



Fortification of Corn Masa Flour with Folic Acid

The March of Dimes is proud to have championed efforts to allow the fortification of corn masa flour with folic acid, a nutrient necessary to prevent serious, common birth defects.

Folic acid is a B vitamin needed by every cell in the body for normal growth and development. Folic acid plays a critical role in many organ systems and their function, including the generation of red blood cells. If women take folic acid before and during early pregnancy, it can prevent birth defects of the brain and spine known as neural tube defects (NTDs). Some studies show that it also may help prevent heart defects and cleft lip and palate. Many, but not all, NTDs could be prevented if women took 400 mcg of folic acid daily, before and during early pregnancy.

Fortification is a proven public health success

In 1996, the U.S. Food and Drug Administration (FDA) required that most flours, including wheat flour, be fortified with folic acid to help prevent birth defects. Since mandatory fortification took effect in 1998, NTD rates have nationwide dropped by 35%. However, rates have remained higher in the Hispanic community, presumably because they usually consume corn masa flour products rather than fortified wheat flour products.

Fortification of corn masa flour

Corn masa flour was not included in the 1996 FDA action. The March of Dimes brought together partners, including the American Academy of Pediatrics, Gruma Corporation (the major producer of corn masa flour and products sold in the U.S.), the National Council of La Raza, and the Spina Bifida Association, to file a petition with the FDA to allow the voluntary fortification of corn masa flour with folic acid. After a four-year review process, including the generation of new research data on the stability of folic acid in corn masa flour funded by the March of Dimes, the FDA approved this petition in early 2016.

Fortified corn masa flour products began appearing on store shelves in fall 2016. It is estimated that, in the future, fortification will prevent dozens of NTDs every year. The Centers for Disease Control and Prevention, the March of Dimes, and others are monitoring NTD rates in the Hispanic population closely to track the public health impact of this important step.

Key Points

- NTDs appear very early in pregnancy, sometimes before a woman knows she's pregnant. It's therefore critical for all women of childbearing age to consume adequate amounts of folate/folic acid.
- Folic acid is the synthetic form of the B vitamin folate, which is found in leafy greens, beans, and oranges, among other foods.
- In the U.S., about 3,000 pregnancies are affected by neural tube defects every year.
- Since mandatory fortification of wheat and other flours, NTD rates nationwide dropped by 35%.
- NTD rates are about 23% higher among infants born to Hispanic mothers than among those born to non-Hispanic white mothers.
- Fortification of corn masa flour is expected to prevent dozens of NTDs every year.

Contact information: Cindy Pellegrini at March of Dimes, cpellegrini@marchofdimes.org, (202) 659-1800