Nursing Alert

Encouraging intake of clear fluids by mouth, such as fruit juices, carbonated soft drinks, and gelatin, does not help diarrhea. These fluids usually have high carbohydrate content, very low electrolyte content, and high osmolality. Have patients avoid caffeinated beverages because caffeine is a mild diuretic and may lead to increased loss of water and sodium. Chicken or beef broth is not given because it contains excessive sodium and inadequate carbohydrate. A BRAT diet (bananas, rice, applesauce, and toast or tea) is contraindicated for the child and especially for infants with acute diarrhea, because this diet has little nutritional value (low in energy and protein), is high in carbohydrates, and is low in electrolytes (Churgay and Aftab, 2012b).

In cases of severe dehydration and shock, IV fluids are initiated whenever the child is unable to ingest sufficient amounts of fluid and electrolytes to (1) meet ongoing daily physiologic losses, (2) replace previous deficits, and (3) replace ongoing abnormal losses. Select the IV solution for fluid replacement on the basis of what is known regarding the probable type and cause of the dehydration. The type of fluid normally used is a saline solution containing 5% dextrose in water. Sodium bicarbonate may be added, because acidosis is usually associated with severe dehydration. Although the initial phase of fluid replacement is rapid in both isotonic and hypotonic dehydration, rapid replacement is contraindicated in hypertonic dehydration because of the risk of water intoxication.

After the severe effects of dehydration are under control, begin specific diagnostic and therapeutic measures to detect and treat the cause of the diarrhea. The use of antibiotic therapy in children with acute gastroenteritis is controversial. Antibiotics may shorten the course of some diarrheal illnesses (e.g., those caused by *Shigella* organisms). However, most bacterial diarrheas are self-limiting, and the diarrhea often resolves before the causative organism can be determined. Antibiotics may prolong the carrier period for bacteria such as *Salmonella*. Antibiotics may be considered, in patients who are younger than 3 months old, on immunosuppressive medication, or who have clinical signs of shock, severe malnutrition, dysentery, suspected cholera, or