

Information Sheet

Genetics and Folic Acid

Spina bifida is a congenital defect of the spine. It involves a failure of the vertebrae and spinal cord to develop properly and occurs within the first month of pregnancy. It is one of a number of defects collectively called neural tube defects.

The cause of spina bifida is not well understood. A combination of genetic and environmental factors seem to be involved and there are a variety of things which are known to give parents an increased risk of having a child with a neural tube defect.

The incidence of spina bifida in Australia is approximately 1 in 3 000 live births. One pregnancy in 500 involves a neural tube defect. However, if a woman or her partner has a close family history of neural tube defects, the risk of having an affected child is greatly increased.

Folic acid

One factor which is known to influence the risk of having a child with spina bifida is the amount of folic acid in the mother's diet.

Folic acid is a water-soluble vitamin found in many fruits (particularly avocado, grapefruit and oranges), green vegetables and legumes.

It has been found that a diet rich in folic acid or the taking of folic acid supplements in the month before and the first three months of pregnancy can significantly reduce the incidence of neural tube defects.

For more information on the subject, please contact SBH Queensland.

July 2001