PRAMS
PREGNANCY RISK ASSESSMENT MONITORING SYSTEM

Delaware
NATAL STATS

Issue 1 Spring 2012

News from PRAMS on prenatal and newborn health issues

Vitamins & Folic Acid

IN THIS ISSUE:
The Importance of Vitamins

Folate is a water-soluble B vitamin that occurs naturally in food. Folic acid is the synthetic form of folate found in supplements and added to fortified foods.

The body makes new cells each day, and folate keeps the new cells healthy. The human body also needs folate to synthesize DNA and repair DNA.

Folic acid is a critical vitamin recommended for everyone, even more so for developing children and women who may become pregnant.

Adequate folate intake during the periconceptual period, the time just before and after a woman becomes pregnant, helps prevent serious birth defects.

Because nearly 50 percent of pregnancies are unintended, women taking folic acid ensure their own health and that of their "someday" babies.

DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health

For women in their childbearing years, vitamins are very important.

Vitamins, specifically Folate or Folic acid, have been shown to reduce the occurrence of birth defects and other health issues of pregnancy, which is the reason that women who discover they are pregnant immediately begin a vitamin regimen.

But in the earliest days of a pregnancy before a woman is aware of the changes happening within her body, vitamin deficiency can occur.

In particular, an inadequate amount of folic acid (vitamin B9) has been associated with neural tube (what becomes the brain and spinal cord) defects. Two types of birth defects are spina bifida, a serious defect of the spinal cord, and anencephaly, a condition in which the baby's brain does not develop properly and most or all of the brain tissue is absent.

The development of the neural tube is usually completed within 28 days after conception and *many women do not know they are pregnant until they reach six weeks .*

Women, especially those of reproductive age, are advised to eat foods fortified with folic acid or take a folic acid supplement for their own health, and to reduce the risk of birth defects if they become pregnant.

For folic acid and other vitamins to help prevent some major birth defects, a woman should start taking it at least one month before she becomes pregnant and while she is pregnant.

Foods rich in folic acid include leafy green vegetables, fruits, dried beans, peas and nuts. Enriched breads, cereals and other grain products also contain folic acid.

In the U.S., most women who eat foods enriched with folic acid are still not getting enough, so it's important to take a vitamin with folic acid daily! Researchers recommend the intake of 400 mg of folic acid per day.

Delaware PRAMS – Pregnancy Risk Assessment Monitoring System – is an ongoing population based surveillance system of maternal health and behaviors before, during and just after pregnancy. It is a joint project of the Centers for Disease Control and the Division of Public Health. PRAMS supplements vital records data by providing state-specific information to be used for planning and evaluating maternal health programs. Further information can be found at: http://www.cdc.gov/PRAMS

The Folic Acid Education Initiative

The Delaware Division of Public Health's (DPH) Maternal and Child Health Bureau is developing plans to launch a Folic Acid Education Campaign to raise awareness of folic acid and it's role in preventing birth defects of the brain and spine.

The campaign consists of media activities, educational materials and provider trainings.

DPH will partner with the Delaware Healthy Mother Infant Consortium's Education & Prevention Committee who will include Folic Acid promotion as part of their preconception care model.

For many more resources, please visit: http://healthywomende.com/

References:

http://www.cdc.gov/ncbddd/folicacid/recommendations.html - Accessed 3/29/2011

Delaware Health Statistics Center. Delaware Vital Statistics Annual Report, 2008. Delaware Department of Health and Social Services, Division of Public Health: 2010.

http://www.nlm.nih.gov/medlineplus/folicacid.html#cat1 - Accessed 3/29/2011

http://www.womenshealth.gov/faq/folic-acid.cfm - Accessed 3/29/2011.

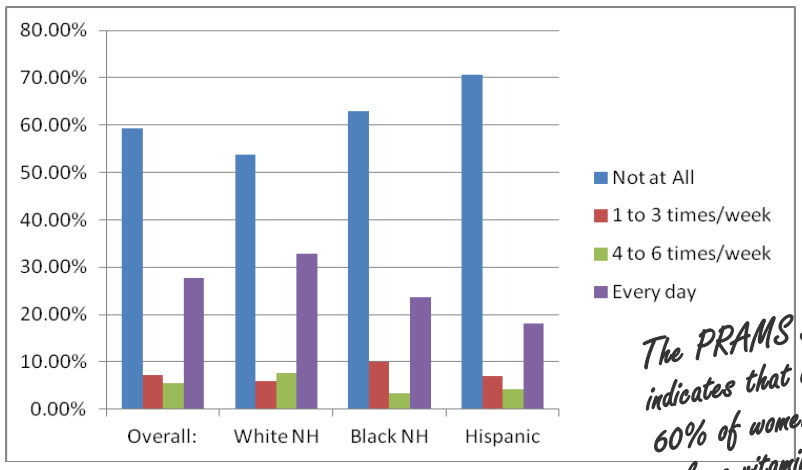
Shaw GM, Schaffer D, Velie EM, Morland K, Harris JA (1995). "Periconceptional vitamin use, dietary folate, and the occurrence of neural tube defects". Epidemiology 6 (3): 219–226.

US Preventive Services Task Force. Folic Acid to Prevent Neural Tube Defects: http://www.uspreventiveservicestaskforce.org/uspstf/uspsnrfol.htm - Accessed 11/30/2011

So *WHO* is taking their vitamins?

Graphs below show vitamin intake by age and ethnicity.

Figure 1. Vitamin use by race/ethnicity, Delaware PRAMS 2008.



The PRAMS survey indicates that almost 60% of women do not take a vitamin at all. We know the risks, we can do better!

Figure 2. Vitamin use by age group, Delaware PRAMS 2008.

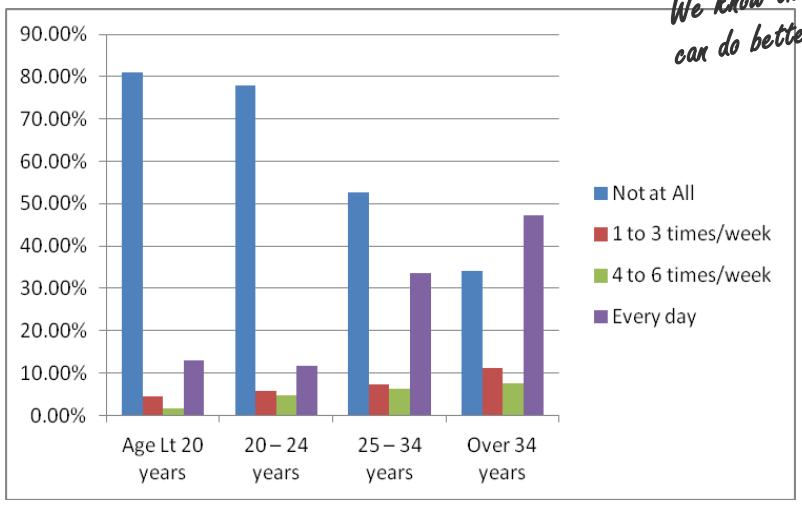
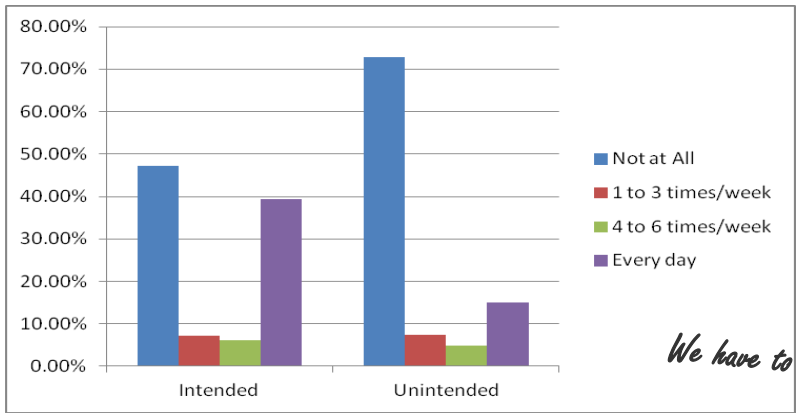


Figure 3. Vitamin use and pregnancy intention, Delaware PRAMS 2008.



We have to do better.

PRAMS survey question was "During the month before you got pregnant with your new baby, how many times a week did you take a multi-vitamin, a prenatal vitamin or a folic acid vitamin?" The choices were: I didn't take a multivitamin, prenatal vitamin, or folic acid at all; 1 to 3 times a week; 4 to 6 times a week; every day of the week. The PRAMS data reflect live births of Delaware mothers during 2008.