

normal. Encourage the child and parents to find new recipes using suitable ingredients, such as Mexican or Chinese dishes that use corn or rice. Consult a registered dietitian to provide children and their families with detailed dietary instructions and education.

Several resources are available to assist children and parents in all aspects of coping with celiac disease. The Celiac Sprue Association\* provides support and guidance to families and supplies educational materials concerning a gluten-free diet, food sources, recipes, and travel information.

## Short-Bowel Syndrome

SBS is a malabsorptive disorder that occurs as a result of decreased mucosal surface area, usually because of extensive resection of the small intestine. Malabsorption may be exacerbated by other factors, such as bacterial overgrowth and dysmotility. The most common causes of SBS in children are necrotizing enterocolitis, volvulus, jejunal atresias, and gastroschisis ([Uko, Radhakrishnan, and Alkhouri, 2012](#)). Less frequent causes include trauma to the GI tract and total colonic aganglionosis with extension into the small bowel ([Soden, 2010](#)).

The definition of SBS includes two important findings: (1) decreased intestinal surface area for absorption of fluid, electrolytes, and nutrients; and (2) a need for PN ([Olieman, Penning, Ijsselstijn, et al, 2010](#)). The prognosis for infants with SBS has improved dramatically with survival rates between 73% to 89%; however, children on PN have a lower survival rate at approximately 60% ([Soden, 2010](#)).

## Management

The goals of therapy for infants and children with SBS include (1) preserve as much length of bowel as possible during surgery; (2) maintain optimum nutritional status, growth, and development while intestinal adaptation occurs; (3) stimulate intestinal adaptation with enteral feeding; and (4) minimize complications related to the disease process and therapy ([Uko, Radhakrishnan, and Alkhouri, 2012](#)).

Nutritional support is the long-term focus of care for children with SBS ([Uko, Radhakrishnan, and Alkhouri, 2012](#)). The initial