

practitioner if they develop dark urine or new muscle aches. Statin medications are not safe during pregnancy; therefore, sexually active adolescents need to take adequate birth control measures. Very long-term studies are unlikely to be available over decades; however, in the shorter-term studies that have been completed, statins seem to have a similar safety profile for children as they do for adults (McCrindle, Urbina, Dennison, et al, 2007). Ezetimibe is sometimes given in combination with statins to further reduce LDL cholesterol, which it accomplishes by decreasing reabsorption of cholesterol from the gut. Another class of lipid lowering drugs includes bile acid binding resins. Bile acid binding resins act by binding bile acids in the intestinal lumen. Because the intestine does not absorb them, resin binders do not produce systemic toxicity and are safe for children. Cholestyramine (Questran) and colestipol (Colestid) are both powders that are mixed with water or juice just before ingestion. Unfortunately, the vast majority of patients do not get adequate reduction in LDL cholesterol from bile acid-binding resins alone. Many cannot tolerate the medication because of the taste; gritty texture; and side effects, the most significant being constipation, abdominal pain, gastrointestinal bloating, flatulence, and nausea. Lastly, it is not common to use medications to lower triglyceride values unless they are significantly elevated (>500 mg/dl), in which case, fibrates which decrease the production of triglycerides, may be considered.

## **Nursing Care Management**

Nurses play an important role in the screening, education, and support of children with lipid abnormalities and their families. When a child is referred to a preventive cardiology clinic, it is essential that the family be adequately prepared for the first visit. Generally, the parents will be asked to keep a dietary history of the child before this visit. Sometimes they will need to complete a questionnaire regarding the child's normal dietary habits. Families should be instructed to keep their child fasting for at least 12 hours before lab work. In addition, parents should be aware that lipids should not be drawn within 3 weeks of a febrile illness because doing so can affect cholesterol values. It is important to schedule the blood test early in the morning and to arrange for nourishment immediately thereafter. At the visit, a full family history should be