

A pregnant woman with long brown hair is shown from the chest down to the waist. She is wearing a white long-sleeved shirt with a lace collar. She is holding her pregnant belly with both hands. The background is a bright, out-of-focus window with white curtains. A white rectangular text box with a black border is centered over the upper part of the image.

Pregnancy Essentials

Pregnancy Essentials

What will be covered:

- Conception
- Dos and don'ts of pregnancy
- First trimester
- Morning sickness therapy
- Second and third trimesters
- Nutrition recommendations
- Exercise recommendations
- Labor and delivery
- Postpartum recovery and mental health
- Infant feeding
- Resources



Purpose of this session:

The purpose of this session is to provide health education on conception and pregnancy. It is recommended to additionally consult a medical professional as you undergo your prenatal journey.



Conception

For those who are trying to become pregnant, the best chances come from having intercourse one or two days preceding ovulation. The simplest, most effective solution is to have frequent intercourse (every 2-3 days).

Difficulties Conceiving

Infertility affects men and women equally, and various treatments exist. For women in their early thirties or younger, it is recommended to try for one year before consulting a doctor. Those over the age of 35 can consult a fertility specialist after 6 months of trying.

You are Pregnant! What Now?

Pregnancy is a very personal and unique experience. You may have people advising on what worked for them during their pregnancy, and sometimes that can be overwhelming. Here are some basic recommendations on what expecting mothers should and should not do.

Setting You and Your Baby up for Success



Begin taking a prenatal vitamin:

It is best to start taking prenatal vitamins a few months before the baby is even conceived, however, it is never too late in your pregnancy to start taking one. Prenatal vitamins help provide additional nutrients that you may not be getting enough of through your natural diet. Be sure the supplement you take has enough:

- **Folate/Folic Acid:** A B-vitamin that helps prevent neural tube defects in the baby's brain and spinal cord. 600–800 micrograms is recommended daily.
- **Calcium:** This mineral will promote strong bones and teeth for mother and baby alike. It also helps your circulatory, muscular, and nervous systems operate normally. Aim for 1000–2500 milligrams a day.
- **Iron:** Supports the development of blood and muscle cells for both mother and baby. Iron also helps prevent anemia. Some prenatal vitamins don't contain iron, so check the label. About 27 milligrams a day is recommended.

Schedule a prenatal appointment:

Meet with a family doctor, OB/GYN, or midwife. They will be able to help you plan and prepare for a successful pregnancy. Be sure to let your doctor know about any medications you are taking.

Rest as needed:

Fatigue is common during pregnancy, especially during the first trimester. Try to view this not as laziness, but as an essential rejuvenation period for you and your unborn child. Rest is part of the work of pregnancy. You're not falling behind, you're building life. Respect your limits, and remember: slowing down now helps you go farther later, especially when baby arrives.



Get a flu shot:

The Centers for Disease Control (CDC) recommends flu shots for anyone who will be pregnant during the flu season (November–March). The only exception is if you have had a severe allergic reaction to a previous flu vaccination. Pregnancy puts extra stress on your heart and lungs and can affect the immune system. These factors increase your risk of both getting the flu and developing flu-related complications such as pneumonia. Flu shots can help prevent these problems.

What to Avoid When Pregnant



Alcohol consumption:

If you are or are trying to become pregnant, stop any alcohol consumption. Once in the bloodstream, alcohol passes through the placenta to the baby. This can cause fetal alcohol spectrum disorders, miscarriage, and fetal death.



Nicotine and tobacco products:

Smoking and vaping during pregnancy increase the risk of stillbirth, premature birth, low birth weight, and sudden infant death syndrome. Be wary of smokeless tobacco products as well, as they have been seen to correlate with a low birth weight.



Illicit drug use:

Any illicit drug use can harm your baby. The drugs you take while pregnant pass to your baby, and fetal death and withdrawal symptoms in newborns can occur. Abuse of prescription drugs is also dangerous for both you and your baby. Consult with your healthcare provider on any drugs you are taking legally or illegally.

1st Trimester: Conception-12 Weeks

Baby's growth and development through the 1st trimester:

Weeks 1-2: Beginning of your last menstrual period. Sperm and egg join to form a zygote (fertilization).

Weeks 3-4: The baby moves from the fallopian tubes to the uterus. The hormone human chorionic gonadotropin (HCG) is released and can be detected by at-home pregnancy tests.

Weeks 5-8: Officially an embryo! During this time, the baby will begin to develop various organ systems. The neural tube, which eventually develops into the brain, spinal cord, and backbone, forms.

Weeks 9-12: All vital organs have begun to develop. Starting week 11, the baby is now described as a fetus. Upon ending the 1st trimester, your baby typically weighs about 2 ounces and is roughly 3 inches long.



Miscarriage



It is estimated that 10-20% of known pregnancies end in miscarriage. Most of these are attributed to fetal chromosomal abnormalities. Approximately 80% of all cases of pregnancy loss occur within the first trimester.

Experiencing a miscarriage can be physically and emotionally difficult. It is common to feel a range of emotions, including sadness, grief, anger, confusion, guilt, or numbness. Everyone experiences pregnancy loss differently, and there is no "right" way to feel or grieve. It is important to remember that most miscarriages are not caused by anything a parent did or did not do. In most cases, miscarriage occurs because the pregnancy was not developing normally and could not have been prevented.

If you experience a pregnancy loss, consider reaching out to your healthcare provider, trusted loved ones, a mental health professional, or a support group. Seeking support can help you navigate the emotional and physical recovery process.

You are not alone. Miscarriage is a common pregnancy complication, but that does not make the loss any less significant. Give yourself permission to grieve and seek support in whatever way feels right for you.



Morning Sickness

A majority of pregnant women will experience morning sickness. Sadly, this nausea is not limited to just the morning time, but is most commonly experienced in the first trimester of pregnancy, particularly between weeks 6 and 12. If morning sickness is severe, talk to your healthcare provider about medications to ease the symptoms.



Morning Sickness Nutrition Therapy

To help with nausea and vomiting during pregnancy, the Academy of Nutrition and Dietetics recommends the following:

- Try to eat 6 small meals or snacks throughout the day. These can be easier to tolerate than large meals.
- Keep easy-to-digest food, such as crackers and pretzels, with you. You may even try eating a few crackers before getting out of bed in the morning.
- Drink water or other beverages that are caffeine-free between meals.
- Lower-fat foods are easier to digest, whereas higher-fat foods can make nausea worse.

2nd Trimester: 13– 26 Weeks

This is often considered the easiest stage of pregnancy, as morning sickness and fatigue begin to subside. Women usually feel their best here. Enjoy it by getting out and doing what you love!

Baby's growth and development through the 2nd trimester:

Weeks 13-16: Your baby has doubled in size in just a few weeks! Their reproductive system is evolving as they start producing hormones. Hair follicles and pigmentation that determine hair color are at work.

Weeks 17-20: As the baby's bones and skeletal system begin to harden, you will likely feel them begin to wiggle and kick! The skin of your baby is also toughening up and adding layers of fat to keep them warm.

Weeks 21-24: The little one is probably sucking their thumb as they figure out a sense of taste and touch. Additionally, inner ear development notifies them of balance in the womb as they reach 1 pound in weight.

Weeks 25-27: Fully developed hands and opening eyes alert your baby to its environment. Babies born past the 27th week have about a 94% chance of survival if they do come prematurely.





3rd Trimester: Week 28–Delivery

During this rapid growth period, you will really start to notice the weight of your baby. Set yourself up for comfort by practicing good posture and avoiding lifting heavy things. Your back will thank you for it!

Baby's growth and development through the 3rd trimester:

Weeks 28–32: During this time development of a sleep and wake cycle is occurring for the baby. From here until delivery, the baby will gain about half a pound a week. Begin to pay attention to your baby's activity.

Weeks 33–36: Your baby has started to pack on the pounds and accumulate fat. A white, waxy coating known as vernix starts to thicken on your baby's skin to help protect it. Meanwhile, the previous soft downy hair covering the baby's skin, called lanugo, is almost completely gone.

Weeks 37–40: The baby goes from early term to full term, and the rate of growth begins to slow. Week 40 will be the week of your due date, however, most women don't deliver right on their due date.

Nutrition During Pregnancy

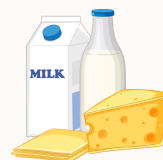
- By eating a variety of healthy foods, you should be able to get all the nutrients you need for pregnancy from food and prenatal vitamins.
- There is a common misconception that you are “eating for two”; in reality, your energy requirements only increase by about 340 and 450 extra calories per day in the 2nd and 3rd trimesters, with the exception of someone carrying multiples like twins or triplets.
- The extra calories you consume should come from nutritious foods like lean meats, low—or non-fat dairy products, fruits, vegetables, and whole grain breads.
- Drink approximately 12 (8-fluid-ounce) cups of water or other beverages throughout the day. Try to make them caffeine-free.

Daily Meal Planning Guidelines

Dairy:

Have at least 3 cups of low-fat or fat-free dairy foods for adequate calcium and vitamin D intake.

Foods recommended: Low-fat yogurt, skim or 1% milk, reduced-fat cheese or cottage cheese.



Foods not recommended: Raw or unpasteurized milk, cheese, and dairy made with raw or unpasteurized milk, soft cheese like brie and blue cheese.



Vegetables:

Eat at least 3 cups of vegetables, including 1 cup of dark green or orange vegetables high in vitamin C.

Foods recommended: Fresh, frozen, and canned vegetables, vegetable juice, low in sodium.

Foods not recommended: Raw sprouts.

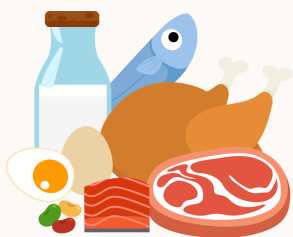
Fruits:

Aim for 2 cups or more, limit juice to 1 cup a day of 100% fruit juice.

Foods recommended: Fresh, frozen, canned, and dried fruits. Can include fruit juices and nectars.



Foods not recommended: Unpasteurized apple cider or juices.



Protein:

Minimum of 5–6 ounces of lean meat, fish, or poultry. If you don't eat meat, try similar amounts of other protein-rich foods like beans, lentils, eggs, or nuts.

Foods recommended: Cooked dried beans and peas, lean beef, chicken, turkey, lamb, and pork, shrimp, crab, clams, halibut, and trout.

Foods not recommended: Raw or undercooked meats, fish, poultry, or eggs. Fish with high mercury, like swordfish and shark. Hot dogs, luncheon meats, or other deli meats, unless they are heated until steaming hot.

Daily Meal Planning Guidelines (continued)

Grains: Half of your grains should be whole grains. Aim for at least 5–7 ounces of grains a day.

Foods recommended: Fortified ready-to-eat cereals, including cooked cereals, wheat germ, whole grain bread, pasta, and rice.



Exercise Through Pregnancy

The more active and fit you are during pregnancy, the easier it will be to adapt to your changing shape and weight gain. It can also help you cope with labor. Keep up your normal activity or exercise for as long as you feel comfortable.

Exercise Tips

- Do not exhaust yourself. It's normal to have to slow down as your pregnancy progresses. As a general rule, you should be able to hold a conversation as you exercise when pregnant.
- If you were not active before pregnancy, do not suddenly take up strenuous exercises; rather, start small.
- Try to keep active on a daily basis; 30 minutes of walking each day can be enough, but any amount of exercise is better than none.
- Use caution when participating in exercises that have a risk of falling, like horseback riding, skiing, and cycling. Falls carry a risk of damage to you and your baby.

Recommended Exercises

During pregnancy, participating in exercises that strengthen the abdomen, pelvis, and back is very important. The QR code will link you to the MAYO Clinic's Guide to a Healthy Pregnancy, including month-by-month exercise recommendations and walkthroughs.



Prenatal Medical Care

How often should I go for prenatal visits?

- **Weeks 4 to 28 of pregnancy.** Go for one checkup every 4 weeks (once a month).
- **Weeks 28 to 36 of pregnancy.** Go for one checkup every 2 weeks (twice a month).
- **Weeks 36 to 41 of pregnancy.** Go for one checkup every week (once a week).



If you have complications during pregnancy, your provider may want to see you more often.

Labor and Delivery Overview

As your due date approaches, it can be helpful to learn about the labor and delivery process and discuss any questions or preferences with your healthcare provider.

Signs of labor to Watch For

Contact your healthcare provider if you experience any of the following signs that labor may be beginning:

- Regular contractions that become stronger, longer, and closer together over time
- Water breaking (rupture of membranes), which may feel like a gush or a slow trickle of fluid
- Bloody show, a pink, red, or brown mucus discharge that may indicate the cervix is beginning to dilate
- Persistent lower back pain or cramping
- Pelvic pressure or the sensation that the baby has "dropped"

Your healthcare provider can help you determine when it is time to go to the hospital or birthing center.



The Stages of Labor

Labor is typically divided into three stages:

- Labor: The cervix gradually softens, thins, and dilates.
- Delivery: The baby is born.
- Placental Delivery: The placenta is delivered after the baby.

Every birth experience is unique. Some individuals deliver vaginally, while others may require a cesarean birth (C-section). Your healthcare team will work with you to determine the safest approach for you and your baby.

Many options are available to help manage discomfort during labor, including breathing and relaxation techniques, movement and position changes, labor support from a partner or doula, and medical pain relief such as an epidural.

Remember that flexibility is important. While birth plans can be helpful, labor and delivery are often unpredictable, and adjustments may be needed to promote the health and safety of both parent and baby.

Postpartum Recovery and Mental Health

The postpartum period begins after delivery and is a time of significant physical, emotional, and lifestyle adjustments. As your body recovers from childbirth and you adapt to caring for a newborn, it is important to prioritize rest, nutrition, hydration, and support whenever possible.

Common physical changes after delivery may include:

- Vaginal bleeding and discharge (lochia)
- Breast tenderness or engorgement
- Fatigue
- Cramping as the uterus returns to its pre-pregnancy size
- Healing from a vaginal delivery or cesarean birth

Emotional changes are also common. Many new parents experience mood swings, tearfulness, irritability, or feeling overwhelmed during the first few weeks after birth, often referred to as the "baby blues." These feelings typically improve within two weeks.

If feelings of sadness, anxiety, hopelessness, excessive worry, or difficulty bonding with your baby persist or interfere with daily life, contact your healthcare provider. Postpartum depression and anxiety are common, treatable conditions, and support is available.

Remember that caring for yourself is an important part of caring for your baby. Accept help from family and friends, attend postpartum appointments, and reach out for support when needed. You do not have to navigate the postpartum period alone.

When to seek immediate help: Contact a healthcare provider right away if you experience thoughts of harming yourself or your baby, heavy bleeding, severe pain, fever, chest pain, or difficulty breathing.

Breast vs Bottle Fed Babies

Choosing whether to breastfeed or formula feed their baby is one of the biggest decisions expectant and new parents will make.

Health experts believe breast milk is the best nutritional choice for infants. But breastfeeding may not be possible for all women. For many, the decision to breastfeed or formula feed is based on their comfort level, lifestyle, and specific medical situations.

Breastfeeding Benefits

- **Free Nutrition:** Breastmilk costs nothing to produce
- **Prevents Disease and Fights Infection:** During the first few days after delivery, mothers produce colostrum through their breasts. This thick substance plays an important role in building your baby's immune system.
- **Skin to Skin Contact:** The intimate experience of breastfeeding is a great way to bond and connect with your baby.
- **Different Tastes:** Breastfed babies experience different tastes through their mothers' breast milk, depending on what their mothers have eaten. This can make transitioning to solid foods easier for your baby.



Breastfeeding Challenges

- **Personal Discomfort:** Breastfeeding can be uncomfortable and requires correct technique to avoid latch-on pains.
- **Dietary Restrictions:** Women who are breastfeeding need to be aware of what they eat and drink, since these can be passed to the baby through the breast milk.
- **Time and frequency of feedings:** Breastfeeding requires a big time commitment from mothers, especially in the beginning, when babies feed often. A breastfeeding schedule or the need to pump breast milk during the day can make it harder for some moms to work, run errands, or travel. Breastfed babies also need to eat more often than babies who take formula, because breast milk digests faster than formula.

Lactation Pods on Campus

UVU has Mamava lactation pods across campus. These freestanding pods are a private, secure, and dedicated place to breastfeed or pump breastmilk. To access the pods and find locations near you, download the Mamava mobile app, available on the App Store and Google Play.

Formula Feeding Benefits

- **Convenience and Flexibility:** Either parent or caregiver can formula feed their baby at any time. No need to pump breast milk ahead of time.
- **Frequency of Feedings:** Because formula is less digestible than breast milk, formula-fed babies usually need to eat less often than breastfed babies.
- **Diet:** Women who opt to formula feed don't have to worry about the things they eat or drink that could affect their babies.



Formula Feeding Drawbacks

- **Lack of antibodies:** None of the antibodies found in breast milk are in manufactured formula. So, formula can't provide a baby with the added protection against infection and illness that breast milk does.
- **Planning and Organization:** Unlike breast milk, which is always available, unlimited, and served at the right temperature, formula feeding your baby requires planning and organization.
- **Expense:** Formula can be costly for new parents trying to avoid extra expenses.

A Final Word on Infant Feeding

Feeding your baby is a personal decision, and every family's circumstances, preferences, and needs are different. While breastfeeding offers many benefits for both parent and baby, it is not always possible or the best choice for every family. Formula feeding is a safe and nutritious alternative that can help babies grow and thrive.

The most important goal is to ensure that your baby is well-fed and that you feel supported in your feeding journey. Whether you choose to breastfeed, formula feed, pump, or use a combination of feeding methods, give yourself grace as you learn what works best for you and your baby.

If you have questions or concerns about feeding your infant, consult your healthcare provider, pediatrician, or a lactation specialist for personalized guidance and support.

For additional support and resources, visit UVU Wellness Programs in SL 211 to receive a Prenatal Starter Bag containing prenatal vitamins and helpful pregnancy resources.

Resources for Current or Expectant Mothers:

American Pregnancy Association Pregnancy Educator Hotline:

Answers frequently asked pregnancy questions: (800)-672-2296



The Women, Infants, and Children's program:

Frequently referred to as WIC, it is a supplemental food and nutrition program for pregnant women, new moms, and children under the age of 5 years. Use the QR code or learn more and apply at: <https://wic.utah.gov/about/apply/>



Maternal and Infant Health Program via the Utah Department of Health and Human Services:

Provides a multitude of prenatal and postnatal resources, advocates, and organizations available in Utah.



Sources:

Centers for Disease Control and Prevention
The American College of Obstetricians and Gynecologists
Cleveland Clinic
American Pregnancy Association
National Health Services
Mayo Clinics: Guide to a Healthy Pregnancy, 2nd edition
Academy of Nutrition and Dietetics
March of Dimes