Because infants and young children are unable to retain the solution after it is administered, the buttocks must be held together for a short time to retain the fluid. The enema is administered and expelled while the child is lying with the buttocks over the bedpan and with the head and back supported by pillows. Older children are ordinarily able to hold the solution if they understand what to do and if they are not expected to hold it for too long. The nurse should have the bedpan handy or, for ambulatory children, ensure that the bathroom is available before beginning the procedure. An enema is an intrusive procedure and thus threatening to preschool children; therefore, a careful explanation is especially important to ease possible fear.

A preoperative bowel preparation solution given orally or through an NG tube is increasingly being used instead of an enema. The polyethylene glycol–electrolyte lavage solution (GoLYTELY) mechanically flushes the bowel without significant absorption, thereby avoiding potential fluid and electrolyte imbalances. NuLYTELY, a modification of GoLYTELY, has the same therapeutic advantages as GoLYTELY and was developed to improve on the taste. Another effective oral cathartic is magnesium citrate solution.

## **Ostomies**

Children may require stomas for various health problems. The most frequent causes in infants are necrotizing enterocolitis and imperforate anus and, less often, Hirschsprung disease. In older children, the most frequent causes are inflammatory bowel disease, especially Crohn disease (regional enteritis), and ureterostomies for distal ureter or bladder defects.

Care and management of ostomies in older children differ little from the care of ostomies in adult patients. The major emphasis in pediatric care is preparing the child for the procedure and teaching care of the ostomy to the child and family. The basic principles of preparation are the same as for any procedure (see earlier in chapter). Simple, straightforward language is most effective together with the use of illustrations and a replica model (e.g., drawing a picture of a child with a stoma on the abdomen and explaining it as "another opening where bowel movements [or any other term the child uses] will come out"). At another time, the