

age. The data indicate that serum folate concentrations among women of childbearing age decreased 16% from 2003 to 2004 in all ethnic groups studied. Lowest serum folate levels were seen in non-Hispanic whites in 2003 to 2004; however, overall serum folate levels remained below recommended levels in non-Hispanic African Americans during all three periods studied ([Centers for Disease Control and Prevention, 2007](#)). These results indicate that nurses and other health care workers have an important task in disseminating information that may decrease the incidence of birth defects in children by promoting maternal consumption of folic acid.*

To ensure adequate daily intake of the recommended amount of folic acid, women must take a folic acid supplement, eat a fortified breakfast cereal containing 100% of the Recommended Dietary Allowance (RDA) of folic acid (e.g., Kellogg's Product 19, General Mills Total, Multigrain Cheerios Plus), or increase their consumption of fortified foods (cereal, bread, rice, grits, pasta) and foods naturally rich in folate (green, leafy vegetables and citrus fruits). For women who have had a previous pregnancy affected by NTDs, folic acid intake is increased to 4 mg under the supervision of a practitioner beginning 1 month before a planned pregnancy and continuing through the first trimester. Supplementation of 4 mg of folate should not be given solely in multivitamin preparations because of the risk of overdose of other vitamins. Drugs that affect folic acid metabolism and increase the risk of myelomeningocele should be avoided before pregnancy (if plans are to become pregnant in the near future) and during pregnancy; these include trimethoprim and the AEDs—carbamazepine, phenytoin, phenobarbital, valproic acid, and primidone ([Kinsman and Johnston, 2016](#)).

Nursing Care Management

At birth, an examination is performed to assess the integrity of the membranous cyst. During transport to the nursery, every effort is made to prevent trauma to this protective covering. In addition to the routine assessment of the newborn (see [Chapter 7](#)), assess the infant for the level of neurologic involvement. Note movement of extremities or skin response, especially an anal reflex that might provide clues to the degree of motor or sensory impairment. It is