

## Audience Profiles for the Folic Acid Campaign

### Legend

1. (MOD'97) March of Dimes Study 1997 - Based on 2001 telephone interviews with women age 18-45.
2. (MOD-FG'96 ) March of Dimes Study 1996 - Focus Group Report: 6 focus groups with 34 participants conducted in Massachusetts.
3. (HS'96) Health Style Study 1996 - Porter/Novelli Health Style Survey Study of 865 women age 18-44.
4. (LS'96) Life Style 1996 - Porter/Novelli Life Style Survey Study of 865 women age 18-44.
5. (de Kadt '96) de Kadt Marketing & Research, Inc. 1996 - 4 focus groups with 5-8 participants each (2 focus groups held at each location: Paramus, NJ and Stanford, CT).
6. (FG) Westat Focus Groups 1998 - 16 focus groups with women age 18-35: 6 Hispanic groups in Houston & Miami, 10 racially mixed groups in Atlanta, Houston, & Miami.
7. (Rheaume'96) Rheaume & Corwin 1996 - 4 focus groups on billboard message testing: 27 women age 18-28 in Columbia, SC (16 African American and 11 white participants).
8. (Bender'92) Bender, Levy, Schucker, & Yetley 1992 - Based on 1986 National Health Interview Survey of 11,775 adults (6,747 females which include 217 pregnant or lactating women).

**Note:** If two or more sources are listed after a statement, any specific percentages listed in that statement come from the first source; the other sources confirm the statement in general.

Abbreviation: MV= Multivitamins

## 1) ALL WOMEN OF REPRODUCTIVE AGE

A. Knowledge	B. Attitudes, Social Influences, Self-Efficacy	C. Behaviors	D. Communication issues
<p><b>Most women have heard of spina bifida but have not heard of neural tube defects and anencephaly.</b> (FG)</p> <p><b>Most women have heard of folic acid.</b></p> <ul style="list-style-type: none"> <li>• 66% have heard of folic acid (MOD'97) (FG)</li> <li>• 56% of 18-24 age group have heard of folic acid (MOD'97)</li> <li>• 67% of 25-34 age group have heard of folic acid (MOD'97)</li> <li>• 69% of 35-45 age group have heard of folic acid (MOD'97)</li> </ul>	<p><b>BARRIERS</b></p> <p><b>Many women felt they would not be persuaded to take MV unless they were planning a pregnancy.</b></p> <ul style="list-style-type: none"> <li>• Believe MV definitely needed during pregnancy (FG)</li> </ul> <p><b>Many barriers exist to taking MV daily: don't perceive need, forget to take, cost, size of the pill, past experience with or fear of side effects, not a daily habit, perceived increase in appetite &amp; weight gain, confusing information in media, and confidence in diet.</b></p> <ul style="list-style-type: none"> <li>• Concern about gastrointestinal effects: upset stomach, constipation, overdose, nausea (FG)</li> </ul>	<p><b>VITAMIN/SUPPLEMENT USE</b></p> <p><b>Less than one third take vitamins containing folic acid daily.</b></p> <ul style="list-style-type: none"> <li>• 32% take some type of vitamin containing folic acid on a daily basis (MOD'97)</li> <li>• Among 68% who did not take a folic acid containing supplement daily, approximately half used a supplement but either did not take one daily or took a supplement that did not contain folic acid (MOD'97)</li> <li>• 45% of women reported taking some type of vitamin or mineral supplements on a daily basis (MOD'97)</li> </ul>	<p><b>COMMUNICATION SOURCES</b></p> <p><b>Recommendation for spokesperson</b></p> <ul style="list-style-type: none"> <li>• Spokesperson should not be a celebrity but a woman/family who has had personal experience with birth defects (FG)</li> </ul> <p><b>A variety of credible organizations are mentioned: the March of Dimes, United Way, WIC, American Academy of Pediatrics, American Cancer Society, American Heart Association, public health department, Surgeon General, FDA and CDC.</b> (FG)</p> <ul style="list-style-type: none"> <li>• March of Dimes is perceived as a good charity (deKadt '96) (FG)</li> </ul>

<p><b>Majority are unaware that MV have the recommended amount of folic acid.</b></p> <ul style="list-style-type: none"> <li>From 1995-1997, there has been little change in awareness of folic acid in MV (MOD'97)</li> <li>24% believe MV contain recommended amount of folic acid (27% don't believe; 49% don't know) (MOD'97)</li> </ul> <p><b>Very few are aware that folic acid should be taken BEFORE pregnancy.</b> (FG) (de Kadt'96)</p> <ul style="list-style-type: none"> <li>Only 9% are aware folic acid should be taken before pregnancy (4% point increase from 1995) (MOD'97)</li> </ul> <p><b>Majority of women are aware of the importance of vitamins during pregnancy.</b></p> <ul style="list-style-type: none"> <li>Most women acknowledged importance of vitamins for the general health of both the mother and baby (not to prevent birth defects per se) (FG)</li> <li>58% believe consuming vitamins during pregnancy can reduce risk of birth defects (MOD'97)</li> </ul> <p><b>Most women are unaware of health benefits of folic acid in the prevention of neural tube defects.</b> (MOD'97) (de Kadt '96) (FG)</p> <ul style="list-style-type: none"> <li>Only 22% aware of Public Health Service recommendation of 400 micrograms of folic acid for all women of childbearing age, whether they are</li> </ul>	<ul style="list-style-type: none"> <li>16% of women aged 18-24 agreed they don't need to take any MV because they eat a lot of fruits, vegetables, and grains (compared to 24% of all women age 25-34, 21% of all women age 18-44) (HS'96) (MOD'97) (FG)</li> <li>20% don't believe they need MV (due to confidence in diet and feel healthy) (MOD'97) (FG)</li> <li>23% forget to take MV (MOD'97) (FG)</li> <li>Cost; size of MV; not a daily habit (FG)</li> </ul> <p><b>Less than 20% are advised by their doctors to take MV with folic acid daily.</b></p> <ul style="list-style-type: none"> <li>Only 19% of women age 18-44 agreed their doctor encourages them to take a daily MV containing folic acid (compared to 29% of all women age 18-24 and 25% of all women age 25-34) (HS'96)</li> <li>Of women who visited a physician when pregnant or considering pregnancy, most said doctor advised them to take a MV during pregnancy but no reason was given (FG)</li> </ul> <p><b>Some women are skeptical of the importance of folic acid in preventing birth defects.</b></p> <ul style="list-style-type: none"> <li>"If I (or my mother/sister/friend) have had healthy children in the past, why should I take folic acid now?" (FG)</li> </ul>	<ul style="list-style-type: none"> <li>Take MV 7 times a week: <ul style="list-style-type: none"> <li>28% of women age 18-44 (HS'96)</li> <li>18% of women age 18-24 (HS'96)</li> <li>29% of women age 25-34 (HS'96)</li> </ul> </li> <li>Prevalence of usage styles among supplement users: <ul style="list-style-type: none"> <li>54% classified as light users, 11% as moderate users, 23% as heavy users, and 12% as very heavy users (Bender '92)</li> </ul> </li> </ul> <p><b>Women age 25 and over are more likely to take vitamin containing folic acid on a daily basis.</b></p> <ul style="list-style-type: none"> <li>Take vitamin containing folic acid on daily basis: 23% of women age 18-24, 36% of women age 25-34, and 35% of women age 35-45 (MOD'97)</li> <li>Women age 25 and over are more likely than those younger to take vitamin or mineral supplements on a daily basis: 36% among women age 18-24; 44% among women age 25-34; and 49% among women age 35-45 (MOD'97)</li> </ul> <p><b>Women with a college education are more likely to take vitamin containing folic acid on a daily basis.</b></p> <ul style="list-style-type: none"> <li>Use of vitamins higher among college graduates (53%) than among women who have not graduated high school (34%) (MOD'97)</li> </ul>	<p><b>COMMUNICATION MESSAGES</b></p> <p><b>Some women are confused by nutrition information.</b></p> <ul style="list-style-type: none"> <li>28% of women age 18-44 agreed they are confused by all the nutrition information that is available today (compared to 20% of all women age 18-24, and 17% of all women age 25-34) (LS'96) (FG)</li> </ul> <p><b>Less than one third are influenced by advertising in making better buying decisions.</b></p> <ul style="list-style-type: none"> <li>31% age 18-24 agree: information from advertising helps them make better buying decisions (compared to 25% of all women age 18-44 and 29% of all women age 25-34) (LS'96)</li> </ul> <p><u>Images</u></p> <p><b>Recommendation to use graphic pictures of children with neural tube defects except on TV or places where children could see them.</b> (FG)</p> <p><b>Recommendation to use a happy healthy baby in billboards.</b> (de Kadt'96)</p> <p><u>Terminology</u></p> <p><b>Most prefer the term "folic acid" for familiarity.</b> (FG)</p> <ul style="list-style-type: none"> <li>Other suggested terms are "folate" and "Vitamin B9" (FG)</li> <li>Other suggested terms are: B-vitamin folic acid, the natural folic acid or the vitamin folic acid The term "folic acid" has</li> </ul>
---	--	---	---

<p>pregnant or not (MOD'97)</p> <p>Based on all women who have heard of folic acid:</p> <ul style="list-style-type: none"> <li>• Only some knew folic acid was for healthy baby (FG)</li> <li>• 16% are aware folic acid helps prevent birth defects (7% point increase from 1995) (MOD'97)</li> <li>• Only 1% aware folic acid prevents neural tube defects (MOD'97) (FG)</li> <li>• Only 5% are aware folic acid helps reduce risk for spina bifida in unborn children (MOD'97)</li> <li>• Only 6% aware of greater need for folic acid during pregnancy (MOD'97)</li> <li>• Some aware of greater need for folic acid during pregnancy (FG)</li> <li>• Only 11% name folic acid as important for women of childbearing age (MOD'97)</li> </ul> <p>Among those who believe taking vitamins during pregnancy can reduce risk of birth defects:</p> <ul style="list-style-type: none"> <li>• 15% mentioned low birthweight as a birth defect, 8% mentioned spina bifida, 2% mentioned neural tube defects, and 1% mentioned brain development (MOD'97)</li> <li>• 58% did not know which specific vitamins could help reduce a woman's risk of birth defects</li> <li>• However, the proportion of women who named folic acid as reducing risk</li> </ul>	<p><b>MOTIVATORS</b></p> <p><b>Motivators for taking MV daily are: feel better (have more energy), compensate for a poor diet, prevent birth defects, prevent colds, and long term health benefits.</b></p> <ul style="list-style-type: none"> <li>• Main benefits of taking MV are: compensation for poor diet, feel better, increased energy, prevent colds, and long term health benefits such as prevention of heart disease (FG)</li> <li>• Prevention of heart disease would be a motivator for some women if they believed it were true (FG)</li> <li>• 44% of all women age 18-44 agree taking a daily MV will make them feel healthier (compared to 50% of all women age 18-24 and 47% of all women age 25-34) (HS'96) (FG)</li> <li>• 66% of all women age 18-44 agreed : "I would take a daily MV containing folic acid if it would reduce my chances of having a baby with birth defects" (compared to 85% of all women age 18-24 and 76% of all women age 25-34) (HS'96) (FG)</li> <li>• Compensate for poor diet (FG)</li> <li>• 22% of all women age 18-44 agreed: "one of the reasons I take a daily MV containing folic acid is to prevent certain birth defects during future pregnancies." (compared to 37% of women age 18-24 and 32% of women age 25-34) (HS'96)</li> </ul>	<p><b>Less than a third take MV or prenatal vitamins before pregnancy.</b></p> <ul style="list-style-type: none"> <li>• 28% of women who have heard the folic acid recommendation took prenatal or MV before they conceived (compared to 15% among those who had not heard the folic acid recommendation) (MOD'97)</li> </ul> <p><b>HEALTH CARE UTILIZATION</b></p> <p><b>Vast majority have visited a physician in the last year.</b></p> <ul style="list-style-type: none"> <li>• 89% of all women age 18-44 have visited a primary care doctor at least once in the past 12 months (compared to 93% of women 18-24 and 90% of women age 25-34) (HS'96)</li> <li>• Majority see general practitioner/family physician for a check-up (HS'96)</li> </ul> <p><b>Majority of women waited to see a health care provider until after they thought they were pregnant.</b></p> <ul style="list-style-type: none"> <li>• Only 27% reported seeing a doctor before conception (MOD'97)</li> </ul> <p><b>DIETARY BEHAVIORS</b></p> <p><b>Less than one-third select foods fortified with vitamins and minerals.</b></p> <ul style="list-style-type: none"> <li>• 31% of women age 18-44 try to select foods fortified with vitamin and minerals (compared to 31% of all women age 18-24 and 33% of all women age 25-34) (LS'96)</li> <li>• Only 19% of women age 18-24 check ingredient labels when buying food (compared to 33% of all women age 25-34)</li> </ul>	<p>negative connotations (de Kadt'96) (FG)</p> <p><b>COMMUNICATION CHANNELS</b></p> <p><b>Recommendations for reaching women are: television (Spanish and English channels), women's magazines (Spanish and English), pharmacies, clinics, health departments, toll free number, and doctor's office. (FG)</b></p> <p><b>Primary sources of information for folic acid are magazine/newspaper articles; followed by radio/television (orange juice commercials) and health care providers.</b></p> <ul style="list-style-type: none"> <li>• 36% magazine/newspaper article</li> <li>• 22% radio/TV (MOD'97)</li> <li>• 15% health care provider (MOD'97)</li> <li>• 7% books (MOD'97)</li> <li>• 6% brochures at health care provider's office (MOD'97) (FG )</li> <li>• 6% friend or relative/co-worker (MOD'97)</li> <li>• 1% label/back of vitamin bottle (MOD'97)</li> <li>• Health food stores such as GNC (FG)</li> <li>• Heard of folic acid through orange juice commercials (FG)</li> </ul> <p><b>GENERAL COMMUNICATION BEHAVIORS</b></p> <ul style="list-style-type: none"> <li>• TV is the primary form of entertainment for less than one-third of women (LS'96 )</li> <li>• More than three-fourths of all women age 18-44 have gone to a movie in the past 12 months (LS'96)</li> </ul>
---	--	---	---

<p>of birth defects increased from 8% in 1995 to 14% in 1997 (MOD'97)</p> <ul style="list-style-type: none"> <li>• Among women who believe there are things a woman can do to reduce risk: 72% mentioned avoid alcohol and illicit drugs, followed by not smoking (64%), proper diet (32%), regular doctor visits/prenatal visits (19%), prenatal vitamins (13%), and folic acid (3%) (MOD'97)</li> </ul> <p><b>Most women are unaware of which food items are good sources of folic acid.</b> Based on all women who have heard of folic acid:</p> <ul style="list-style-type: none"> <li>• 16% mentioned orange juice as a good source of folic acid (10% point increase from 1995 to 1997) (MOD'97) (FG)</li> <li>• 5% mentioned green leafy vegetables (MOD'97) (FG)</li> <li>• 8% mentioned broccoli (MOD'97)</li> <li>• 11% mentioned other greens (collard, mustard, turnip) (MOD'97) (de Kadt, '96)</li> <li>• Half (51%) are unable to name a food item that is a good source of folic acid (MOD'97)</li> </ul>	<p><b>Majority would take MV daily if advised by their doctor.</b></p> <ul style="list-style-type: none"> <li>• 69% women age 18-24 agree: "I would take a MV daily if my doctor encouraged me to do so," (compared to 66% of women age 25-34; 61% of all women age 18-44) (HS'96) BUT would need to know why (FG)</li> </ul> <p>SELF-EFFICACY</p> <p><b>More than half are confident they can take MV daily for at least one month.</b></p> <ul style="list-style-type: none"> <li>• 57% of all women age 18-44 expressed confidence in remembering to take a MV daily for at least one month (compared to 56% of women aged 18-24 and 59% of women aged 25-34) (HS'96)</li> <li>• 87% believe there are things women can do to help reduce risk of having baby with birth defects (MOD'97)</li> <li>• 8% do not think there is anything a woman can do to prevent birth defects (MOD'97)</li> </ul> <p>PRENATAL CARE ISSUES (MOD'97)</p> <p><b>Majority strongly agree to the importance of prenatal care during pregnancy.</b></p> <ul style="list-style-type: none"> <li>• 99% strongly agree it is very important for pregnant woman to see a doctor during pregnancy (MOD'97)</li> <li>• 92% strongly agree drinking alcohol during pregnancy can cause birth defects (MOD'97)</li> <li>• 88% strongly agree smoking during pregnancy can cause low birthweight (MOD'97)</li> <li>• 76% strongly agree it is very important for a woman who is planning to have a child to</li> </ul>	<p>and 34% of all women age 18-44) (LS'96)</p> <ul style="list-style-type: none"> <li>• 21% don't eat cereal in an average week</li> <li>• Average number of servings of cereal for women age 18-45 was 4 servings per week (MOD'97)</li> <li>• Only 4% reported eating cereals high in folic acid (100% of recommended daily allowance) (MOD'97)</li> <li>• 78% reported eating cereals that contain 25% of the recommended daily allowance (MOD'97)</li> </ul> <p><b>Even after being informed about the amount of selected foods necessary to achieve folic acid RDA, many women strongly believe that they would rely on food alone or a combination of food and MV. (FG)</b></p>	<ul style="list-style-type: none"> <li>• Majority have used a toll free number to get information about a product or service (LS'96)</li> <li>• Many expressed interest in an 800 number from the March of Dimes (de Kadt '96)</li> <li>• Less than 20% use the internet (LS'96)</li> <li>• Majority do not own CD-ROM (HS'96)</li> <li>• Majority do not surf the World Wide Web (HS'96)</li> <li>• 3.5% of women age 18-24 agreed they do not like using computers (compared to 9.3% of women age 25-34, 8.5% of all women age 18-44) (HS'96)</li> <li>• 21% of women age 18-24 agree nutritional information on food labels determine which products and brands they buy (compared to 26% of all women age 18-44 and 26% of all women age 25-34) (LS'96)</li> </ul> <p><b>Women desire more information on this topic.</b></p> <ul style="list-style-type: none"> <li>• Women believe health care providers should be giving them this information (FG)</li> </ul>
--	---	---	---

see a doctor before she is pregnant (MOD'97)

**Majority strongly agree to the importance of taking vitamins during pregnancy, but less likely to agree to taking MV before pregnancy.**

- 84% strongly agree it is important to take MV during pregnancy (MOD'97) (FG) (de Kadt'96)
- Women are less likely to strongly agree with need for MV before pregnancy (MOD'97) (FG). 47% strongly agree women should take MV before pregnancy (MOD'97)

**After being informed of the folic acid recommendation, most would be very willing to take MV with folic acid daily.**

Given that Public Health Service recommends folic acid, willingness of women to buy and take daily MV that contain folic acid:

- 63% would be very willing (MOD'97)
- 26% somewhat willing (MOD'97)
- 10% not willing (MOD'97)

**[This finding is only somewhat supported in focus groups; very dependent on pregnancy intention status- women who intend to get pregnant are more willing to take daily MV with folic acid than women not intending pregnancy.] (FG)**

SOCIAL INFLUENCES

**Most of their female friends do not take a daily MV to reduce birth defects.**

	<ul style="list-style-type: none"> <li>• Only 18% agree most of their female friends take a daily MV to reduce the chances of having a baby with certain birth defects (compared to 20% for women age 18-24, and 22% for women ages 25-34) (HS'96)</li> </ul> <p><b>Nearly half agree significant others are pleased with healthy behaviors.</b></p> <ul style="list-style-type: none"> <li>• 40% of all women age 18-44 agreed "people who matter most to me are pleased if I eat a low-fat diet." (compared to 30% of women age 18-24, and 42% of women age 25-34) (HS'96)</li> <li>• 45% of all women age 18-44 agreed "people who matter most to me are pleased if I exercise regularly." (same as percentage of all women age 18-24, and all women age 25-34) (HS'96)</li> </ul>		
--	---	--	--

## 2) HISPANIC WOMEN OF REPRODUCTIVE AGE

A. Knowledge	B. Attitudes, Social Influences, Self-Efficacy	C. Behaviors	D. Communication issues
<p><b>Most are aware of folic acid, but not of its importance in the prevention of birth defects.</b></p> <ul style="list-style-type: none"> <li>• Most have heard of folic acid but do not know what it is for (FG)</li> <li>• Only 42% agreed that taking a daily MV containing folic acid will reduce a woman's chance of having a baby with certain birth defects (compared to 49% of all women age 18-44) (HS'96)</li> <li>• Most are unaware of the PHS folic acid recommendation (FG)</li> </ul> <p><b>Awareness of folic acid is higher among Hispanics who have been pregnant. (FG)</b></p> <p><b>Most are not aware of spina bifida, neural tube defects, or anencephaly. (FG)</b></p> <p><b>Most are unaware that folic acid should be taken before pregnancy. (FG)</b></p> <p><b>Most are unaware that folic acid is in certain foods. (FG)</b></p>	<p><b>BARRIERS</b></p> <p><b>Primary barrier to vitamin use is the perception of increased appetite and subsequent weight gain.</b></p> <ul style="list-style-type: none"> <li>• Perceive MV use will increase appetite and lead to weight gain (FG)</li> </ul> <p><b>Many other barriers exist to taking daily MV: lack information on benefits, believe MV are not necessary everyday, perceive vitamins as remedies, perceive vitamins cause dizziness, perceive MV use not part of their culture, and perceive vitamins are more suitable for men.</b></p> <ul style="list-style-type: none"> <li>• Perceive MV use among adults as an "American concept" (FG)</li> <li>• Believe vitamins are more appropriate for men than women; are for athletes or people who exercise a lot; for those with a health problem (FG)</li> <li>• Believe vitamins are for people who do not eat right (FG)</li> <li>• Believe MV are not necessary everyday (FG)</li> <li>• Perceive vitamins as remedies and not as a preventive measure (FG)</li> <li>• Perceive vitamins cause dizziness (FG)</li> <li>• Concern about gastrointestinal effects: upset stomach, and nausea (FG)</li> <li>• 20% agreed that they often get an upset stomach after they take a MV (compared to 14% of all women age 18-44) (HS'96) (FG)</li> <li>• Concern about darkening of urine (FG)</li> </ul>	<p><b>VITAMINS/SUPPLEMENT USE</b></p> <p><b>Among Hispanic women who are taking vitamins, vitamin use is sporadic. (FG)</b></p> <ul style="list-style-type: none"> <li>• Some Hispanics take vitamins and minerals as separate supplements such as iron, calcium, and vitamin C</li> </ul> <p><b>One-fourth take folic acid daily.</b></p> <ul style="list-style-type: none"> <li>• 25% Take MV 7 times a week (compared to 27% of all women 18-44) (HS'96)</li> </ul> <p><b>Childhood is used as a frame of reference for vitamin use.</b></p> <ul style="list-style-type: none"> <li>• Nearly all made reference to childhood when they were given vitamins by their mothers to promote "strong," "healthy," and "robust " children (FG)</li> </ul> <p><b>DIETARY BEHAVIORS</b></p> <p><b>Less than half select foods which are fortified with vitamins.</b></p> <ul style="list-style-type: none"> <li>• 44% try to select foods that are fortified with vitamins and minerals (compared to 31% of all women age 18-44) (LS'96)</li> </ul> <p><b>Less than half check ingredient labels when buying food.</b></p> <ul style="list-style-type: none"> <li>• 38% check ingredient labels when buying food (compared to 34% of all women age 18-44) (LS'96)</li> </ul>	<p><b>COMMUNICATION CHANNELS</b></p> <p><b>Recommendations for channels from bilingual Hispanics are: television, magazines, brochures, pharmacies, health care providers' office, and family planning classes.</b></p> <ul style="list-style-type: none"> <li>• Television (commercials during soap opera), magazines, brochures, doctor's offices, vitamin chart in a pharmacy, and sex education and family planning classes (FG)</li> </ul> <p><b>Recommendations from Spanish-speaking Hispanics are: Hispanic television channels, Hispanic radio stations, and pamphlets in Spanish. (FG)</b></p> <p><b>COMMUNICATION SOURCES</b></p> <p><b>The March of Dimes and La Liga Contra El Cancer (The League Against Cancer) were mentioned as credible organizations. (FG)</b></p> <p><b>Recommendations for spokesperson are: woman who has had personal experience or Hispanic spokesperson from a cancer organization such as La Liga Contra El Cancer. (FG)</b></p>

- For Hispanics not taking vitamins, commonly held beliefs are: too much vitamin is bad for you, adults perceive MV are for children, and don't want to become dependent on taking MV (FG)
- Some are skeptical of the importance of folic acid in preventing birth defects (FG)

**Less than 20% state their doctor advises daily MV with folic acid to prevent birth defects.**

- Only 19% agreed that their doctor encourages them to take a daily MV containing folic acid to prevent birth defects during future pregnancies (same percentage as all women age 18-44) (HS'96) (FG)
- Of women who visited a physician when considering pregnancy, doctors mentioned prenatal vitamins but did not explain why (FG)

**MOTIVATORS**

**Motivators for taking MV daily are: enhance physical appearance, feel healthier, reduce PMS, remedy a disease/condition, supplement diet, prevent colds/flu, prevent memory loss, reduce birth defects, and prevent long term health problems such as heart disease.**

- Beauty was an important consideration when thinking about taking MV. Many would take a MV if they believed it would make their hair, skin, and nails look better. (FG, Houston; not Miami)
- 66% agreed that they would take a MV with folic acid if it would reduce chances of having a baby with birth defects (same as percentage of all women age 18-44) (HS'96) (FG)

**HEALTH CARE UTILIZATION**  
**Majority have visited a physician in the last year.**

- 86% have visited a primary care doctor at least once in the past 12 months (compared to 89% of all women 18-44) (HS'96)

**For more acculturated Hispanics, statistics and studies conducted by a reputable organization such as March of Dimes would be more credible.** (FG)

**COMMUNICATION MESSAGE**  
**Women desired more information regarding folic acid.** (FG)

Terminology  
**There was no consensus on the preference of terms for folic acid.** (FG)

Images  
**Recommendation to use graphic pictures of birth defects.** (FG)

Channels Used  
**Most do not make purchasing decisions based on advertising.**  

- Only 35% agree: information from advertising helps them make better buying decisions (compared to 25% of all women age 18-44) (LS'96) (FG)

- Among bilingual Hispanics who do not take vitamins, pregnancy intention would be a motivator (FG)
  - 24% agreed one of the reasons they take a daily MV containing folic acid is to prevent certain birth defects (compared to 22% of all women age 18-44) (HS'96)
  - Only 39% agreed taking a daily MV will make them feel healthier (compared to 44% of all women age 18-44) (HS'96)
  - Perceive MV will add energy, and make one feel their best both psychologically (assist in fighting depression) and physically (slow down aging process) (FG)
  - 58% would take a MV daily if doctor encouraged them to do so (HS'96) (FG)
  - Among Hispanics not taking vitamins, a motivator to take MV was the reduction of PMS (FG)
  - To remedy a condition or deficiency such as anemia (FG)
  - To supplement their diet, make up for a lack of a particular vitamin or mineral in their diet (FG)
  - To prevent colds/flu, heart disease, and memory loss (FG). To prevent heart disease was a motivator especially for Spanish speaking groups who take some vitamins (FG)
- Most would take MV if advised by their health care provider and if they were planning on getting pregnant. (FG)**

SELF-EFFICACY

**Less than half are confident they can take MV daily for at least one month.**

- Only 44% expressed confidence in remembering to take a MV daily for at least one month (compared to 57% of all women age 18-44) (HS'96)

SOCIAL INFLUENCES

**Among Hispanics not taking vitamins, friends, or family members were perceived as someone they trusted rather than their doctor. (FG)**

**Most of their female friends do not take a daily MV to reduce birth defects.**

- Only 20% agree most of their female friends take a daily MV to reduce the chances of having a baby with certain birth defects (compared to 18% of all women age 18-44) (HS'96)

**Nearly half agree significant others are pleased with healthy behaviors.**

- 48% agreed "people who matter most to me are pleased if I eat a low-fat diet" (compared to 40% of all women age 18-44) (HS'96)
- 58% agreed "people who matter most to me are pleased if I exercise regularly" (compared to 45% of all women age 18-44) (HS'96)

### 3) AFRICAN-AMERICAN WOMEN OF REPRODUCTIVE AGE

A. Knowledge	B. Attitudes, Social Influences, Self-Efficacy	C. Behaviors	D. Communication issues
<p><b>Less than half are aware of the importance of folic acid in reducing birth defects.</b></p> <ul style="list-style-type: none"> <li>Only 38% agreed that taking a daily MV containing folic acid will reduce a woman's chance of having a baby with certain birth defects (compared to 49% of all women age 18-44) (HS'96)</li> </ul>	<p><b>BARRIERS</b></p> <p><b>Important barriers to taking MV daily include: confidence in diet, confusion about nutrition information, and perceive MV will increase weight.</b></p> <ul style="list-style-type: none"> <li>28% agreed that they don't need to take any MV because they eat a lot of fruits, vegetables, and grains (compared to 21% of all women age 18-44) (HS'96)</li> <li>9% agreed people who take a MV daily are too health conscious (compared to 5% of all women age 18-44) (HS'96)</li> <li>Some perceive MV increase fertility (FG)</li> <li>Perceive MV make you gain weight (FG)</li> </ul> <p><b>Majority of doctors do not advise women to take daily MV with folic acid to prevent birth defects.</b></p> <ul style="list-style-type: none"> <li>Only 18% agree their doctor encourages them to take a daily MV containing folic acid to prevent birth defects during future pregnancies (compared to 19% of all women age 18-44) (HS'96)</li> </ul> <p><b>MOTIVATORS</b></p> <p><b>Several motivators for taking MV daily are: feel better, prevent heart disease, reduce birth defects, and advice from doctor.</b></p> <ul style="list-style-type: none"> <li>To feel good and for more energy (FG)</li> <li>Frequently indicated that preventing heart disease would be a motivator to taking a MV, if they believed it were true (FG)</li> <li>22% agreed one of the reasons they take a daily MV containing folic acid is to prevent certain birth defects (same percentage as all women age 18-44) (HS'96)</li> </ul>	<p><b>HEALTH CARE UTILIZATION</b></p> <p><b>Majority have visited a physician in the last year.</b></p> <ul style="list-style-type: none"> <li>89% have visited a primary care doctor at least once in the past 12 months (same percentage as all women age 18-44) (HS'96)</li> </ul> <p><b>VITAMIN/ SUPPLEMENT USE</b></p> <p><b>Majority do not take MV daily.</b></p> <ul style="list-style-type: none"> <li>27% take MV 7 times a week (same percentage as all women age 18-44) (HS'96)</li> </ul> <p><b>DIETARY BEHAVIORS</b></p> <p><b>Approximately a third select foods which are fortified with vitamins and minerals.</b></p> <ul style="list-style-type: none"> <li>39% try to select foods that are fortified with vitamins and minerals (compared to 31% of all women age 18-44) (LS'96)</li> <li>35% check ingredient labels when buying food (compared to 34% of all women age 18-44) (LS'96)</li> </ul>	<p><b>COMMUNICATION MESSAGES</b></p> <p><b>Some women find nutritional information and advertising helpful in making decisions.</b></p> <ul style="list-style-type: none"> <li>46% agree information from advertising helps them make better buying decisions (compared to 25% of all women age 18-44) (LS'96)</li> <li>34% agree nutritional information on food labels determine which products and brands they buy (compared to 26% all women age 18-44) (LS'96)</li> <li>12% agree "I am confused by all the nutrition information that is available today." (compared to 28% of all women age 18-44) (LS'96) (FG)</li> </ul>

	<ul style="list-style-type: none"> <li>• Only 59% agreed that they would take a MV containing folic acid if it would reduce chances of having a baby with birth defects (compared to 66% of all women age 18-44) (HS'96)</li> <li>• 30% agreed they are trying to eat better because a doctor/health professional advised them to (compared to 20% of all women age 18-44) (HS'96)</li> </ul> <p><b>Half would take MV daily if advised by their doctor.</b></p> <ul style="list-style-type: none"> <li>• 50% agreed that they would take a MV if their doctor encouraged them to do so (compared to 61% of all women age 18-44) (HS'96)</li> </ul> <p>SELF-EFFICACY</p> <p><b>Half are confident they can take MV daily for at least one month.</b></p> <ul style="list-style-type: none"> <li>• 50% expressed confidence in remembering to take a MV daily for at least one month (compared to 57% of all women age 18-44) (HS'96)</li> </ul> <p><b>More than half are confident they could eat five servings of fruit and vegetables daily.</b></p> <ul style="list-style-type: none"> <li>• 64% agreed they are confident they could eat 5 or more servings of fruits and vegetables each day (compared to 39% of all women age 18-44) (HS'96)</li> </ul> <p>SOCIAL INFLUENCES</p> <p><b>Most of their female friends do not take a daily MV to reduce birth defects.</b></p> <ul style="list-style-type: none"> <li>• Only 19% agreed most of their female friends take a daily MV to reduce the chances of having a baby with certain birth defects (compared to 18% of all women age 18-44) (HS'96)</li> </ul>		
--	---	--	--

	<p><b>Half agree significant others are pleased with healthy behaviors.</b></p> <ul style="list-style-type: none"><li>• 50% agree "people who matter the most to me are pleased if I exercise regularly" (compared to 45% of all women age 18-44) (HS'96)</li></ul> <p><b>Recent Caribbean immigrants view MV use as an "American" concept. (FG)</b></p>		
--	--	--	--

## 4) WOMEN PLANNING TO GET PREGNANT WITHIN ONE YEAR

A. Knowledge	B. Attitudes, Social Influences, Self-Efficacy	C. Behaviors	D. Communication issues
<p><b>Majority of women are aware of the importance of folic acid in preventing birth defects.</b></p> <ul style="list-style-type: none"> <li>68% of women agree taking a daily MV containing folic acid will reduce woman's chances of having a baby with certain birth defects (compared to 49% of all women age 18-44) (HS'96)</li> </ul> <p><b>Majority are unaware of benefits to taking MV prior to pregnancy.</b></p> <ul style="list-style-type: none"> <li>Many knew of the benefits of taking a prenatal vitamin during pregnancy, but not about the benefits of taking vitamins prior to pregnancy (FG)</li> </ul>	<p><b>BARRIERS</b></p> <p><b>A few barriers to taking MV daily are: nausea, constipation, perception of vitamins as chemicals, size of the pill, and they have had or know others who have had healthy babies without taking MV:</b></p> <ul style="list-style-type: none"> <li>Size of the pill (FG)</li> <li>Perceive no immediate benefits (FG)</li> <li>Concern about gastrointestinal effects: upset stomach, heart burn, nausea, belching and constipation (FG)</li> <li>55% wouldn't take a MV if it upset their stomach (HS'96) (FG)</li> </ul> <p>Of the women taking some vitamins, barriers to taking MV daily are:</p> <ul style="list-style-type: none"> <li>Don't perceive need for taking MV daily (FG)</li> <li>Perceive weight gain (FG)</li> <li>Perceive vitamins are chemicals (FG)</li> </ul> <p>Of the women not taking MV, barriers to taking MV daily are:</p> <ul style="list-style-type: none"> <li>Unfamiliar with vitamins (FG)</li> <li>Inconvenient to take with food (FG)</li> <li>Not needed if eating right (FG)</li> <li>Bad taste (FG)</li> </ul> <p><b>Less than half state their doctor advises them to take a daily MV with folic acid to prevent birth defects.</b></p> <ul style="list-style-type: none"> <li>39% agree their doctor encourages them to take a daily MV containing folic acid to prevent birth defects during future pregnancies</li> </ul>	<p><b>VITAMIN/SUPPLEMENT USE</b></p> <p><b>Half take MV daily.</b></p> <ul style="list-style-type: none"> <li>50% take MV 7 times a week (compared to 27% of all women age 18-44) (HS'96)</li> </ul> <p><b>Most prefer a combination of food and MV.</b></p> <ul style="list-style-type: none"> <li>Of the women taking some vitamins, most prefer combination method of food and MV (FG)</li> </ul> <p><b>HEALTH CARE UTILIZATION</b></p> <p><b>Majority have visited a physician in the last year.</b></p> <ul style="list-style-type: none"> <li>93% of all women age 18-44 have visited a primary care doctor at least once in the past 12 months (compared to 89% of all women age 18-44) (HS'96)</li> </ul> <p><b>DIETARY BEHAVIORS</b></p> <p><b>Nearly a third select foods fortified with vitamins.</b></p> <ul style="list-style-type: none"> <li>31% try to select foods that are fortified with vitamins and minerals (same percentage as all women age 18-44) (LS'96)</li> <li>30% check ingredient labels when buying food (compared</li> </ul>	<p><b>COMMUNICATION MESSAGES</b></p> <p><b>Majority of the women are not confused by nutrition information.</b></p> <ul style="list-style-type: none"> <li>Only 18% agree they are confused by all the nutrition information that is available today (compared to 28% of all women age 18-44) (LS'96) (FG)</li> <li>28% agree information from advertising helps them make better buying decisions (compared to 25% of all women age 18-44) (LS'96)</li> <li>47% agree they make a point to read or watch stories about nutrition (compared to 40% of all women age 18-44) (HS'96)</li> </ul> <p><b>COMMUNICATION CHANNELS</b></p> <p><b>Recommendation to use television commercials or clinics as communication channels.</b></p> <ul style="list-style-type: none"> <li>Of the women taking some vitamins, they suggest television commercials during or after soap operas and schools with clinics for adolescent mothers as possible communication channels (FG)</li> </ul>

	<p>(compared to 19% of all women age 18-44) (HS'96)</p> <ul style="list-style-type: none"> <li>• Of women who visited a physician when considering pregnancy, doctor encourages daily MV but does not explain the reasoning behind the advice (FG)</li> </ul> <p><b>MOTIVATORS</b>  <b>Motivators to taking MV daily include: long term health benefits, prevent birth defects, feel healthier, and doctor's advice.</b></p> <ul style="list-style-type: none"> <li>• 54% agree one of the reasons they take a daily MV containing folic acid is to prevent certain birth defects (compared to 22% of all women age 18-44) (HS'96)</li> <li>• 94% of women agree they would take a daily MV containing folic acid if it would reduce their chances of having a baby with birth defects (compared to 66% of all women age 18-44) (HS'96) (FG)</li> <li>• 54% agree taking a daily MV will make them feel healthier (compared to 44% of all women age 18-44) (HS'96) (FG)</li> </ul> <p>Of the women taking some vitamins, motivators commonly cited are:</p> <ul style="list-style-type: none"> <li>• MV add years to your life; long term health benefits such as prevent heart disease (FG)</li> <li>• Compensate for a poor diet (FG)</li> <li>• "To feel my best," for more energy (FG)</li> </ul> <p><b>Majority would take a MV daily if advised by their doctor.</b></p> <ul style="list-style-type: none"> <li>• 78% agree they would take a MV daily if their doctor encouraged them to do so (compared to 61% of all women age 18-44) (HS'96) (FG)</li> </ul>	<p>to 34% of all women age 18-44) (LS'96)</p> <ul style="list-style-type: none"> <li>• 15% drank 100% orange juice or grapefruit juice 7 times per week on average during past year (compared to 11% of all women age 18-44) (HS'96)</li> <li>• 13% ate green salad 7 times per week on average during the past year (compared to 8% of all women age 18-44) (HS'96)</li> </ul>	
--	--	---	--

<p>SELF-EFFICACY  <b>More than two-thirds are confident they can take MV daily for at least one month.</b></p> <ul style="list-style-type: none"> <li>69% expressed confidence in remembering to take a MV daily for at least one month (compared to 57% of all women age 18-44) (HS'96)</li> </ul> <p>SOCIAL INFLUENCES  <b>Majority of their female friends do not take a daily MV to reduce birth defects.</b></p> <ul style="list-style-type: none"> <li>Only 30% agree most of their female friends take a daily MV to reduce the chances of having a baby with certain birth defects (compared to 18% of all women age 18-44) (HS'96)</li> </ul>		
--	--	--

## 5) WOMEN PLANNING PREGNANCY IN THE FUTURE

A. Knowledge	B. Attitudes, Social Influences, Self-Efficacy	C. Behaviors	D. Communication issues
<p><b>Some are aware of folic acid from orange juice commercials.</b></p> <ul style="list-style-type: none"> <li>Some have heard of folic acid from orange juice commercials (FG)</li> </ul> <p><b>Most have heard of spina bifida but have not heard of neural tube defects and anencephaly.</b> (FG)</p> <p><b>More than half of the women are aware of the importance of folic acid in preventing birth defects.</b></p> <ul style="list-style-type: none"> <li>56% agree taking a daily MV containing folic acid will reduce a woman's chance of having a baby with certain birth defects (compared to 49% of all women age 18-44) (HS'96)</li> </ul> <p>[This was not supported in the focus groups. Very few were aware of the importance of folic acid in preventing birth defects. (FG)]</p>	<p><b>BARRIERS</b></p> <p><b>Many barriers exist for taking MV daily: confidence in diet, size of the pill, perceive MV as not natural, allergic reaction, conflicting nutrition information, and have had healthy babies without folic acid supplement.</b></p> <ul style="list-style-type: none"> <li>21% agree they don't need to take any MV because they eat a lot of fruits, vegetables, and grains (compared to 21% of all women age 18-44) (HS'96)</li> <li>Folic acid message is not relevant to them (FG)</li> <li>Perceive MV are not natural</li> <li>Concern about gastrointestinal effects: nausea and constipation (FG)</li> <li>Among women not currently taking MV, most indicated they would take MV only when actually planning a pregnancy (FG)</li> <li>Confidence in diet (FG)</li> </ul> <p>Of the women who take some vitamins, barriers to daily use are:</p> <ul style="list-style-type: none"> <li>Confidence in diet (FG)</li> <li>Perceive MV as unnatural (FG)</li> <li>Past experience with allergic reactions (FG)</li> <li>Conflicting nutrition information (FG)</li> </ul> <p><b>Less than a third state their doctor advises daily MV with folic acid to prevent birth defects.</b></p> <ul style="list-style-type: none"> <li>Only 27% agree their doctor encourages them to take a daily MV containing folic acid to prevent birth defects during future pregnancies (compared to 19% of all women age 18-44) (HS'96)</li> <li>Of women who visited a physician when</li> </ul>	<p><b>VITAMIN/SUPPLEMENT USE</b></p> <p><b>Nearly half take supplements daily, only one-fifth take MV daily.</b></p> <ul style="list-style-type: none"> <li>45% take supplements on a daily basis (HS'96)</li> <li>21% take MV 7 times a week (compared to 27% of all women age 18-44) (HS'96)</li> <li>Of the women who take some vitamins, most prefer combination method of food and MV (FG)</li> </ul> <p><b>DIETARY BEHAVIORS</b></p> <p><b>Less than one-third select foods fortified with vitamins.</b></p> <ul style="list-style-type: none"> <li>30% try to select foods fortified with vitamins and minerals (compared to 31% of all women age 18-44) (LS'96)</li> </ul> <p><b>HEALTH CARE UTILIZATION</b></p> <p><b>Nearly all have visited a physician in the last year.</b></p> <ul style="list-style-type: none"> <li>92% have visited a doctor at least once in the past 12 months (compared to 89% of all women 18-44) (HS'96)</li> </ul>	<p><b>COMMUNICATION CHANNELS</b></p> <p><b>Recommendation to use vitamin racks as a communication channel.</b></p> <ul style="list-style-type: none"> <li>Vitamin racks at the store were a recommendation for folic acid message location (FG)</li> </ul> <p><b>COMMUNICATION MESSAGES</b></p> <p><b>Nearly half are attentive to nutrition information.</b></p> <ul style="list-style-type: none"> <li>48% agree they make a point to read or watch stories about nutrition (compared to 40% of all women age 18-44) (HS'96)</li> <li>17% agree they are confused by all the nutrition information that is available today (compared to 28% of all women age 18-44) (LS'96) (FG)</li> <li>28% agree information from advertising helps them make better buying decisions (compared to 25% of all women age 18-44) (LS'96)</li> <li>24% agree nutritional information on food labels determine which products and brands they buy (compared to 26% all women age 18-44) (LS'96)</li> <li>31% check ingredient labels when buying food (compared to 34% all women age 18-44) (LS'96)</li> </ul>

<p><b>Most are unaware of need for folic acid before pregnancy.</b></p> <ul style="list-style-type: none"> <li>Unaware folic acid should be taken before pregnancy (FG)</li> </ul> <p><b>Most women are aware of sources of folic acid.</b></p> <ul style="list-style-type: none"> <li>Most women know folic acid is in orange juice and vegetables (FG)</li> </ul>	<p>considering pregnancy, doctor advised daily MV but no reason was given for taking MV (FG)</p> <p><b>MOTIVATORS</b></p> <p><b>Motivators for taking MV daily include: prevent birth defects, believe MV would make them feel healthier, and prevent heart disease.</b></p> <ul style="list-style-type: none"> <li>35% agree one of the reasons they take a daily MV containing folic acid is to prevent certain birth defects (compared to 22% of all women age 18-44) (HS'96)</li> <li>84% of women agree they would take a daily MV containing folic acid if it would reduce their chances of having a baby with birth defects (compared to 66% of all women age 18-44) (HS'96)</li> <li>46% agreed taking a daily MV will make them feel healthier (compared to 44% of all women age 18-44) (HS'96)</li> <li>Women would take daily MV to: "feel my best," "feel well-rested," and feel "energized." (FG)</li> </ul> <p>Of the women who take some vitamins, motivators mentioned for taking MV daily are:</p> <ul style="list-style-type: none"> <li>Prevent birth defects (FG)</li> <li>Long term health benefits such as prevent heart disease (FG)</li> </ul> <p><b>Majority would take MV daily if advised by their doctor.</b></p> <ul style="list-style-type: none"> <li>67% agree they would take a daily MV if their doctor encouraged them to do so (HS'96) (FG)</li> </ul>		
---	--	--	--

**SELF-EFFICACY**  
**More than half are confident they can take MV daily for at least one month.**

- 54% expressed confidence in remembering to take a MV daily for at least one month (compared to 57% of all women age 18-44) (HS'96)

**SOCIAL INFLUENCES**  
**Most of their female friends do not take a daily MV to reduce birth defects.**

- Only 17% agree most of their female friends take a daily MV to reduce the chances of having a baby with certain birth defects (compared to 18% of all women age 18-44) (HS'96)

**PREGNANCY INTENTION**  
**One-third plan to have a child; for those who do not have children, majority plan to have a child.**

- 33% plan to have a child (MOD'97)
- Among those who have had a child, 16% plan another pregnancy (MOD'97)
- Among those who do not currently have a child, 69% plan to have a child (MOD'97)

## 6) WOMEN NOT PLANNING PREGNANCY IN THE FUTURE

A. Knowledge	B. Attitudes, Social Influences, Self-Efficacy	C. Behaviors	D. Communication issues
<p><b>Most women are only aware of folic acid in general.</b></p> <ul style="list-style-type: none"> <li>Some have heard of folic acid from orange juice commercials (FG)</li> <li>Overall, participants did not know what folic acid was (Rheaume'96)</li> </ul> <p><b>Most have heard of spina bifida but not neural tube defects, or anencephaly.</b> (FG)</p> <p><b>Some are aware of link between folic acid and prevention of birth defects.</b></p> <ul style="list-style-type: none"> <li>45% women agree taking a daily MV containing folic acid will reduce a woman's chance of having a baby with certain birth defects (compared to 49% of all women age 18-44) (HS'96)</li> <li>Only some are aware of the importance of folic acid for the prevention of birth defects (FG)</li> </ul> <p><b>Some are aware of sources of folic acid.</b></p> <ul style="list-style-type: none"> <li>Vegetables and orange juice were mentioned as sources of folic acid (FG)</li> </ul>	<p><b>BARRIERS</b></p> <p><b>Women do not intend to get pregnant and see MV as necessary only for pregnancy.</b></p> <ul style="list-style-type: none"> <li>Some indicated they would take folic acid only if they were planning to become pregnant which they are not (FG)</li> <li>May tune out any message which focuses on pregnancy: MV not perceived to be relevant to them (FG)</li> </ul> <p><b>Many barriers exist to taking MV daily: cost, confusing information in media, easy to forget, perceive that MV is not relevant to them, perceive no immediate benefits, and believe MV are unnatural.</b></p> <ul style="list-style-type: none"> <li>Perceive no immediate benefits from MV (FG) (Rheaume'96)</li> <li>Perceive MV are for children (FG)</li> <li>Size of the MV (Rheaume'96)</li> <li>Easy to forget (Rheaume'96)</li> </ul> <p>Of the women not taking vitamins, barriers to taking MV daily are:</p> <ul style="list-style-type: none"> <li>Size of the pill (FG)</li> <li>Not a habit (FG)</li> <li>Not needed due to proper diet (FG)</li> <li>Consider vitamins unnatural (FG)</li> <li>Concern about gastrointestinal effects: stomach pain, and nausea (FG)</li> <li>Cost (FG)</li> <li>Easy to forget (FG)</li> </ul>	<p><b>VITAMIN/ SUPPLEMENT USE</b></p> <p><b>Only one-fourth take MV daily.</b></p> <ul style="list-style-type: none"> <li>25% take MV 7 times a week (compared to 27% of all women 18-44) (HS'96)</li> </ul> <p><b>VITAMIN CHOICE</b></p> <p><b>Women choose vitamins according to price, brand name, size of the pill, and upon recommendation from friends and family.</b></p> <ul style="list-style-type: none"> <li>Price (cheapest, coupons available) (Rheaume'96)</li> <li>Word of mouth from friends, family, co-workers, pharmacists, doctor, etc. (Rheaume'96) (FG)</li> <li>Reading product label (Rheaume'96)</li> <li>Product familiarity/brand name recognition (Rheaume'96)</li> <li>Consumer reports/magazines (Rheaume'96)</li> <li>Size of MV tablet (Rheaume'96)</li> </ul> <p><b>HEALTH CARE UTILIZATION</b></p> <p><b>Nearly all have visited a physician in the last year.</b></p> <ul style="list-style-type: none"> <li>90% have visited a primary care doctor at least once in the past 12 months (compared to 89% of all women 18-44) (HS'96)</li> </ul>	<p><b>COMMUNICATION CHANNELS</b></p> <p><b>Recommendations for communication channels include pharmacies, stores, natural food stores, billboards, toll free numbers, and bumper stickers.</b></p> <ul style="list-style-type: none"> <li>Grocery stores, drug stores, natural food stores (Rheaume'96)</li> <li>Billboard messages (Rheaume'96)</li> <li>Recommendation for folic acid message on billboards and bumper stickers where space is limited: no explicit pregnancy message; use a toll free hotline number (Rheaume'96)</li> </ul> <p>From focus groups conducted with sample billboard messages, recommendations were:</p> <ul style="list-style-type: none"> <li>Place in malls, hospitals, grocery stores, health clubs/gyms, churches, airport, buses, &amp; near high schools (Rheaume'96)</li> <li>Majority did not like one of the messages tested "make it a habit" because the term "habit" was associated with drugs and addiction (Rheaume'96)</li> <li>Unfamiliar with the term "folic acid," suggestion to use "folic acid" in conjunction with MV (Rheaume'96)</li> <li>Be direct, get to the point (Rheaume'96)</li> <li>Include photographs of women &amp; healthy smiling babies (Rheaume'96)</li> </ul>

**Less than 20% state their doctor advises daily MV with folic acid to prevent birth defects.**

- Only 15% agree their doctor encouraged them to take a daily MV containing folic acid to prevent birth defects during future pregnancies (compared to 19% of all women age 18-44) (HS'96)
- Of women who visited a physician when considering pregnancy, doctor mentioned prenatal vitamins but did not explain why (FG)

**MOTIVATORS**

**For women not planning pregnancy, benefits other than prevention of birth defects are needed to motivate daily MV consumption.**

- Only 14% agree one of the reasons they take a daily MV containing folic acid is to prevent certain birth defects (compared to 22% of all women age 18-44) (HS'96). Many said they would take a MV "if I were going to get pregnant, which I am not." (FG)
- 42% agree taking a MV will make them feel healthier (HS'96) (FG)
- 83% of women agree they would take a daily MV containing folic acid if it would reduce chances of having a baby with birth defects, (compared to 66% of all women age 18-44) (HS'96) if they were going to get pregnant, which they are not. (FG)
- Psychologically helps them think they look/feel better; to "feel their best" (FG)
- Making up for nutritional deficiencies when unable to eat right (FG)
- Perceive important for overall health (FG)
- To feel better when sick (FG)
- Long term health benefits (e.g. protection against cancer/heart disease) (FG)

**DIETARY BEHAVIORS**

**Less than one-third select food fortified with vitamins.**

- 28% try to select foods fortified with vitamins and minerals (compared to 31% of all women age 18-44) (LS'96)
- 35% check ingredient labels when buying food (compared to 34% of all women age 18-44) (LS'96)

**Recommendation for a generalized communication strategy that includes folic acid message within a general health message.**

(Rheume'96)

- Recommendation to include other benefits of taking MV other than prevention of birth defects (FG)

**Recommendation to combine key information into one brochure with no more than 6 pages and include a toll free number for more information.** (MOD-FG'96 )

**COMMUNICATION MESSAGES**

**Recommendation to include risk statistics in folic acid message.** (FG)

**Almost one-third find nutrition information helpful and majority are not confused by nutrition information.**

- Only 10% agree they are confused by all the nutrition information that is available today (compared to 28% of all women age 18-44) (LS'96)
- 30% agree information from advertising helps them make better buying decisions (compared to 25% of all women age 18-44) (LS'96)

**Terminology**

**The term "folic acid" was preferred.**

- Of those not taking vitamins, "folic acid" preferred due to familiarity of the term (FG)

- Help reduce PMS symptoms (FG)
- Prevent memory loss (FG)

**Majority would take MV daily if advised by their doctor.**

- 60% agree they would take a MV daily if their doctor encouraged them to do so (compared to 61% of all women age 18-44) (HS'96)

SELF-EFFICACY

**More than half are confident they can take MV daily for at least one month.**

- 55% expressed confidence in remembering to take a MV daily for at least one month (compared to 57% of all women age 18-44) (HS'96)

SOCIAL INFLUENCES

**Most of their female friends do not take a daily MV to reduce birth defects.**

- Only 16% agree most of their female friends take a daily MV to reduce the chances of having a baby with certain birth defects (compared to 18% of all women age 18-44) (HS'96)

## 7) WOMEN NOT TAKING VITAMINS

(LS'96 & HS'96, defined "not taking vitamins" as no vitamins per week; FG, defined "not taking vitamins" as less than once a week or not at all; MOD'97, defined "not taking vitamins" as do not take vitamins)

A. Knowledge	B. Attitudes, Social Influences, Self-Efficacy	C. Behaviors	D. Communication issues
<p><b>Most women have heard of folic acid.</b> (FG)</p> <p><b>Most have heard of spina bifida, but not neural tube defects, or anencephaly.</b> (FG)</p> <p><b>Most are unaware of the need for folic acid before pregnancy.</b> (FG)</p> <p><b>Less than half are aware of link between folic acid and prevention of birth defects.</b></p> <ul style="list-style-type: none"> <li>• 46% women agree taking a daily MV containing folic acid will reduce woman's chances of having a baby with certain birth defects (compared to 49% of all women age 18-44) (HS'96)</li> <li>• Few are aware of the connection between folic acid and prevention of birth defects (FG)</li> </ul>	<p><b>BARRIERS</b></p> <p><b>Barriers to taking MV daily are: confidence in diet, upset stomach, cost, forget to take MV, perceive MV as not natural, skepticism of benefits, and concern about side effects:</b></p> <ul style="list-style-type: none"> <li>• Almost one-third (32%) agree they don't need to take any MV because they eat a lot of fruits, vegetables, and grains (compared to 21% of all women age 18-44) (HS'96) (FG)</li> <li>• Believe they can get enough folic acid from their diet (FG)</li> <li>• Concern about gastrointestinal effects: upset stomach, nausea, and overdosing</li> <li>• 75% agree "I wouldn't take MV if it upset my stomach." (HS'96) (FG)</li> <li>• Cost; forget; bad taste; not a daily habit; too busy (FG)</li> <li>• Some believe MV increases fertility (FG)</li> <li>• Perception that MV are not natural (FG)</li> <li>• Skepticism about benefits of folic acid (FG)</li> <li>• Not planning to get pregnant (FG)</li> </ul>	<p><b>HEALTH CARE UTILIZATION</b></p> <p><b>Majority have visited a physician in the last year.</b></p> <ul style="list-style-type: none"> <li>• 87% have visited a doctor at least once in the past 12 months (compared to 89% of all women 18-44) (HS'96)</li> </ul> <p><b>DIETARY BEHAVIORS</b></p> <p><b>Only one-fourth select foods fortified with vitamins.</b></p> <ul style="list-style-type: none"> <li>• 25% try to select foods that are fortified with vitamins and minerals (compared to 31% of all women age 18-44) (LS'96)</li> <li>• 26% check ingredient labels when buying food (34% of all women age 18-44) (LS'96)</li> <li>• 23% do not eat cereal in an average week (MOD'97)</li> </ul> <p><b>PREGNANCY PLANS</b></p> <ul style="list-style-type: none"> <li>• 1% are currently pregnant (HS'96)</li> <li>• 14% are planning pregnancy in year or so (HS'96)</li> <li>• 32% are planning pregnancy in the future (HS'96)</li> <li>• 51% are not planning to get pregnant (HS'96)</li> </ul>	<p><b>COMMUNICATION CHANNELS</b></p> <p><b>A variety of communication channels are recommended: TV, brochures, buses, clinics, and vitamin racks.</b></p> <ul style="list-style-type: none"> <li>• Recommendations are: television PSAs, brochures/pamphlets at doctor's office, clinics, buses, vitamin rack at store (FG)</li> </ul> <p><b>COMMUNICATION MESSAGES</b></p> <p><b>Almost one-fourth of women indicate nutrition information is confusing/conflicting.</b></p> <ul style="list-style-type: none"> <li>• 21% agree they are confused by all the nutrition information that is available today (compared to 28% of all women age 18-44) (LS'96) (FG)</li> <li>• Conflicting nutritional information from media (FG)</li> <li>• 28% agree that information from advertising helps them make better buying decisions (compared to 25% of all women age 18-44) (LS'96)</li> </ul>

<p><b>Most believe women should take MV before pregnancy.</b></p> <ul style="list-style-type: none"> <li>When asked directly if a woman should take MV before pregnancy, 69% believe MV should be taken before pregnancy (MOD'97)</li> </ul>	<p><b>Less than one fifth state their doctor encouraged them to take a daily MV with folic acid to prevent birth defects.</b></p> <ul style="list-style-type: none"> <li>Only 16% agree their doctor encourages them to take a daily MV containing folic acid to prevent birth defects during future pregnancies (compared to 19% of all women age 18-44) (HS'96)</li> <li>Of women who visited a physician when considering pregnancy, doctor mentioned vitamin use but not why (FG)</li> </ul> <p><b>MOTIVATORS</b></p> <p><b>Motivators to taking MV daily are: doctor's advice, prevent birth defects, feel healthier, and perceived decrease in PMS symptoms.</b></p> <ul style="list-style-type: none"> <li>73% agree they would take a daily MV containing folic acid if it would reduce their chances of having a baby with birth defects (compared to 66% of all women age 18-44) (HS'96) (FG)</li> <li>34% agree taking a daily MV will make them feel healthier (compared to 44% of all women age 18-44) (HS'96) (FG)</li> <li>Believe MV will reduce PMS symptoms (FG)</li> </ul> <p><b>Majority would take daily MV if their doctor advised them.</b></p> <ul style="list-style-type: none"> <li>60% agree they would take a daily MV if their doctor encouraged them to do so (compared to 61% of all women age 18-44) (HS'96)</li> </ul>		
--	---	--	--

	<p>SELF-EFFICACY</p> <p><b>Approximately one-third are confident they can take MV daily for at least one month.</b></p> <ul style="list-style-type: none"> <li>• 37% expressed confidence in remembering to take a MV daily for at least one month (compared to 57% of all women age 18-44) (HS'96)</li> </ul> <p>SOCIAL INFLUENCES</p> <p><b>Most of their female friends do not take a daily MV to reduce birth defects.</b></p> <ul style="list-style-type: none"> <li>• Only 19% agree most of their female friends take a daily MV to reduce the chances of having a baby with certain birth defects (compared to 18% of all women age 18-44) (HS'96)</li> </ul>		
--	---	--	--

## 8) WOMEN TAKING SOME VITAMINS

(LS'96 & HS'96, "some vitamins" defined as 1-5 times per week; FG & MOD'97, "some vitamins" defined as do not take vitamins on a daily basis)

A. Knowledge	B. Attitudes, Social Influences, Self-Efficacy	C. Behaviors	D. Communication issues
<p><b>Many aware of need for folic acid but not aware of the reason.</b> (FG)</p> <ul style="list-style-type: none"> <li>Most women taking some vitamins are aware of folic acid but not aware of the reason for the folic acid recommendation (FG)</li> </ul> <p><b>Most have not heard of spina bifida, neural tube defects, or anencephaly.</b> (FG)</p> <p><b>Two-thirds agree taking folic acid daily will prevent birth defects.</b></p> <ul style="list-style-type: none"> <li>66% women agree taking a daily MV containing folic acid will reduce a woman's chance of having a baby with certain birth defects (compared to 49% of all women age 18-44) (HS'96)</li> </ul> <p>[Only a few aware of this in the focus groups (FG)]</p>	<p><b>BARRIERS</b></p> <p><b>Many barriers exist to taking MV daily: cost, confidence in diet, upset stomach, perceived increase in appetite and weight gain, and believe they don't need MV.</b></p> <ul style="list-style-type: none"> <li>15% agree they don't need to take any MV because they eat a lot of fruits, vegetables, and grains (compared to 21% of all women age 18-44) (HS'96)</li> <li>12% feel they get balanced nutrition from the foods they eat (MOD'97) (FG)</li> <li>Perceived increased appetite and subsequent weight gain (FG)</li> <li>Gastrointestinal concerns: constipation and stomach pain</li> <li>2% mentioned stomach problems/get sick from them (MOD'97) (FG)</li> <li>Perceive MV are not natural "full of chemicals" (FG)</li> <li>23% mentioned they forget to take them (MOD'97) (FG)</li> <li>20% feel they don't need them (MOD'97)</li> <li>4% mentioned cost (MOD'97) (FG)</li> <li>College graduates (51%) are more likely than those who have not attended college (31%) to strongly agree a balanced diet is sufficient (MOD'97)</li> <li>Some are skeptical of the benefits of MV (FG)</li> </ul> <p>When given a list of reasons why women might not take MV daily:</p> <ul style="list-style-type: none"> <li>32% strongly agree vitamins are too expensive (28% somewhat agree) (MOD'97) (FG)</li> <li>58% agree they need more information about vitamins and mineral supplements (MOD'97) (FG)</li> </ul>	<p><b>VITAMIN/SUPPLEMENT USE</b></p> <p><b>Majority of women do not take a vitamin that contains folic acid.</b></p> <ul style="list-style-type: none"> <li>Only 12% use a vitamin supplement that contains folic acid (MOD'97)</li> </ul> <p><b>Type of supplement taken</b></p> <ul style="list-style-type: none"> <li>58% take MV (MOD'97)</li> <li>22% take Vitamin C (MOD'97)</li> <li>7% take calcium (MOD'97)</li> <li>6% take Vitamin E (MOD'97)</li> <li>4% take prenatal vitamins (MOD'97)</li> </ul> <p><b>DIETARY BEHAVIORS</b></p> <p><b>More than a third select foods fortified with vitamins.</b></p> <ul style="list-style-type: none"> <li>37% try to select foods that are fortified with vitamins and minerals (compared to 31% of all women age 18-44) (LS'96)</li> <li>27% check ingredient labels when buying food (compared to 34% all women age 18-44) (LS'96)</li> <li>23% do not eat cereal in an average week (MOD'97)</li> </ul>	<p><b>COMMUNICATION CHANNELS</b></p> <p><b>Recommendation for communication channels include: PSA, TV, magazines, doctor's office, family planning clinic (FG)</b></p> <p><b>COMMUNICATION MESSAGES</b></p> <p><b>Some do not find nutrition information helpful and are skeptical of news regarding vitamins.</b></p> <ul style="list-style-type: none"> <li>16% agree they are confused by all the nutrition information that is available today (compared to 28% of all women age 18-44) (LS'96) (FG)</li> <li>Skeptical of news regarding vitamins and foods (FG)</li> <li>27% agree information from advertising helps them make better buying decisions (compared to 25% of all women age 18-44) (LS'96)</li> </ul>

<p><b>Majority think women should take MV before pregnancy.</b></p> <ul style="list-style-type: none"> <li>When asked directly if a woman should take MV before pregnancy, 83% believed women should take MV before pregnancy (MOD'97)</li> </ul>	<ul style="list-style-type: none"> <li>68% agree a balanced diet is sufficient (MOD'97)</li> </ul> <p><b>Less than one-fourth of women are advised by their physician to take a daily MV containing folic acid.</b></p> <ul style="list-style-type: none"> <li>Only 23% agree their doctor encourages them to take a daily MV containing folic acid to prevent birth defects during future pregnancies (compared to 19% of all women age 18-44) (HS'96)</li> <li>Of women who visited a doctor when considering pregnancy, very few doctors mentioned to take MV with folic acid and gave no reasons for taking them (FG)</li> </ul> <p><b>MOTIVATORS</b></p> <p><b>Motivators for taking MV daily are: reduce PMS symptoms, doctor's advice, free MV, perceived enhancement of physical appearance, prevent birth defects, compensate for poor diet, and to feel healthier.</b></p> <ul style="list-style-type: none"> <li>Willingness to take daily vitamins at no cost: 36% are very willing and 42% are somewhat willing (MOD'97)</li> <li>Perceived vitamins made them more regular and reduced PMS symptoms (FG)</li> <li>Perceive vitamins improve their hair, skin, and nails (FG)</li> <li>Don't always eat balanced diet (FG)</li> <li>51% agree taking a daily MV will make them feel healthier (compared to 44% of all women age 18-44) (HS'96) (FG)</li> <li>84% of women agree they would take a daily MV containing folic acid if it would reduce their chances of having a baby with birth defects (compared to 66% of all women age 18-44) (HS'96) (FG)</li> <li>38% agree one of the reasons they take a daily MV containing folic acid is to prevent certain birth defects (compared to 22% of all women age 18-44) (HS'96)</li> </ul>	<p><b>HEALTH CARE UTILIZATION</b></p> <p><b>Nearly all have visited a physician in the last year.</b></p> <ul style="list-style-type: none"> <li>94% have visited a primary care doctor at least once in the past 12 months (compared to 89% of all women 18-44) (HS'96)</li> </ul> <p><b>PREGNANCY PLANS</b></p> <ul style="list-style-type: none"> <li>4% are currently pregnant (HS'96)</li> <li>12% are planning pregnancy in year or so (HS'96)</li> <li>38% are planning pregnancy in the future (HS'96)</li> <li>46% are not planning to get pregnant (HS'96)</li> </ul>	
---	---	---	--

	<p><b>Majority would take a MV daily if their doctor advised them.</b></p> <ul style="list-style-type: none"> <li>68% agree they would take a MV daily if their doctor encouraged them to do so (compared to 61% of all women age 18-44) (HS'96) BUT they would need to know why (FG)</li> </ul> <p>SELF-EFFICACY</p> <p><b>Almost two-thirds are confident they can take MV daily for at least one month.</b></p> <ul style="list-style-type: none"> <li>65% expressed confidence in remembering to take a MV daily for at least one month (compared to 57% of all women age 18-44) (HS'96)</li> </ul> <p>SOCIAL INFLUENCES</p> <p><b>Most of their female friends do not take a daily MV to reduce birth defects.</b></p> <ul style="list-style-type: none"> <li>Only 23% agree most of their female friends take a daily MV to reduce the chances of having a baby with certain birth defects (compared to 18% of all women age 18-44) (HS'96)</li> </ul>		
--	--	--	--