Folic Acid Intake and Spina Bifida in New Mexico

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Abstract

• Spina bifida is a preventable neural tube defect linked to the folic acid intake of women.2
• The rates of spina bifida are highest among women of Latin American descent.2
• Educational approach: diet plan and brochures.

Project Goals/Objectives

• Decrease rate of spina bifida in New Mexico through education and implementation of a diet plan.
• Make the diet plan affordable, broadly nutritious and culturally cohesive.

Background

• Spina bifida is caused by the failure of a fetal spinal column to close.3
• There is no known cure for spina bifida.6
• Best prevention is adequate folic acid intake by periconceptual and pregnant women.2
• In New Mexico, 5.63 out of every 10,000 live births are affected by spina bifida.1

Methods/Process

• Went to the Hispanic foods section of a local market and determined which foods would be most accessible and budget-friendly.

Results/Outcomes

In order to determine the significance of our intervention, we will compare the previously established rate of neural tube defects with a new rate, which we will determine five years after the implementation of our plan.

Conclusions/Recommendations

• We anticipate a significant decrease in the rate of spina bifida in New Mexico.
• If this is the case, we will recommend extending our program to other high risk communities.

Acknowledgments

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• All photographs included on this poster are original photographs.

References


doi:10.1002/bdra.23084

3. Folic Acid Intake and Spina Bifida in New Mexico. Hannah Hill (Biochemistry), Kathryn Liziewski (BME), Elizabeth Pellegrini (BME), Advisors: Professor Helen Vassallo (Business), Professor Jill Rulfs (Biology)