



# Newsletter

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## VitaGrant Project Dramatically Increases Multivitamin Use Among Women

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Contributed by Elizabeth Jensen, VitaGrant Project Manager



March of Dimes received \$2 million from the Florida Attorney General's office in 2004.

The Florida VitaGrant program, funded through a two million dollar grant awarded to the March of Dimes by the Florida Attorney General's Office, was a pre/interconception education and multi-vitamin distribution program that sought to reach women at risk for neural tube defects (NTDs). Through a partnership with the Florida Department of Health, the VitaGrant program distributed over one half million bottles of folic acid-containing multi-vitamins during 2005-2007 to women of childbearing age living in Florida. These women also received

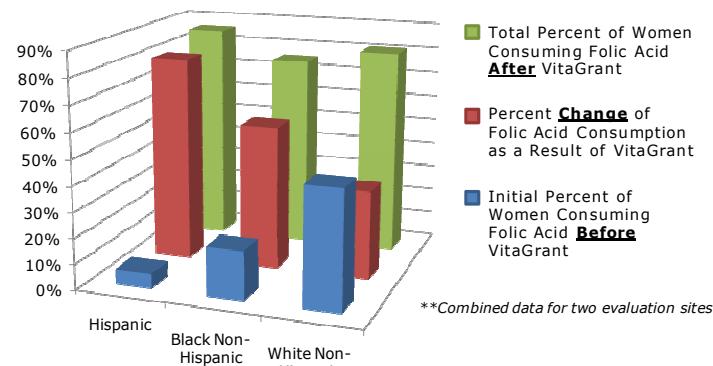
pre/interconception education. One of the keys to the success of this program was the ability to develop and maintain alliances with over 250 health and service providers throughout the state who agreed to distribute the vitamins and provide educational materials to the women they served.

Program evaluation included investigating the impact of providing free vitamins and pre/interconception education about multi-vitamin consumption,

and identifying which provider organizations served the population groups identified as most at risk for NTDs. The at-risk population groups included Mexican-Hispanic women because compared to other racial and ethnic groups they have been shown to experience the highest rates of NTD-affected pregnancies in Florida; and women younger than 24 years because they are least likely to take multivitamins.

*Continued on page 3*

### VitaGrant's Impact on Women's Consumption of Folic Acid



# *Folic Acid May Reduce Risk for Prematurity*

Contributed by SaraMarie Sargent, Research and Education Assistant, UF/IFAS/FSHN

Add another reason to the list of why everyone, especially women of childbearing age, needs folic acid every day. A new study of almost 40,000 women reports that women who took folic acid supplements for at least one year before

conception had a 50-70% decreased risk of preterm birth, birth that occurs prior to 37-weeks gestation.

Taking into account this remarkable new information, "researchers can now look at the different

reactions that folic acid causes and see which might be related to preterm labor," says Dr. Katherine Wenstrom, president of the Society of Maternal-Fetal Medicine, and professor of obstetrics and gynecology at Vanderbilt University

Medical Center in Nashville.

This study was presented at the Society for Maternal-Fetal Medicine annual meeting. For more information: [http://www.marchofdimes.com/aboutus/22684\\_28610.asp](http://www.marchofdimes.com/aboutus/22684_28610.asp).

## *New Data Questions Protective Role of Folate in Colon Cancer*

Contributed by Gail Rampsaud, MS, RD, LDN, Assistant in Nutrition Research and Education, UF/IFAS/FSHN

In the past, epidemiologic data have reported protective effects of folate on the risk for colorectal cancer and adenomas. However, two studies published in 2007 call into question this protective association. In the first study (Mason et al. 2007), there was an observed increased risk of colorectal cancer in the United States and Canada that coincided with the implementation of folic acid fortification of cereal grains. The increase was surprising because it occurred during a steady, downward trend in colorectal cancer rates observed in both

countries since 1985 and could not be accounted for by an increase in cancer screening rates or other factors. Since fortification, the downward trend for colorectal cancer cases has resumed and continues to decline over time.

In the second study (Cole et al. 2007), individuals were randomized to receive either a 1 milligram/day dose of folic acid or placebo tablet. Subjects were screened twice by colonoscopy, once at 3 years and again at 3 or 5 years later. Folic acid did not reduce adenoma risk in study subjects who all had previously

been diagnosed with adenoma and of concern was an observed trend for an increased risk for recurrence of adenoma with folic acid use.

Clearly, more research is needed and individuals who may be at higher risk for colorectal cancer or adenomas because of their age, family history or previous diagnosis of adenomas or colorectal cancer, should consult their doctor to discuss having regular screenings for detection of adenomas, which can reduce their chances of developing colorectal cancer.

The results of these

studies in no way affect the public health recommendations for folic acid and women of childbearing age - recommendations that are strongly supported throughout the world.

**All women of childbearing age should consume 400 micrograms of folic acid daily as part of a healthy diet that includes folate-rich foods.**

### **References**

Mason et al. Cancer Epidemiol Biomarkers Prev. 2007; 16(7):1325-1329.

Cole et al. JAMA 2007; 297(21):2351-2359.

## VitaGrant (continued from page 1)



Some VitaGrant partners had great success sharing the folic acid message through information boards at their facilities.

Compared to other providers, County Health Departments (CHD) served the greatest number of women in general, as well as the greatest

number and proportion of women younger than 24 years old. Non-CHD public providers served the largest proportion of Hispanics, particularly Mexican-Hispanics, whereas CHDs served a greater absolute number of both demographic groups.

Data related to changes in multivitamin use pre- and post initiation of the VitaGrant program were examined from two providers and showed significant

increases in daily vitamin consumption. Specifically, participants followed by a case management agency increased their daily multivitamin consumption from 25% to 73% ( $p \leq 0.001$ ). Multivitamin use increased from 6% to 88% ( $p \leq 0.001$ ) among participants served by a migrant association.

The results of the VitaGrant evaluation suggest that free multivitamin distribution and pre/interconception

education can dramatically increase multivitamin use among participants, particularly among at-risk populations like Mexican-Hispanics. CHDs are good choices to implement such programs, although specific populations may be better served through other types of providers.

For evaluation results or information, contact Elizabeth Jensen at [ejensen@marchofdimes.com](mailto:ejensen@marchofdimes.com).

## Research Update

Contributed by Gail Rempersaud, MS, RD, LDN, Assistant in Nutrition Research and Education, UF/IFAS/FSHN

Data from a longitudinal study that followed 965 persons aged 64 years and older for over 6 years reports that individuals with the highest intake of total folate (from diet and supplements) had a lower risk of Alzheimer's disease (hazard ratio 0.5, 95% confidence interval, 0.3 - 0.9). This lower risk was independent of other risk factors such as age, sex, education, hypertension, and heart disease, as well as the intake of vitamins B6 and B12. The study was conducted in a cohort residing in New York City. [Luchsinger et al. *Arch Neurol.* 2007;64:86-92.]

An analysis of pregnancy and birth data from seven Canadian provinces (1993-2002) found a significant reduction in the rates of neural tube defects (NTDs) across Canada following folic acid fortification. There was a greater reduction in rates in provinces with higher baseline rates of NTDs. Across all provinces included in the analysis, there was a 46 percent reduction in the rate of NTDs. The rate reduction was greater for spina bifida than for anencephaly or encephalocele. [De Wals et al. *N Engl J Med.* 2007;357(2):135-142.]

In a multisite (eight participating states) case-control study of over 10,000 mothers enrolled in the National Birth Defects Prevention Study, mothers of children with spina bifida, heart defects, and several other structural birth defects were more likely to be obese than the mothers of control infants. Obese mothers were more than 2 times likely to have an infant with spina bifida compared to control mothers who were of normal weight based on body mass index (BMI). [Waller et al. *Arch Pediatr Adolesc Med.* 2007;161(8):745-750.]

Data from the National Birth Defects Prevention Study with 1,841 cases and 2,551 nonmalformed controls delivered between 1997 and 2000 indicate some associations between parental socioeconomic status (SES) and risk for certain birth defects, including neural tube defects, orofacial clefts, and conotruncal heart defects. Risks were generally higher in households with multiple low SES indicators including parental education, parental occupation and household income. [Yang et al. *Am J Epidemiol.* 2007;Epub ahead of print. DOI: 10.1093/aje/kwm283.]

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## Florida Folic Acid Coalition

### Mission:

*Decrease the incidence of folic acid preventable birth defects and to reduce chronic disease risk in Floridians.*

### Vision:

*As a result of the Coalition's efforts, this simple primary prevention strategy will result in fewer pregnancies affected by folic acid preventable birth defects. More Floridians will experience the indirect health benefits of taking a daily multivitamin to enhance health throughout their lifespan.*



## March of Dimes and Grain Foods Foundation Team Up

Contributed by SaraMarie Sargent, Research and Education Assistant, UF/IFAS/FSHN



This purple seal will be featured on selected grain products that are enriched with folic acid.

According to two recent studies, ten years after the start of folic acid fortification, the majority of women are still not getting enough of the B vitamin. In an effort to increase consumption, the

March of Dimes Foundation and the Grain Foods Foundation have created a new "folic acid for healthy pregnancy" seal to help women choose foods that are high in folic acid. Look for this new

label, coming soon, on grain products.

### Reference

March of Dimes Foundation. ScienceDaily. 21 January 2008 < <http://www.sciencedaily.com/releases/2008/01/080111100627.htm> >.

## Around the State

Complied by Elizabeth Jensen & Staff, Florida VitaGrant Project

### October 2007

A Governor's Proclamation, initiated by the March of Dimes, declared October Folic Acid Awareness Month in Florida, as well as national Spina Bifida Awareness Month.

**Big Bend Area**  
**Leon County Public Library** - Speakers, folic acid rich lentil chili and children's activities.

### North Florida

**Grab-n-Go Breakfast** at the University of Florida - free folic acid rich breakfast multivitamin kits and information to female college students.

### Central Florida

**Southern Women's Conference** — Folic acid and spina bifida information offered to 30,000 women.

**Viva Osceola!** - One-on-one outreach to 500 women in the Hispanic community.

**Save Our Babies Shower** - Outreach to 100 expectant and new moms about the importance of folic acid every day.

**Tampa Bay Area**  
**Harvest Your Resources/Folic Acid**

**Awareness Event** - Presentation, games and goodie bags with free vitamins provided to participants.

### November 2007

**Central Florida Seminole Tribe Health Fair** - Distributed vitamins and folic acid materials at the Seminole Hard Rock Casino and Hotel.