



BASIC INFORMATION ON HEALTH AND CARE OPTIONS FOR WOMEN IN THEIR CHILDBEARING YEARS

By
Gina Ord, MS, OTR/L, Assistant Professor, WSU Extension. **Elizabeth Soliday**, PhD, Associate Professor, Human Development, WSU Vancouver. **Vivianne Fischer**, MA, CPM, LM, Instructor, Department of Human Development, WSU. **Kristin Eggleston**, LM, CPM.

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Basic Information on Health and Care Options for Women in Their Childbearing Years

Abstract

Nearly 40% of births to U.S. women result from “surprise” pregnancies. Whether or not a woman intends to become pregnant, it is useful to have basic information on pregnancy nutrition and health care handy to help get things off to a good start should the time come. In this publication, we discuss current guidelines on nutrition and weight gain for healthy pregnancy as well as infant feeding because these factors can make a difference in the health of mothers and babies. In addition, we review pregnancy and birth care options available to women with healthy pregnancies. These include safe options that may not be well known but that many women find supportive. Resources for more information are also provided.

Nutrition, Healthy Pregnancy, and Care Options Go Hand-in-Hand

Did you know that nearly 40% of births to U.S. women are the result of “surprise” pregnancies? (Mosher et al. 2012). Whether or not you intend to become pregnant, it is useful to have basic pregnancy health and health care facts on hand if you are in your childbearing years. Figure 1 shows the linkage between optimal health prior to and during pregnancy and increased birth options to allow for a safe and supported birth.

Nutrition, Lifestyle, and Healthy Pregnancy

What is a Low-Risk Pregnancy?

A “low-risk pregnancy” is expected to be free of problems, whereas a high-risk pregnancy has a higher risk of complications before, during, or after delivery. Most pregnancies are low risk, with only about 6–8% in the high-risk category (UCSF 2016). According to the National Institutes of Health (2016a), factors that put a woman at risk include health conditions such as high blood pressure, diabetes, obesity, and others. Very young or more advanced age, smoking, alcohol use, and conditions of pregnancy including gestational diabetes also increase risk. Women with higher levels of risk in their pregnancies can seek specialty or subspecialty care (Menard et al. 2015) that includes specialized equipment and doctors that can handle potential complications surrounding labor and birth. Although some pregnancy risks cannot be controlled, other risks can be reduced or even eliminated to enable a low-risk or lower risk pregnancy, which allows for a wider range of birth providers and settings.

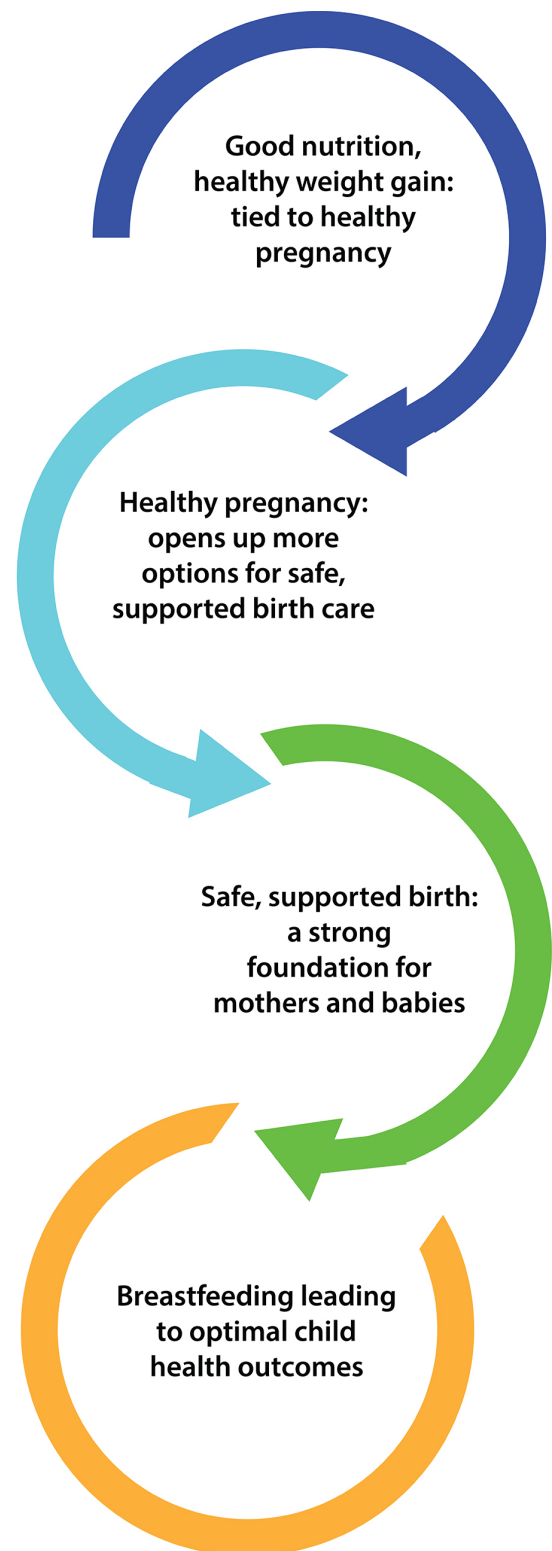


Figure 1. Healthy Outcomes Sequence

Staying as healthy as you can before and during pregnancy increases your chance of a healthy, uncomplicated pregnancy. Eating healthy foods, exercising, and maintaining a healthy body weight all reduce the potential that you will need extra medications and medical procedures in pregnancy and birth. In turn, having a healthy, uncomplicated pregnancy expands your pregnancy and birth health care options.

Nutrition

Your diet affects the health of your growing baby and newborn, and good nutrition in pregnancy and beyond can set the stage for your own and your baby’s health. Nutrition recommendations are slightly different for pregnant women than non-pregnant women. Besides eating a variety of nutrient-rich foods from the United States Dietary guidelines, pregnant women should follow recommended weight gain guidelines and make sure they are getting enough iron, folic acid, vitamin D, cholate, calcium, and iodine. Caffeine and artificial sweeteners should be limited and alcohol should be completely avoided. Furthermore, pregnant women are more susceptible to getting foodborne illnesses and should take food safety precautions (Campbell and Procter 2014; ACOG 2015).

The United States Department of Agriculture’s website (2016) on nutrition in pregnancy provides a variety of evidence-based resources. Another resource that provides nutritional information and supports to pregnant women and women with young children is the Special Supplemental Nutrition Program for Women, Infants, and Children, otherwise known as WIC. You may qualify for WIC even if your income is too high to qualify for other government services. Check with your local WIC office to see if you qualify.

Folic Acid Intake

If you have been pregnant before, you have probably heard about folic acid. Folic acid has been shown to reduce the likelihood of having a baby born with a serious neural tube defect such as spina bifida or anencephaly. The neural tube is the part of the body that develops into the brain and spinal cord. Folate is a vitamin found naturally in foods such as green leafy vegetables, egg yolks, and beans. Eating foods rich in folate prior to and during pregnancy is highly recommended because naturally occurring folate produces the most usable form of the vitamin. Folic acid is a synthetic form of folate added to fortified cereals, breads, and vitamin tablets (Mayo Clinic 2014).

The Centers for Disease Control and Prevention (CDC) recommends that all women of childbearing age take at least

400 micrograms per day of folic acid. In 1998, the U.S. mandated that cereal grain products be enriched with folic acid. Since that time, an estimated 1,300 serious birth defects per year have been prevented (Williams et al. 2015; NIH 2016a). Because your diet may or may not have an adequate amount of folic acid, and because you may become pregnant unintentionally, you should take a regular supplement containing 400 micrograms of folic acid every day. To get the most benefit from this vitamin, start taking it at least one month before you plan to become pregnant. It could save your future baby’s life! If you have a history of either spina bifida or anencephaly in your family or with a prior pregnancy, or if you have diabetes, the daily folic acid dosage recommendation may be higher (Arth et al. 2015; March of Dimes 2015). If this is the case, be sure to consult with your provider for recommendations.

Healthy Pre-Pregnancy Weight and Weight Gain in Pregnancy

A good starting point for a healthy pregnancy is knowing your body mass index, or BMI. BMI is a measure of body fat based on height and weight. If you are planning to conceive, your BMI is a good number to know because that number helps determine the recommendation for healthy weight gain during pregnancy. To find your BMI, use the calculator from the National Institutes of Health (2016b).

You can use Table 1 to determine recommended pregnancy weight gain depending on your BMI. Directly across from your pre-pregnancy BMI is how much weight you are recommended to gain during pregnancy with a single fetus (Rasmussen and Yaktine 2009).

Weight gain recommendations change depending on a woman’s pre-pregnancy BMI. Women who are overweight or obese before becoming pregnant have an increased risk of complications in pregnancy, such as preeclampsia, gestational diabetes, preterm birth, a larger-than-normal baby, and possible fetal death (Anderson et al. 2015; ACOG 2015). The good news is that staying within the recommended weight gain guidelines helps reduce your risk of having these

Table 1. Recommended Weight Gain Based on Pre-Pregnancy BMI

Pre-Pregnancy BMI	Recommended Weight Gain
Under 18.5	28–40 lb
18.5–24.9	25–35 lb
25.0–29.9	15–25 lb
Over 30	11–20 lb

Table adapted from Rasmussen and Yaktine (2009).

complications. This is true even for women whose pre-pregnancy BMIs are outside the optimal range. Of course, each woman and pregnancy is unique, and your health care provider can give you more specific guidelines regarding nutrition and weight gain for each stage of your pregnancy.

Staying healthy before and after pregnancy begins with forming healthy dietary habits and physical activity levels before you get pregnant. Having good dietary habits before pregnancy makes it easier to continue those habits in pregnancy. The March of Dimes (2015) recommends getting a preconception check-up to speak with your provider about your intent to become pregnant and learn strategies for safely lowering your BMI. Once you are pregnant, continued physical activity, eating a variety of nutritious foods, and avoiding sugary beverages can help you keep within the recommended guidelines for gaining weight during pregnancy (Campbell and Procter 2014). If you are overweight or obese before you become pregnant, consult with your health care provider about the risks of pregnancy, and consult a professional about any special concerns you may have.

Healthy Pregnancy and Options for Birth Care

If you have a low-risk pregnancy, you may choose from the full range of pregnancy and birth care options available in your area. There are options for different birth locations and different types of medical professionals who help women in pregnancy and birth. Before deciding on a birth care professional and setting that will be best for you, it is helpful to have information on safe birth for low-risk pregnancies and related care options.

About Natural Birth

The term “natural birth” means different things to different people, and can mean anything from birthing a baby vaginally to using no pain medications. To minimize confusion, “physiologic” birth is the term professionals use to refer to the natural, inborn capacities of a woman and her fetus that “power” the birth process (ACNM et al. 2013). Respected scientific studies have shown that, in most cases, physiologic birth is safest for women and babies (Buckley 2015; Sakala and Corry 2008). Physiologic birth means:

- labor begins on its own—without medications or other interference.
- labor happens in a place where you feel safe and comfortable making your wishes known.
- labor progresses without medications or other interference.

- the baby is placed on your body shortly after birth so that bonding can begin.
- you are able to begin breastfeeding soon after birth.

Medical procedures such as inducing labor, using powerful pain medications, and performing surgery have been shown to disrupt the hormonal processes involved in birth. These same processes are tied to optimal adjustment for mothers and babies shortly after birth. Therefore, medical procedures should be used sparingly and only when their benefits outweigh their risks (Buckley 2015; Caughey et al. 2014; World Health Organization 2011). Similarly, practices such as setting time limits on labor, depriving you of food and water during labor, and separating you and your baby after birth should only occur for clearly stated reasons (Sakala and Corry 2008).

Professionals Trained in Pregnancy and Birth Care

Women with low-risk pregnancies have options for birth care providers as well as a choice of where to give birth. Childbirth is complex and life-changing, so it is important to consider your needs and preferences in making these very personal decisions. The education and practice approach of care provider types is described below. These descriptions are general and individual providers may vary.

Physicians: Education and Scope of Practice

More than 80% of U.S. women have obstetrician-gynecologists (OB-Gyns) as their pregnancy and birth care providers (Hamilton et al. 2015). Becoming an OB-Gyn requires college and medical school followed by several years in hospital-based residency training to specialize in women’s health and care in pregnancy, birth, and postpartum. OB-Gyns in particular are trained to perform **cesarean** surgery and complex gynecological procedures. Given their educational background, these physicians generally focus on diagnosing and treating pregnancy and birth complications (Davis-Floyd 2001; Soliday 2012). OB-Gyns generally deliver babies only in hospitals. They may support women who desire birth with no or few procedures. Others specialize in caring for only higher risk cases (American Board of Obstetrics and Gynecology 2015).

A smaller percentage of U.S. women use family physicians (FPs) for their birth care providers. Licensed FPs have gone to college and medical school, and they spend additional years learning general medical care and surgical procedures in a residency. Some family physicians deliver babies, and they normally work only in hospitals. FPs may support women who desire birth with no or few procedures, and they may also treat higher risk cases (AAFP 2015). Families often choose FPs because they can also provide care to the newborn.

Midwives: Education and Scope of Practice

Midwives may be less familiar to you because they provide care to a lower percentage of women (about 8%) than do physicians. However, care by midwives has been found to be safe and effective for low-risk births (Cheyney et al. 2014; Johnson and Daviss 2005). In general, midwives view birth as healthy, natural, and possible with no or few medical interventions. They aim to help women assume maximum control over their birth experiences and they are very experienced in helping women achieve natural birth. In addition, studies have found that women rate their satisfaction with midwives' care higher than care from physicians (Boucher et al. 2009; Zielinski et al. 2015). This is likely because women who have midwife care have reported feeling greater control over their care and their experiences (Zielinski et al. 2015).

There are different routes to becoming a midwife, though most have had specialized education and supervised practice in women's health care. Midwives may work in hospitals or outside hospitals in birth centers or homes ("out-of-hospital," or OOH birth), described in the Birth Settings section. You can learn more about midwives at [The Midwives Alliance of North America](#) (2016) website. If you prefer hospital birth but would like a midwife, check your regional hospitals to see whether they have midwives on staff.

Other Members of a Birth Care Team

In addition to one or more of the care providers above, some women hire a doula during and after birth. The word doula means "a woman who serves." Doulas do not provide medical care. They do, however, provide ongoing emotional, physical, and educational support to women in labor and delivery. Research has shown benefits of doula support in labor and delivery: a study of 15,288 women found that those who had doulas throughout labor were more likely to have vaginal births, to have shorter labors, and to avoid interventions such as cesarean delivery compared to women who did not have doulas (Hodnett et al. 2013). Doulas may help you communicate with health care professionals and they often help advocate for your emotional and physical comfort (DONA 2005). Some doulas support women in the early weeks after birth. Doulas may provide emotional support and encouragement and some help with newborn and sibling care and household tasks.

If you plan to breastfeed, you may find the support of a lactation consultant or lactation counselor helpful. International Board Certified Lactation Consultants (IBCLCs) specialize in supporting and problem-solving with breastfeeding. These professionals have passed an international

exam and must be re-certified every 5 years (CDC 2014). IBCLCs practice in hospital and clinic settings, and could be of benefit just after birth or later on if there is a problem with breastfeeding. Certified Lactation Counselors (CLCs) provide education and counseling about breastfeeding. They pass a certification exam after completing a training course (CDC 2014). CLCs could work for a WIC program, a clinic, or go to the home.

Birth Settings

As well as having options for birth care providers, women with low-risk pregnancies may choose where to give birth. Again, because childbirth is a life-changing event, it is important to consider your needs and preferences when planning on a birth setting. You are also encouraged to talk with your partner and health professional to determine the best choice for you and your baby.

Birth settings fall into three general categories: hospitals, freestanding birth centers, and homes. Birth centers and homes fit in the larger category of out-of-hospital (OOH) birth.

Hospitals

Hospitals are where over 98% of U.S. women have given birth in recent decades (MacDorman et al. 2014). They are staffed by medical professionals and equipped with advanced technology. Hospitals may be the only option for women or babies with identified health problems. Healthy women may prefer hospitals because they view them as safe. You should be aware that even if you are healthy and give birth in a hospital, your chances of having medical procedures such as labor induction or cesarean delivery would be higher than if you gave birth outside of a hospital (Johnson and Daviss 2005; Snowden et al. 2015). Hospital birth is generally the most expensive option due to costs of the facility, the staff, and the medical supplies (Scarf et al. 2016; Stapleton et al. 2013).

Home Birth

The number of women giving birth at home is rapidly growing, and the Pacific Northwest has one of the highest planned home birth rates in the U.S. at about 3% (MacDorman and Declercq 2016). Women who choose this option give birth in the comfort of their homes with the support of a birth professional (usually a midwife), a care team (which may include a second midwife, birth assistant, or student midwife), and their loved ones. Planned home birth with a licensed midwife has been found to be a safe option for generally healthy women experiencing normal pregnancies (Cheyney et al. 2014; Johnson and Daviss 2005). Other benefits include greater satisfaction and cost savings (Hodnett et al. 2012; Scarf et al. 2016; Stapleton et al. 2013).

Freestanding Birth Centers

These are comfortable places where women go to give birth with the support of birth professionals (usually midwives). These facilities offer a home-like environment designed specifically for physiologic birth support and are generally staffed by midwives. They are not attached to hospitals. Like home birth, giving birth in a birth center is generally safe for mothers and babies and best suited to healthy women. Birth centers generally cost less than hospitals (Stapleton et al 2013).

Historically, the American Congress of Obstetricians and Gynecologists (ACOG 2016) has opposed OOH birth on the grounds of safety. However, as high-quality evidence has accumulated on the overall safety of OOH birth with credentialed midwives, ACOG has revised its stance. ACOG now recommends that only low-risk women consider this option and in close consultation of an appropriately credentialed midwife who has easy access to a physician for consultation as well as a nearby hospital.

Insurance companies, including Medicaid, are required to pay for birth at licensed birth centers and for the midwife's professional fee, just like they do for hospitals and doctors. Freestanding birth centers may not be available to women in certain geographic areas, including some rural areas.

Birth, Breastfeeding, and Infant Health

Women who have had a safe and supported birth, whether it be in or out of hospital, have the opportunity to immediately bond with the child after birth and initiate breastfeeding.

Breastfeeding helps fortify a baby's immune system because the mother's antibodies are transmitted to the newborn through her milk (Hildebrand 2014). Even if there were complications or interventions during delivery, breastfeeding is still possible with adequate support, including professional assistance from a nurse, midwife, or lactation consultant. Many women choose not to breastfeed for various and good reasons or are unable to after delivery due to a medical condition with the mother or baby. If this is the case, a health care provider can assist with ensuring you give your baby the correct type and amount of infant formula to replace breastfeeding directly after birth.

If you are able to initiate breastfeeding, exclusive breastfeeding is recommended for the newborn's first six months due to well-researched benefits in the United States and internationally (AAP 2012; World Health Organization 2016). In the short term, breastfeeding reduces ear infections, respiratory conditions, and digestive conditions. It also reduces the risk of Sudden Infant Death Syndrome, or SIDS.

In the long-term, breastfeeding has been associated with lower rates of childhood obesity, reduced allergies throughout childhood, and reduced risk of developing diabetes later in life (AAP 2012; Hildebrand 2014). Before becoming pregnant, a large percentage of women say they would like to breastfeed, but by the time the baby is 6 months old, only 49% of American women do. By the time the baby is 12 months old, only 27% do (CDC 2014).

One way you can plan for breastfeeding success before pregnancy or in the early stages is to build a support system of moms who are currently breastfeeding or have recently breastfed. You can even ask if they are comfortable showing you how they do it. If your mother or other relatives did not have a positive experience with breastfeeding, try to find some people who did. You can also seek the help of a professional, such as a lactation consultant or a support group while pregnant. La Leche League is an international support group of trained and accredited volunteer mothers who can provide support during pregnancy and connect you with other breastfeeding mothers (CDC 2014). Your care provider, whether a midwife or physician, should be supportive and knowledgeable about breastfeeding techniques, options, and local support as well as specific nutritional needs of a breastfeeding mother.

Breastfeeding after returning to work can be challenging. If you are planning to return to work after the baby, make a plan before you become pregnant to determine if you will have enough paid leave to cover maternity leave, as women who take a maternity leave of 12 weeks or more have a higher chance of breastfeeding success (Guendelman et al. 2009). If you do not have enough maternity leave, plan with a friend or family member who can bring your baby to work to allow you to nurse and/or help with pumping and storing expressed milk. Also, become familiar with your rights to pump milk for your baby. Federal/state law requires that the employer must offer a breastfeeding woman reasonable work breaks to pump as well as a private space that is not a bathroom for up to one year after the baby's birth (U.S. Department of Labor 2013). Talk to your care provider about best practice recommendations to help working mothers succeed with breastfeeding.

Crucial for breastfeeding success is educating your partner about your wishes to breastfeed. These talks can feel awkward at first, but partners can be your best allies in this endeavor. Much of your time during the first few months with your baby will be spent feeding the baby and taking care of yourself, so talk with your partner or a supportive friend or family member about helping you get enough sleep, taking care of household tasks, changing diapers, and handling other care needs so that you can focus on quality breastfeeding. Make sure your partner and other members of your

support system know about the benefits of breastfeeding and are comfortable watching breastfeeding mothers. Breastfeeding just after birth and beyond requires time, effort, and some pre-planning, but the well-researched health benefits for both mother and child are extremely worthwhile.

Infant feeding for the first six months and beyond looks different for different families. Your feeding approach may include breastfeeding, using formula, or a combination of the two. A healthcare provider or WIC professional can assist if supplementing with formula for all or part of the infant's nutrition is necessary. Like childbirth, early infant feeding can be an extremely emotional but rewarding experience. It is important that a woman feels supported by family and professionals to create optimal health, development, and bonding in the early months.

Summary and Conclusion

Caring for yourself in the months and years before pregnancy is beneficial for your own health and that of your future children. In turn, staying healthy opens up a range of care options to help you have a safe and supported birth. Your decisions are essential in achieving the safest, most positive experience you can have. Recommendations include:

- Stay healthy overall and keep your body weight in a healthy range.
- Learn as much as you can about pregnancy, birth, and breastfeeding.
- Find a birth care professional and birth setting that supports normal, physiologic birth. Availability of specific options will vary depending on where you live.
- Talk with your health care professional about your wishes from the start of your care and into labor and delivery.
- Ask to interview your potential health care professional about her or his training, expertise, statistics, and ability to address your needs and wishes.
- Work with your partner, support network and employer to plan for a successful breastfeeding experience for optimal health of the infant.

You and your baby deserve a safe and supported pregnancy and birth. You will remember these experiences many years later, so you deserve to take your time in charting your own course to a healthy, happy, and safe birth.

Disclaimer: This publication was prepared by WSU Extension and Human Development faculty, and is not meant to replace advice from a trained medical provider. Individuals should seek the advice of a medical professional prior to making decisions surrounding pregnancy and delivery.

Glossary

cesarean. A surgery in which a baby is born through a surgical cut in a woman's belly and womb (uterus). This may be recommended if you have certain infections, such as HIV or active herpes lesions or pregnancy conditions such as high blood pressure. Because cesarean birth is major surgery, it does have risks and should be performed only for clearly stated reasons (Caughey et al. 2014; Gregory et al. 2012).

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