and the cooking time is more than 20 min; (2) the cooked rice grains tend to crumble and do not taste like conventionally cooked rice; and (3) the cost per meal is higher than regular rice.

Quick-cooking rice should be cooked within 5 min, and the cooking method should be simple. After cooking, the product should match the characteristic flavor, taste, and texture of conventionally cooked rice. The
Rice must be easily processed in mass quantities and must possess good keeping quality.

The Nissin Food Company in Osaka, Japan, has developed an instant "Cup Rice," which can meet most of the conditions mentioned above. The rice is precooked under high pressure and temperature and then dehydrated. The product can be reconstituted with boiling water within 5 min in a polystyrene cup. Today, there are many kinds of instant rice products available on the market (Fig. 6-1).

Quick-cooking rice is precooked and gelatinized to some extent in water, steam, or both. The cooked or partially cooked rice is usually dried in such a manner as to retain the rice grains in a porous and open-structured condition. The finished product should consist of dry, individual kernels, substantially free of lumps or aggregates, and have approximately 1.5–3.0 times the bulk volume of the raw rice. The boiling water used in the final preparation of the rice should penetrate the rice grains in a relatively short time.

Many quick-cooking rice products, although varying in texture, bulk volume, appearance, taste, and performance qualities, are designed specifically for certain consumer uses. Some quick-cooking rice for special applications, such as in dry soup mixes, casseroles, or other dry food mixtures that have certain rehydration time requirements, were designed to be compatible with the other ingredients in the mix. Quick-cooking,