

**Thought Lab 15.1: Folic Acid and Neural Tube Defects Answer Key****Answers to Analysis Questions**

1. The recommended daily amount of folic acid for women who could become pregnant is 0.4 mg daily prior to conception.
2. It is recommended that women should have an adequate intake of folic acid 1 month prior to conception and 3 months after conception.
3. Dietary intake of folic acid is inadequate to prevent NTDs because it is unlikely that women will reach the recommended intake of folic acid without a vitamin supplement.
4. Risk factors related to incidences of NTD such as spina bifida include: hydrocephalus, paralysis, abnormalities of the hips, and bowel and bladder problems. In addition to these problems, other problems such as tendonitis, learning disabilities, and social disorders are also common as the child develops.
5. In November 1998, the Canadian government mandated fortification of foods with folic acid based on the evidence that showed a relationship between low folic acid intake and increasing prevalence of NTDs. Health organizations had been recommending that women increase their daily intake of folic acid to 400 micrograms since 1992.

Your comments could include:

- the need for further testing to ensure that there were no negative consequences (side effects) of increased folic acid for the expectant mothers or the general population
- assessment of whether women would be able to increase their intake of folic acid (supplement it) on their own