Folic Acid Promotion Among Teens: Data and Strategies

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Learning Objectives

Participants will:

• Review the importance of folic acid for all women of reproductive age, including teens.
• Identify the sources from which women and teens can get folic acid.
• Consider barriers to folic acid supplementation and strategies to address these barriers.
• Learn about opportunities for women and teens to get folic acid-containing supplements through public and private health insurance plans.
What Is Preconception Health?

Preconception health is the health of women and men during their reproductive years.

Why does it matter?

• All women and men can benefit.
• Foundation for the health of subsequent generations.
• Key in prevention of birth defects, preterm birth, low birthweight, and related infant mortality.
Why Is Folic Acid Important?

• Folic acid is a B vitamin that our bodies use to make new cells.
• Every woman needs folic acid every day, regardless of whether she intends pregnancy.
• Folic acid helps support healthy skin, hair, and nails in addition to other health benefits.
Why Is Folic Acid Important?

- Folic acid in the month prior to conception and during early pregnancy reduces the incidence of neural tube defects (NTDs) by approximately 70%.
- Some data suggest that folic acid supplementation can reduce other categories of birth defects.
How many births are affected by NTDs?

Wisconsin Birth Defect Registry

• 2012 spina bifida births: 13
• 2012 anencephaly births: 8

Total births covered: 66,975
Important Point

Half of all pregnancies are unplanned

This figure is nearly 80% among teens
The United States Preventive Services Task Force (USPSTF) recommends that:

All women planning or capable of pregnancy take a daily supplement containing 0.4 to 0.8 mgs (400-800 mcg) of folic acid at least 4 weeks prior to conception and for the first trimester.

ACOG, AAP, AAFP, ACMG, and many other professional societies support and echo this recommendation. Wisconsin Association for Perinatal Care has revised their Folic Acid Policy Statement.
Theoretical concerns raised for women:

- Increased risk of cancer
- Masking vitamin 12 deficiency

These concerns have not been proven to be a problem.
Risks of Folic Acid - Children

• No harmful effects proven after in utero exposure.

• Possible concern for increased respiratory problems and atopy.

• Results are inconsistent.
# Folate – Vitamin B9 – Water soluble

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>Amount (mcg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken liver</td>
<td>3.5 oz</td>
<td>770</td>
</tr>
<tr>
<td>Breakfast cereals</td>
<td>1/2 to 1 1/2 cup</td>
<td>100 to 400</td>
</tr>
<tr>
<td>Braised beef liver</td>
<td>3.5 oz</td>
<td>217</td>
</tr>
<tr>
<td>Lentils, cooked</td>
<td>1/2 cup</td>
<td>180</td>
</tr>
<tr>
<td>Chickpeas</td>
<td>1/2 cup</td>
<td>141</td>
</tr>
<tr>
<td>Asparagus</td>
<td>1/2 cup</td>
<td>132</td>
</tr>
<tr>
<td>Spinach, cooked</td>
<td>1/2 cup</td>
<td>131</td>
</tr>
<tr>
<td>Black beans</td>
<td>1/2 cup</td>
<td>128</td>
</tr>
<tr>
<td>Kidney beans</td>
<td>1/2 cup</td>
<td>115</td>
</tr>
<tr>
<td>Lima beans</td>
<td>1/2 cup</td>
<td>78</td>
</tr>
<tr>
<td>Tomato juice</td>
<td>1 cup</td>
<td>48</td>
</tr>
<tr>
<td>Brussels sprouts</td>
<td>1/2 cup</td>
<td>47</td>
</tr>
<tr>
<td>Orange</td>
<td>1 medium</td>
<td>47</td>
</tr>
<tr>
<td>Broccoli, cooked</td>
<td>1/2 cup</td>
<td>39</td>
</tr>
<tr>
<td>Fortified bread</td>
<td>1 slice</td>
<td>38</td>
</tr>
</tbody>
</table>

Source: Food Values of Portions Commonly Used, 16th edition
Does Food Supply Enough Folic Acid?

- Enrichment of grains since 1998 calculated to add 200 mcg folic acid daily to diet

- Certain diets limit folate intake

- Only 50-85% bioavailable in foods
Pregnancy Risk Assessment and Monitoring System (PRAMS)

- Mail and telephone survey of women after live birth, conducted jointly by CDC and state health departments.
- Survey on mothers’ perceptions and experiences before, during, and shortly after pregnancy on many topics related to social determinants, environment, health behaviors, and health care.
- Wisconsin started PRAMS data collection in 2007.
Half of all Wisconsin mothers surveyed during 2009–2012 reported not taking a vitamin containing folic acid in the month before pregnancy.

### PRAMS Question on Folic Acid

<table>
<thead>
<tr>
<th>9. During the month before you got pregnant with your new baby, how many times a week did you take a multivitamin, a prenatal vitamin, or a folic acid vitamin?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ I didn’t take a multivitamin, prenatal vitamin, or folic acid vitamin in the month before I got pregnant</td>
</tr>
<tr>
<td>☐ 1 to 3 times a week</td>
</tr>
<tr>
<td>☐ 4 to 6 times a week</td>
</tr>
<tr>
<td>☐ Every day of the week</td>
</tr>
</tbody>
</table>
What Do the Data Show?

Disparities:

- Maternal age
- Race/ethnicity
- Maternal education
- Federal poverty level
- Medicaid status
- Pregnancy intention
No Vitamin Use the Month Before Pregnancy by Maternal Age

- Under 20 years: 80%
- 20-24 years: 71%
- 25-34 years: 44%
- 35 years and greater: 32%

Source: Wisconsin PRAMS 2012, Division of Public Health, Department of Health Services
No Vitamin Use the Month Before Pregnancy by Race/Ethnicity

- White, non-Hispanic: 44%
- Black, non-Hispanic: 67%
- Hispanic/Latina: 65%
- Other, non-Hispanic: 58%
- All mothers: 50%

Source: Wisconsin PRAMS 2012, Division of Public Health, Department of Health Services
No Vitamin Use the Month Before Pregnancy by Federal Poverty Level (FPL)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Poor (&lt;100% FPL)</th>
<th>Near-poor (100 to 199% FPL)</th>
<th>Not poor (200% FPL or more)</th>
</tr>
</thead>
<tbody>
<tr>
<td>71%</td>
<td>61%</td>
<td>33%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Wisconsin PRAMS 2012, Division of Public Health, Department of Health Services
No Vitamin Use the Month Before Pregnancy by Insurance Status Prior to Pregnancy

Source: Wisconsin PRAMS 2012, Division of Public Health, Department of Health Services
Barriers to Folic Acid Supplementation

What Women Say …

• No one ever told me to…
• Don’t see as a priority or important
• Lack of role models
• They are too big to swallow
• Upset stomach or cause constipation
• Cannot afford or don’t want to spend $ on vitamins
• Can’t remember to take them
• I don’t know…..I just don’t
Barriers to Folic Acid Supplementation

What the Research Says . . .

• Lack of knowledge about the benefits of folic acid
• Misconceptions, such as the belief that folic acid causes morning sickness
• Forgetting, or not having time to take a supplement
• Previously having a healthy pregnancy with no supplement use
• Not planning on getting pregnant.
Strategies to Address Barriers with Teens

- **Ask all young women** about their vitamin use and recommend usage.
- **Inform women of the importance** of taking folic acid even when not trying to conceive. Use messaging that resonates with young women: *Emphasize health and beauty.*
- **Discuss common side effects** of supplements and how to minimize them.
Strategies to Address Barriers

• **Suggesting memory devices**, such as keeping supplements next to her toothbrush, or setting a reminder on her cell phone.

• **Supplementation alternatives** to prenatal vitamin, multivitamin, children’s chewable or folic acid supplement.
New Opportunities for Folic Acid Access

Folic acid provision is a covered preventive service for women under the Affordable Care Act.

It is to be fully covered by insurance plans, with no co-pays or cost sharing.

These standards are also leading to changes to public insurance benefits.
Wisconsin Medicaid Policy Change

As of May 1st, 2015:

The diagnosis restriction on prenatal vitamins has been removed.

This means that prenatal vitamins—which contain folic acid—can be prescribed for ALL women ages 12-60, regardless of whether they are pregnant or not.
Private Insurance Changes

Plans that follow ACA rules and cover the list of covered preventive services should cover prescribed folic acid in some form—multivitamin, prenatal vitamin, or folic acid supplement.

Exact ages covered differ among plans.

Women can call their insurer to find out exact details.
Social Media Campaign

Find us on:

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* Instagram

http://www.folicstrong.org
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