ARNOT HEALTH PREGNANCY GUIDE

REV. 11/2020

ArnotHealth
It's what we do

Table of Contents

Welcome to AMS OB/GYN and Midwifery at Arnot Health! We would like to extend a warm welcome to you and thank you for choosing AMS OB/GYN and Midwifery for your prenatal, birth, and postpartum needs. Pregnancy is a very special time in a woman's life, and we are committed to providing the very best care for you through these next several months. Our goals are the same as yours: to have a healthy baby, and for you and your family to experience the process with confidence, joy, and satisfaction.

Our practice is made up of three Obstetricians, and four Certified Nurse Midwives, all of whom you will meet during your prenatal care. Our clinic is open from 8 a.m. to 5 p.m. Monday through Friday for routine prenatal and acute appointments as needed. If you have questions or concerns any time during your prenatal care, please call our office at 607.734.6544 If emergency issues arise after office hours, you may call our office at 607-734-6544 your call will be forwarded to the answering service, and the on-call midwife or doctor will return your call promptly. Our ultimate goal is to be as accessible to you as possible throughout your prenatal care.

To make the most of your prenatal visits, consider writing down your questions and bringing them with you to your appointment. In addition, please review all the educational material you receive, as many questions can be answered by the information in this binder.

We look forward to working with you to make your pregnancy and delivery as comfortable and memorable as possible. If you have any questions regarding this information, do not hesitate to discuss them with your provider at your next visit.

Sincerely,

AMS OB/GYN and Midwifery
Office Hours: Monday-Friday, 8 a.m.–5 p.m.
Office Phone Number: 607-734-6544

They told you about the contractions, but did they tell you about the expansion? Did they tell you how your body would open to make way for the whole universe to pass through? Did they tell you how your heart would explode with a love bigger than anything you've ever known as you pulled your baby to your chest?

They told you about the ring of fire but did they tell you about the crown of stars? Did they mention that there's a moment when your baby enters the world and you leave your body and touch the heavens and become the light of a million galaxies? Did they tell you how the pain of stretching to receive your child would be more exquisite than any sensation you've felt?

They told you you would scream, but did they tell you about how would you roar? Did they tell you about the power that would rise up from your belly as you called your baby forth with your mighty voice? Did they tell you how you would embody the wild woman within you as breathe fire with your song?

They told these stories and taught you to fear birth, to fear your power, to fear yourself. But you are stronger and wiser than that, Mama. You know that birth is your divine dance, your soul's song, your moment with God, and you walk fearlessly into her open arms.

Words and art by: Catie from Spirit Y Sol.

Caring for the women of our community.

It's what we do.

The physicians and providers at Arnot Health understand the special needs of women. From reproductive health and the region's only Neonatal ICU, to breast health and the senior years, Arnot provides for every stage of a woman's life. Talk to one of the specialists at Arnot Health. We look forward to caring for you!

Sungji Chai, MD

Gary Nicholson, MD

Christopher Allen, MD

Muna Alam, DO

Rachel Cooper, CNM

Lisa Grove, CNM

Alison Platukis, CNM

Jennifer Share, CNM

Deborah Wade, CNM

Erica Angelino, PA-C

Octavia Flanagan, WHNP-C

To find a physician in Elmira, Horseheads, and Corning, call 607-734-6544

www.arnothealth.org

ArnotHealth

It's what we do

AMS OB/GYN and Midwifery

Resource List

Chemung/Schuyler WIC
103 Washington St., Elmira NY 14901
607-737-2039

Steuben WIC
117 E. Steuben St., Bath NY 14810
607-776-1151

Parenting Education
CIDS Community Health Partner
607-733-6533
cidsfamilies.com

Smoking Cessation
Finger Lakes Heart Institute Tobacco Cessation Classes
607-737-4169

Information on Pregnancy, Birth, and Breastfeeding

- American College of OBGYN Patient's Portal
  - http://acog.org/patients
- American Pregnancy Association
  - http://americanpregnancy.org
- Breastfeeding Partners
  http://breastfeedingpartners.org
- Childbirth Connection
  - http://www.childbirthconnection.org
- KellyMom
  - http://kellymom.com
- March of Dimes
  - http://www.marchofdimes.org
- Mother-to-Baby
  - http://mothertobaby.org
- Share With Women
  - A series of educational handouts on a variety of topics, created for women by midwives.
  - http://www.midwife.org/Share-With-Women

*If using Google (or any other search engine) to find the answer to a question during your pregnancy, try to find websites that end in ".org",".edu", or ".gov", as these websites tend to contain more accurate and trustworthy information.

AMS OBGYN and Midwifery

Reading List

Pregnancy and Birth Education

- Expecting Better *(Emily Oster)*
- Like a Mother: A Feminist Journey Through the Science and Culture of Pregnancy *(Angela Garbes)*
- Ina May's Guide to Childbirth *(Ina May Gaskin)*
- Mindful Birthing: Training the Mind, Body, and Heart for Childbirth and Beyond *(Nancy Bardacke)*
- The Birth Partner: A Complete Guide to Childbirth for Dads, Partners, Doulas, and Other Labor Companions *(Penny Simkin)*
- Birth Without Fear: A Judgement-Free Guide to Taking Charge of Your Pregnancy, Birth, and Postpartum *(January Harshe)*

Postpartum Education

- The Fourth Trimester: A Postpartum Guide to Healing Your Body, Balancing Your Emotions, and Restoring Your Vitality *(Kimberly Ann Johnson)*
- The First 40 Days: The Essential Art of Nourishing the New Mother *(Heng Ou)*
- Body Full of Stars: Female Rage and My Passage into Motherhood *(Molly Caro May)*

Breastfeeding Education

- Ina May's Guide to Breastfeeding *(Ina May Gaskin)*
- The Womanly Art of Breastfeeding *(La Leche League International)*
- Work. Pump. Repeat: The New Mom's Survival Guide to Breastfeeding and Going Back to Work *(Jessica Shortall)*

Parenting Education

- Cribsheet *(Emily Oster)*
- Whole Child Parenting: Birth to Age 5 *(Whole Child Parenting)*
- Everyday Blessings: The Inner Work of Mindful Parenting *(Myla & Jon Kabat-Zinn)*

**The books above are personal recommendations from your midwives, as women and mothers ourselves. They are not and should not be used as scientific texts, and the information contained within them represents the opinions of the author and the listed references. They are for personal use only and should not replace any medical advice you receive directly from your physicians or midwives.

Welcome to the First Trimester
(Weeks 1-12)

This is a very exciting time for you, and this section will tell you what you can expect in your first trimester of pregnancy.

There are many physical and emotional changes occurring at this time. Many couples find the first trimester both an exciting and stressful period, because they're still adjusting to the idea of having a baby.

Prenatal vitamins should be started if you're not already taking them. Routine visits occur monthly, and the baby's heartbeat may be heard as early as 10 weeks.

Primary discomforts in the first trimester are:

- **Nausea**—A little more than half of all expectant women experience the nausea and vomiting associated with morning sickness. Increased levels of hormones that sustain the pregnancy can cause morning sickness. Morning sickness does not necessarily occur just in the morning.
- **Fatigue**—during the first trimester you will see your body undergoing many changes as it adjusts to your growing baby. This may result in fatigue due to the physical and emotional demands of pregnancy. During your pregnancy, you might feel tired even when you've had a lot of sleep at night. Once your body has adjusted to the increased demands placed upon it, you should have more energy.
- **Urinary frequency**—the uterus is growing and starting to press on the bladder, causing the need to urinate more frequently. Also, there is an increased volume of body fluids in pregnancy, and the kidneys are very efficient at clearing the body of waste products. The pressure on your bladder is often relieved once the uterus rises into the abdominal cavity at around the fourth month.

First Trimester: FAQs

1. *Can I videotape my obstetrical ultrasound?*

   Please be advised that our department follows the American College of Obstetrics and Gynecology's recommendation that prohibits videotaping ultrasounds. However, we are happy to provide you with still pictures of your unborn baby as a memento.

2. *How do I relieve constipation?*

   We recommend a fiber diet, including apples, cider, fruit juice, raisins, and bran. Also make sure to exercise and drink plenty of water.

3. *Is vaginal spotting normal?*

   Yes. Minor spotting typically occurs during the first four months and can be treated with bed rest. Spotting is often caused by either vaginal exams or sexual intercourse and will stop within 24 hours. However, any bleeding should be reported immediately.

4. *How do I relieve nausea?*

   Eat dry foods (crackers, pretzels, etc.) and small protein snacks (cheese, peanut butter) every one to two hours. If nausea persists, take Dramamine® or Unisom®, and vitamin B6.

Welcome to the First Trimester
(Weeks 1-12)

5. *Is it safe to travel?*

   If you're not experiencing any pregnancy complications, you may travel up to week 36. After week 36, we recommend staying home (i.e. traveling no farther than an hour away) in case you deliver prematurely. Long trips should be discussed with your doctor.

6. *Can I still have sex?*

   Absolutely. Sexual activity will not harm you or your baby. However, there are times when pelvic rest may be ordered (e.g. spotting).

7. *Can I use a midwife for my obstetrical provider?*

   Yes! Midwifery is a big part of our practice. We offer nurse midwives for low-risk deliveries.

First Trimester: Comfort Measures

Fatigue – Take short, 15-minute naps throughout the day.
Nausea – Eat dry foods (crackers, pretzels, etc.) and small protein snacks (cheese, peanut butter) every one to two hours. If nausea persists, take Dramamine® or Unisom® and vitamin B6.
Headache – Relax, massage neck or temples, and apply ice to forehead. If headache persists, take Tylenol®.
Gas, constipation – Consume more fluids and fiber, especially bran. Exercise regularly.
Low cramps – Normal, unless persistent or accompanied by bleeding. If this occurs, call the office.
Mood changes – Mood changes are normal in pregnancy, but let us know if you are experiencing depression or anxiety that is making it difficult to get through your day.

First Trimester: Things to Purchase

At AMS OB/GYN we understand the excitement that comes with purchasing items for you and your baby. That's why we've compiled a basic list of recommended items to help steer you in the right direction.

Pregnancy books

- Planning Your Pregnancy and Birth
- Baby Bargains: Secrets to Saving 20% to 50% on Baby Furniture, Equipment, Clothes, Toys, Maternity Wear and Much, Much More!

Pregnancy calendar

- Follow each step of your baby's growth and development with a helpful 40-week pregnancy calendar.

Pregnancy journal

- Keep track of your thoughts, questions, and emotions as you embark on a special nine-month journey with your baby.

SHARE WITH WOMEN

TAKING GOOD CARE OF YOURSELF WHILE YOU ARE PREGNANT

If you are pregnant or thinking of becoming pregnant soon, you will want to pay special attention to your health. Keep this handout on your refrigerator to help you take care of yourself.

What Should I Eat?

You do not have to eat a lot more food during pregnancy. But it is important to eat the right food—the most healthy food for you and your baby. Every day, make sure you have:

- 6 to 8 large glasses of water.
- 6 to 9 servings of whole grain foods like bread or pasta. By reading the label, you will know that you are getting 'whole' grain and not just brown-colored bread or pasta (1 slice of bread or a half cup of cooked pasta is a serving).
- 3 to 4 servings of fruit. Fresh, raw fruit is best (1 small apple or a half cup of chopped fruit is a serving).
- 4 to 5 servings of vegetables (1 medium carrot or a half cup of chopped vegetables is a serving).
- 2 to 3 servings of lean meat, fish, eggs, or nuts. (A piece of meat the size of a pack of playing cards is 1 serving.)
- 1 serving of vitamin C–rich food, like oranges, sweet peppers, or tomatoes (one half cup is a serving).
- 2 to 3 servings of iron-rich foods, like black-eyed peas, sweet potatoes, greens, dried fruit, or meat.
- 1 serving of a food rich in folic acid, like dark green, leafy vegetables (one half cup is a serving).

Are Some Foods Dangerous?

Most women can eat any food they want while they are pregnant. But there are some foods that can be dangerous to the health of your baby.

Fish—Fish is good food. And it is an important food for growing a smart baby. But some fish have lots of dangerous chemicals. To avoid these chemicals:

- Do not eat swordfish, shark, king mackerel, or tilefish.
- Eat salmon no more than 1 time per week.
- Eat only 'light' tuna. Do not eat albacore tuna.

Milk and cheese—Dairy products are an important source of calcium, and calcium helps build strong bones and teeth. But some dairy products carry dangerous germs. To keep yourself and your baby safe, eat and drink only dairy products—such as milk, yogurt, and cheese—that are pasteurized.

Prepared foods—Any food that is spoiled or not cooked well can make

- you sick. Do not eat any meat or fish that has not been cooked all the way through.
- Do not eat any cooked food that has not been kept hot or chilled.
- Wash knives, cutting boards, and your hands between handling raw meat and any other food—like fruits and vegetables—that you plan to eat raw.
- Wash all fruits and vegetables with 1 tablespoon of vinegar in a pan of water to kill germs before you eat them.

Alcohol—We know that alcohol is dangerous for your baby if you drink a lot during your pregnancy. It is safest to avoid all alcohol.

Caffeine—The most recent studies say that 2 cups of caffeinated drink each day is safe during pregnancy. This means 2 small cups of coffee or tea or 1 can of caffeinated soda.

Do I Need to Take Vitamins?

Even if your diet is good, a daily multivitamin is a good idea. All prenatal vitamins are pretty much the same, so buy the cheapest kind. If you find that your vitamins upset your stomach, take a children's chewable vitamin. Be sure you get at least 400 micrograms of folic acid every day in the vitamin you chose. The num- ber of micrograms of folic acid is on the label of the bottle.

Is Exercise Important?

Yes! You are getting ready for an athletic event: labor! Daily exercise will help you stay fit, control your weight, and be prepared for labor. Every day, try to get at least 30 minutes of moderate exercise like walking or swimming. Do deep squats several times a day. This exercise will help control low back pain and help prepare your pelvis for delivery.

Are Some Exercises Dangerous?

You can continue to do pretty much any exercise you have been doing. It is important to avoid any danger of blows to your stomach. You should avoid scuba diving, and contact sports like rugby.

What if I Get Sick—Can I Take Medicine?

It is important to limit the medicines you take as much as possible. It is safe to take acetaminophen (Tylenol). Avoid ibuprofen (Motrin) and avoid aspirin.

- Head cold—Drink lots of fluids, gargle with warm salt water, take warm baths or showers, take Tylenol for headache and sore throat, suck on throat lozenges
- Headaches—Drink at least 6 big glasses of water every day, eat something healthy every 2 to 3 hours during the day, and take Tylenol
- Constipation—Drink lots of water, eat lots of fruits and vegetables, including dried fruits like prunes, and use a fiber supplement like Metamucil

Are There Danger Signs That I Need to Watch Out For?

Call your health care provider if:

- You start to bleed like a period
- You are leaking fluid
- Your baby is not moving (after 24 weeks into your pregnancy)
- You are having very bad headaches or your vision is blurry or you see 'spots'
- You are having very bad pain
- You are feeling very frightened or sad
- You are very worried about something

Complete the information below in case you or your family need to call:
Your health care provider's name: _____
Your health care provider's phone number: _____

FOR MORE INFORMATION

4women.gov
www.womenshealth.gov/faq/prenatal-care.cfm
This site from the US Office of Women's Health has numerous fact sheets on prepregnant and pregnancy health topics

March of Dimes
www.marchofdimes.com/pnhec/

INTERNATIONAL FOOD INFORMATION COUNCIL FOUNDATION

AAPA

HEALTHY EATING DURING PREGNANCY

eat **HEALTHY** choose **VARIETY** maintain **HEALTHY WEIGHT** stay **FOOD SAFE**

A healthy eating pattern is very important during pregnancy. **GOOD NUTRITION** plays a key role in the health of both mother and baby. As a mom-to-be, you have higher nutrient needs than you did before conception. Yet the general principles of good nutrition—variety, balance, and moderation—still apply during pregnancy.

This resource will help you learn how to eat healthy during pregnancy. This includes how to choose a variety of healthy foods, maintain healthy weight gain during pregnancy, and stay food safe.

A BALANCED DIET—WHAT A MOM-TO-BE NEEDS

Eating a **BALANCED DIET** before, during, and after pregnancy is one part of good health. This section covers the **KEY NUTRIENTS** pregnant women need and where to find them.

Calories

Calorie (aka energy for the body) needs increase during pregnancy. But "eating for two" only requires an additional 340 calories during the second trimester and 500 calories in the third trimester. The first trimester does not require any extra calories.

Choose foods and beverages that are **"NUTRIENT-DENSE"**. This means that they are good sources of the building blocks your body needs. Nutrient-dense foods are full of vitamins, minerals and other nutrients. Eat a variety of foods from all five food groups. These include grains, vegetables, fruits, dairy, and meat and beans. This will ensure that you and your growing baby are getting the nutrients you both need.

Your nutrient and calorie needs are higher if you are carrying more than one baby. Discuss what and how much to eat with your health care provider.

BY **INTERNATIONAL FOOD INFORMATION COUNCIL FOUNDATION** AND **AMERICAN ACADEMY OF PHYSICIAN ASSISTANTS (AAPA)**

KEY NUTRIENTS

Protein

Protein helps maintain **MUSCLE** and **BODY TISSUE**. It is also key for a baby's growth—especially during the second and third trimesters. Most pregnant women

should take in about 70 grams of protein every day to meet their minimum needs. Keep in mind you may need more than that. Protein requirements vary based on weight and activity level. Talk to your health care provider if you have questions about your daily protein intake. Lean meats, poultry, fish, eggs, dairy products, and legumes (beans) are good sources of protein. These foods also supply iron, B vitamins, and other important nutrients. Dried beans, lentils, nuts, and soy products like tofu are other good sources of protein.

If you are vegetarian, you can meet your protein needs by eating foods that are **COMPLETE PROTEIN** sources. A complete protein has all the essential "building blocks" (amino acids) your body needs. Each day, eat a variety of protein sources to provide your body with essential amino acids. Vegetarian protein

options include beans, milk, yogurt, eggs, and soy products. Greek yogurt is another great option. It has twice the amount of protein when compared to regular yogurt. Pregnant vegans are able to meet their protein needs from **SOY**, a complete protein source. Sources of soy protein include soy milk, soy cheese, soy yogurt, tofu, and tempeh. Examples of other protein-rich vegan foods are nuts and beans (red kidney beans, chickpeas, black beans, etc.).

Carbohydrates

Carbohydrates are the primary source of **ENERGY** for the body. Fruits, vegetables, grains, and dairy products contain carbohydrates. **WHOLE GRAINS** are an important source of nutrients, such as dietary **FIBER**.

They also provide a variety of health benefits. Other important carbohydrate foods include enriched refined grains. These grains have the added benefit of iron and folic acid, two essential nutrients for the baby's development. Many carbohydrate foods are great choices for breakfast. Including English muffins, yogurt, bagels, cereals, breads, and fruits. Other carbohydrate-containing choices for meals or snacks include crackers, bread, and pasta.

Aim to get the **MAJORITY** of your daily calories from carbohydrates. For most people, carbohydrates should make up about 45 to 65 percent of daily calorie intake. Most pregnant and breastfeeding women need about 175-210 grams of carbohydrates per day.

Fats

Fat is key for good nutrition, health, and storage of many important vitamins. Like carbohydrates and protein, dietary fat is an important source of energy for the body. Certain foods that contain fat supply the body with essential fatty acids. Essential fatty acids are fats that the body does not make, so they should be included in the diet. Most importantly, **ESSENTIAL FATTY ACIDS** are critical for the baby's growth and development.

Health experts recommend keeping total fat intake between 20 and 35 percent of total calories. Most fats should come from unsaturated sources. Sources of **UNSATURATED** fat include fish, vegetable oils (canola, soybean, olive, peanut, safflower, and sunflower oils), nuts, and flaxseeds. All women, including those who are pregnant or breastfeeding should follow these recommendations.

DHA is an unsaturated fat that is important for babies' brain and eye development. Pregnant women should aim to get 200 mg of DHA per day. Oily fish such as salmon and tuna contain DHA. For example, a serving of salmon (3.5 ozor roughly the size of a deck of cards) has over 1g of DHA. This is five times the recommended amount. A health care provider may recommend

a dietary supplement or prenatal vitamin with DHA. For more information on eating fish during pregnancy, see the Food Safety section.

Calcium

Calcium is important for the **GROWTH** of strong bones and teeth. Calcium intake is necessary for all women. Especially pregnant women younger than 25 years old whose bones are still growing.

Pregnant women should aim to consume 1,000 mg of calcium per day. This is about three servings of calcium-rich foods. Women 18 years and younger need 1,300 mg per day, or four servings of foods high in calcium. Many women do not get enough calcium, so it is important to focus on calcium-rich foods. Women who do not consume dairy products should consider a calcium supplement or a multivitamin.

DAIRY PRODUCTS like milk, yogurt, and cheese are good sources of calcium. Non-fat (skim) and low-fat (1%) dairy have equal amounts of calcium and fewer calories than higher fat (2% and whole) dairy.

Other sources of calcium include **DARK GREEN, LEAFY VEGETABLES**, dried beans and peas, nuts and seeds, and sardines. Calcium-fortified foods and beverages are also good sources of calcium. These include some fortified orange juices, soy milk, tofu, almond milk, and breakfast cereals. It is easiest to meet your calcium needs through dairy foods. If you are vegan, have lactose intolerance, or a milk allergy, ask your health care provider how to consume enough calcium.

Pregnant women should not consume raw (unpasteurized) milk or eat foods that contain raw milk. Raw milk can increase the risk of very dangerous foodborne illnesses, including listeriosis. For more information, see the Food Safety section of this resource.

Vitamin D

Vitamin D is important for calcium absorption, immune function and brain health. **SUNLIGHT** is one source of Vitamin D. About five to ten minutes of sunlight to exposed arms or the face can supply a day's worth of Vitamin D.

These times can vary depending on your geographical location and skin color. Aim for fifty mcg, or 2,000 IUs, of Vitamin D per day. This goal can be met with a multivitamin. Milk or yogurt with added Vitamin D can help you meet your daily needs. Oily fish, mushrooms, fortified orange juice, fortified cereals, and dietary supplements also contain vitamin D.

Iron

Iron carries **OXYGEN** through the blood and delivers it throughout the body. It also aids in immunity, brain development, and metabolism. About 90 percent of the iron in the body is recycled every day. The growing baby also stores enough iron to last through the first few months of life.

PREGNANT WOMEN HAVE AN INCREASED AMOUNT OF BLOOD IN THEIR BODIES SO THEY NEED MORE IRON THAN NON-PREGNANT WOMEN.

Pregnant women have an increased amount of blood in their bodies so they **NEED MORE IRON** than non-pregnant women. Pregnant women should aim for a total of 45 mg of iron per day from foods and dietary supplements. Animal products, including red meat, fish, poultry, and eggs, are rich in iron. Other options include enriched and whole grain breads, cereals, and pasta. Green leafy vegetables, beans, nuts, eggs, and dried fruits are also a good source.

The type of iron found in animal products is different from the iron found in plant sources. The body does not absorb the iron in plant sources as well

MYPLATE FOR PREGNANCY

Nutrient needs are higher for pregnant women. But the general principles of sound nutrition—variety, balance, and moderation—are still important.

There are no "perfect" foods for pregnant women. Eat a variety of foods over the course of each day to get the right amount of calories and nutrients for you.

Eating should be enjoyable. You can continue to enjoy your favorite foods in moderation. All exceptions are listed in the "foods to avoid" section. It is important to keep an eye to portion size, calorie content, and your frequency of eating. Also, aim to keep total calories under control when choosing occasional treats.

MyPlate was developed by the U.S. Department of Agriculture as a meal planning tool. This great resource offers personalized eating plans and tools to help choose between different foods. It also includes tips for how to get the most nutrition while staying within calorie needs. The MyPlate for Pregnancy and Breastfeeding can help you plan healthy meals throughout pregnancy.

Many women enter pregnancy with low iron reserves. Your health care provider may recommend iron supplementation starting at the first prenatal visit. Some women may also need screening for iron deficiency on an ongoing basis. Take iron supplements between meals, with water or juice, and not with other supplements. Substances in coffee, tea, and milk can inhibit iron absorption. Taking iron supplements at bedtime may help reduce upset stomach and/or heartburn.

Folic Acid/Folate/ Vitamin B9

FOLIC ACID, a B vitamin needed to help the baby grow, is key before and throughout pregnancy. Folic acid reduces the risk of spina bifida and other birth defects of the brain and spinal cord, which are also called neural tube defects (NTDs). "Folate" is the term for the different forms of the nutrient found naturally in foods. "Folic acid" is the form used in supplements and in enriched grain products.

Enriched bread, flour, pasta, rice, cereals, and other grain products are common food sources of folic acid. To see if your food contains folic acid, check food labels to see if the food contains folic acid or **FOLATE**.

Any woman planning to become pregnant should consume 400 micrograms (mcg) of folic acid daily to help prevent birth defects. This is along with eating foods that contain folate. Women who have had a baby with NTD in the past should take 4 mg per day of folic acid before getting pregnant again.

There are many ways to meet your folate/folic acid needs. First, take a **MULTIVITAMIN** with folic acid. Also, be sure to eat lots of fruits and vegetables, enriched grain products, legumes (such as peanuts), citrus fruits and juices.

FOLIC ACID, A B VITAMIN NEEDED TO HELP THE BABY GROW, IS KEY BEFORE AND THROUGHOUT PREGNANCY.

OTHER FOOD INGREDIENTS

Caffeine

Coffee, tea, energy drinks, some soft drinks, chocolate, and some over-the-counter medications contain **CAFFEINE**. Pregnant or not, it is important to estimate your total

caffeine intake from all sources. Caffeine from foods and beverages is able to cross the placenta and becomes part of breast milk. Yet, most research finds that pregnant and nursing mothers can consume moderate amounts of caffeine safely. Moderate caffeine intake during pregnancy is about 200 mg/day, which is equal to about **TWO 8-OUNCE CUPS OF COFFEE** or four cups of tea a day. A 12-ounce caffeinated soft drink contains about 37 mg of caffeine, while an 8-ounce energy drink has about 100 mg. It is important to read the food labels on foods and beverages to be aware of how much caffeine they contain.

Some women may have heard about a link between caffeine and miscarriage. There have been many studies on whether caffeine increases miscarriage risk. Yet the results are unclear. Leading health experts agree that 200 mg caffeine per day or less during pregnancy is safe. Talk to your health care provider about your caffeine intake if you have a history of heart problems or high blood pressure.

Low-calorie sweeteners

Low-calorie sweeteners are safe for the general public, including pregnant women. The FDA and other leading authorities affirm their safety. Eight **LOW-CALORIE SWEETENERS** are allowed for use in foods and as tabletop sweeteners. They are acesulfame potassium (Ace-K), advantame, aspartame, neotame, saccharin, sucralose, monk fruit extract, and stevia leaf extract. Studies show that they are all safe to consume during pregnancy.

Anyone with phenylketonuria (PKU) must restrict their intake of phenylalanine from all sources. This includes aspartame. PKU is a genetic disorder that prevents the breakdown of phenylalanine. Phenylanine is present in aspartame and many other foods. Pregnant women who have the PKU gene but not the PKU disorder can digest aspartame safely.

Sodium

Sodium is a very important, natural part of fluids in the human body. Sodium works with other minerals to keep **WATER BALANCE** in the body. It is also critical for a healthy nervous system and muscle coordination.

Sodium needs and limits for pregnant women are not different from the general population. The 2015 Dietary Guidelines for Americans recommend limiting sodium intake to 2,300 mg or less per day. Excessive sodium intake has been linked to high blood pressure, heart disease, stroke, and other health conditions.

OTHER NUTRITION SOURCES

Vitamin/Mineral Supplements

A balanced diet meets most nutrient needs. Still, your health care provider may recommend you take a daily multivitamin as well. These can also be helpful if you plan to become pregnant. Taken a few months before conception, an over-the-counter **PRENATAL VITAMIN** may help resolve any nutritional deficiencies.

More vitamin and/or mineral supplementation may be important for certain groups. For example, you may need to **SUPPLEMENT** your diet if you are a strict vegan or follow a restrictive diet. Additional supplementation may also be beneficial if you are carrying twins or triplets. Consider taking a calcium supplement (600 milligrams per day) plus Vitamin D if you are a vegan, are under 25, or do not consume dairy. Also, vitamin B12 supplements (and perhaps vitamin D and zinc) for strict vegans.

Pregnant women should **not** take Vitamin A supplements. Excessive levels of Vitamin A could be toxic to the developing baby. You can meet your vitamin A needs with a healthful diet and a prenatal multivitamin.

Herbal and Botanical Supplements

There is no scientific evidence to support benefits from herbal and botanical products during pregnancy. In fact, some herbal products may have serious **SIDE EFFECTS** for both mom and baby. For these reasons, pregnant and breast-feeding women should avoid herbal and botanical supplements.

Alcohol and Pregnancy

Drinking alcohol during pregnancy can cause **PERMANENT** physical, behavioral, and intellectual disabilities. Do **not** consume alcohol during pregnancy. Also, women who are trying to get pregnant should not drink alcohol. Many women do not know they are pregnant until they are four to six weeks into the pregnancy. Drinking even small amounts during this time could expose their developing baby to alcohol. Women should stop drinking alcohol as soon as they find out they are pregnant.

WEIGHT GAIN DURING PREGNANCY

It is important to track your weight gain during pregnancy. This helps to make sure that both you and your baby are healthy. Women who gain **TOO LITTLE WEIGHT** are at risk of having a small baby (less than 5 1/2 pounds). Yet women who gain **TOO MUCH WEIGHT** have a greater risk of having the baby early or having a large baby. Gaining too much weight during pregnancy may also lead to other health problems. These may include gestational diabetes, high blood pressure, and varicose veins in the mother.

Pregnant women **STORE FAT** to prepare for breastfeeding. If you are below your target pregnancy weight, your health care provider will carefully track your progress. Also, ask your health care provider or a registered dietitian to help with meal planning. This will help ensure that you get the nutrients and calories you need for proper weight gain.

Goals for Weight Gain

Weight gain goals are based on pre-pregnancy weight, height, age, and usual eating patterns. Every woman and every pregnancy is unique. Your health-care provider can help you gain weight at a **HEALTHY RATE** throughout pregnancy.

A weight gain of 25 to 35 pounds is normal for women with a body mass index, or BMI, of 18.5 to 24.9 kg/m2 ("normal weight"). BMI is one way to determine if you are at an appropriate weight. This tool can determine how much weight you should gain during pregnancy. Women who are below **HEALTHY WEIGHT** when they conceive (BMI < 18.5 kg/m2) should aim to gain about 28 to 40 pounds. Women with a BMI of 25 to 29.9 kg/m2 ("overweight") should gain no more than 15 to 25 pounds.

IT IS IMPORTANT TO TRACK YOUR WEIGHT GAIN DURING PREGNANCY TO MAKE SURE THAT BOTH YOU AND YOUR BABY ARE HEALTHY.

Go to www.cdc.gov/nccdphp/dnpa/bmi/ to calculate your individual BMI.

Women with a BMI over 30 kg/m2 ("obese") should gain no more than 11 to 20 pounds. If you are in this category, a health care provider or registered dietitian

PRE-PREGNANCY WEIGHT CATEGORY	BODY MASS INDEX	RECOMMENDED RANGE OF TOTAL WEIGHT GAIN (LBS.)	RECOMMENDED RATES OF WEIGHT GAIN IN THE SECOND AND THIRD TRIMESTERS (LBS./WEEK)
Underweight	Less than 18.5	28-40	1-1.3
Normal Weight	18.5-24.9	25-35	1
Overweight	25-29.9	15-25	0.6
Obese	30 and greater	11-20	0.5

can help you meet these recommendations in a healthy way. Aim to meet your calorie and nutrient needs, while maintaining regular physical activity. Weight loss during pregnancy is not advised.

If you are carrying more than one baby, weight gain recommendations increase. Women with a BMI of 18.5 to 24.9 kg/m2 should gain 37-54 pounds. Women with a BMI of 25 to 29.9 kg/m2 should gain 31-50 pounds. Women with a BMI over 30 kg/m2 should aim to gain 25-42 pounds. There are no set guidelines for weight gain for underweight (BMI less than 18.5 kg/m2) women carrying more than one baby. Work closely with your health care provider to ensure proper weight gain.

Pattern of Weight Gain

Patterns of weight gain during pregnancy are as important as total weight gain. Your health care provider will keep records of your **HEIGHT AND WEIGHT** starting on the first prenatal visit. Regular weigh-ins will be recorded at each visit to make sure you are gaining weight at the **PROPER RATE.**

Weight maintenance or slight weight losses are normal during the first trimester (or first 13 weeks) of pregnancy. But most women should expect to gain about four to five pounds during the first trimester. Weight gain should come

from the **NUTRIENT-RICH FOODS** described earlier in this resource. Listen to your body's signals and stop eating when you feel full. This will help keep you from overeating because "you're eating for two."

Women with healthy pre-pregnancy weights should gain about one pound a week during the second and third trimesters. Women who are underweight before conception should gain a little more than one pound per week. Those who were initially overweight should gain at a slower rate (a little more than a half a pound per week).

Food Cravings and Aversions

Food cravings and dislikes of certain foods are **COMMON** during pregnancy. There is no evidence that food cravings

THERE IS NO EVIDENCE THAT FOOD CRAVINGS ARE LINKED TO NUTRITIONAL DEFICIENCIES. THEIR CAUSE REMAINS A MYSTERY.

LISTEN TO YOUR BODY'S SIGNALS AND STOP EATING WHEN YOU FEEL FULL. THIS WILL HELP KEEP YOU FROM OVEREATING BECAUSE "YOU'RE EATING FOR TWO."

are linked to nutritional deficiencies. Their cause remains a mystery. It is acceptable to meet your food cravings within reason. Especially when they supply nutrients to the diet.

In rare cases, some pregnant women crave nonfood substances. This is a disorder called **PICA**. The consumption of nonfood items can be dangerous for both mother and baby. In some cases, pica involves eating large amounts of nonfood. This can prevent you from getting enough calories or nutrients to stay healthy. Examples of these nonfood items include clay, starch, ice, coffee grounds, or baking soda. If you experience **NONFOOD CRAVINGS**, talk to your health care provider right away. These symptoms may be a sign of nutrient deficiency (such as iron), and may need to be treated with an additional supplement.

PHYSICAL ACTIVITY IS ANOTHER CRITICAL PART OF GOOD HEALTH. INCLUDE 30 MINUTES OR MORE OF MODERATE PHYSICAL ACTIVITY ON MOST, IF NOT ALL, DAYS OF THE WEEK.

Physical Activity

Physical activity is another critical part of good health. Include **30 MINUTES** or more of moderate physical activity on most, if not all, days of the week. Try activities like **WALKING** or **SWIMMING**. But avoid activities that have a high risk of falling or injury. If you already do vigorous activities (like running), you can continue them throughout your pregnancy. Discuss **ADJUSTMENTS** to the activity with your health care provider. Some women cannot fit 30 minutes of one time at one time into their schedules. Feel free to split up the time into three 10-minute intervals throughout the day.

BEING SMART ABOUT FOOD SAFETY

Food safety is important for everyone. There are certain foods that pose an extra risk to pregnant women and their unborn babies. In particular, pregnant women should be aware of their increased risk of **LISTERIOSIS**.

Listeriosis

Listeriosis is a **DANGEROUS INFECTION** caused by bacteria often found in soil, ground water, and on plants. Refrigerated, ready-to-eat foods such as meat, poultry, seafood, and dairy may contain listeria. Also, unpasteurized (raw) milk and products made with raw milk may contain these bacteria. Listeria can be dangerous for pregnant women and their unborn babies. Listeriosis, the infection caused by listeria, can cause **MANY DANGERS** for mother and baby. These include premature delivery, miscarriage, fetal death, and severe illness of the newborn.

Symptoms of listeriosis can take a few days or even weeks to appear and can be mild. You may not even know you have listeriosis. This makes **PRACTICING PROPER FOOD SAFETY** even more critical. Listeriosis can have flu-like symptoms at first. These include sudden onset of fever, chills, muscle aches, diarrhea, and/or upset stomach. Other symptoms could include headache, stiff neck, confusion, loss of balance, or convulsions. A blood test can determine if you have listeriosis, and it can be treated with antibiotics. This can also prevent the fetus from contracting the infection.

AVOID CERTAIN FOODS during pregnancy to prevent listeriosis. These include:

- Hot dogs, luncheon or deli meats, unless they are reheated until steaming hot.
- Soft cheeses such as feta, Brie, Camembert, and blue-veined cheese.
- Soft Mexican-style cheeses ("queso blanco fresco"). Unless they are labeled as made with pasteurized milk.
- Deli salads such as ham salad, chicken salad, egg salad, tuna salad, or seafood salad.
- Refrigerated meat-based pâté or spreads.
- Refrigerated smoked seafood, unless it is an ingredient in a cooked dish such as a casserole.
- Raw (unpasteurized) milk or foods that contain unpasteurized milk.

Mercury in Fish

Fish contains high-quality protein and other essential nutrients. It is also low in saturated fat, and contains healthy **OMEGA-3 FATS**. These fats contribute to heart health, brain development and children's proper growth and development. The 2015 Dietary Guidelines encourage pregnant and breastfeeding women to eat a 2-3 meals (8-12 ounces) of seafood each week.

ONLY FOUR TYPES OF FISH SHOULD BE AVOIDED DURING PREGNANCY DUE TO THEIR MERCURY CONTENT. THESE HIGHER-MERCURY FISH ARE TILEFISH, SHARK, SWORDFISH, AND KING MACKEREL.

All popular types of fish in the U.S. are healthy, low in mercury and safe to eat during pregnancy. These include **SALMON, TUNA** (light canned), and **TILAPIA**. All seafood contains trace (very, very small) amounts of mercury. But only four types of fish should be avoided during pregnancy due to their mercury content. These higher-mercury fish are tilefish, shark, swordfish, and king mackerel.

CONCLUSION

Food has a big role in maintaining the health of both mothers and their babies. Practice good nutrition and food safety habits during pregnancy. These can have **LIFELONG BENEFITS** for you and your child. Eat a mix of whole grains, fruits, vegetables, low-fat dairy, lean meats, and beans. All food groups provide essential nutrients to your diet. Also, remember that certain foods may pose health risks to the mother and unborn baby. Choose foods based on the principles of balance, variety, and moderation. This is the best approach to enjoying a healthy eating plan during pregnancy and for a lifetime.

A MESSAGE FROM THE AMERICAN ACADEMY OF PHYSICIAN ASSISTANTS (AAPA)

PAs are licensed health professionals, and valued members of a health care team that includes a supervising physician. PAs deliver a broad range of medical and surgical services to diverse populations. They can diagnose and treat illnesses, order and interpret tests, develop treatment plans, and write prescriptions in all 50 states, the District of Columbia, and all U.S. territories, with the exception of Puerto Rico. PAs also counsel on preventive health care and assist in surgery.

AAPA is the only national organization to represent the nation's more than **108,500 PHYSICIAN ASSISTANTS** in all clinical specialties. Founded in 1968, the Academy works to promote quality, cost-effective health care, and the professional and personal growth of PAs. For more information about the Academy and the PA profession, visit AAPA's Web site, www.aapa.org.

BASIC RULES OF FOOD SAFETY

TO REDUCE YOUR RISK FOR FOODBORNE ILLNESSES, FOLLOW THESE GENERAL FOOD SAFETY GUIDELINES:

Wash hands, clean, and disinfect surfaces well and often.

Do not cross-contaminate. Use separate cutting boards for produce (fruits and vegetables), and meat, fish, and poultry.

Cook food to proper temperatures. Use a food thermometer and follow instructions provided with food products and microwave meals.

Refrigerate perishable foods and leftovers within 2 hrs of serving.

REFERENCES

American Academy of Physician Assistants. www.aapa.org

Academy of Nutrition and Dietetics (2016). "Healthy Weight During Pregnancy." www.eatright.org/resource/health/pregnancy/prenatal-wellness/healthy-weight-during-pregnancy

Academy of Nutrition and Dietetics. Use of Nutritive and Nonnutritive Sweeteners. *J Acad Nutr Dietetics*. May 2012; 112(5):739-758.

American Academy of Pediatrics (2010). Vitamin D Supplementation for Infants.

American College of Obstetricians and Gynecologists. Weight gain during pregnancy. Committee Opinion No. 548. *Obstet Gynecol* 2013;121:210–2.

Carlson SE. Docosahexaenoic acid supplementation in pregnancy and lactation. *Am J Clin Nutr.* February 2009;89(2):6785-6845.

Centers for Disease Control and Prevention, Division of Birth Defects, National Center on Birth Defects and Developmental Disabilities (2016). *Folic Acid.*

Institute of Medicine. Weight gain during pregnancy: reexamining the guidelines. Washington, DC: National Academies Press; 2009.

March of Dimes (2015). "Caffeine in pregnancy".

Moderate caffeine consumption during pregnancy. Committee Opinion No. 462. American College of Obstetricians and Gynecologists. *Obstet Gynecol.* 2010;116:467–8. Reaffirmed 2015.

National Institutes of Health. Nutrient Recommendations: Dietary Reference Intakes (DRIs). *Dietary Reference Intakes for Energy, Carbohydrate. Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids.* 2002/2005.

United States Department of Agriculture. "Pregnancy and Breastfeeding". www.choosemyplate.gov/moms-pregnancy-breastfeeding

U.S. Department of Health and Human Services, Office on Women's Health (2011). *Fish Facts for Women who are Pregnant or Breastfeeding* [fact sheet].

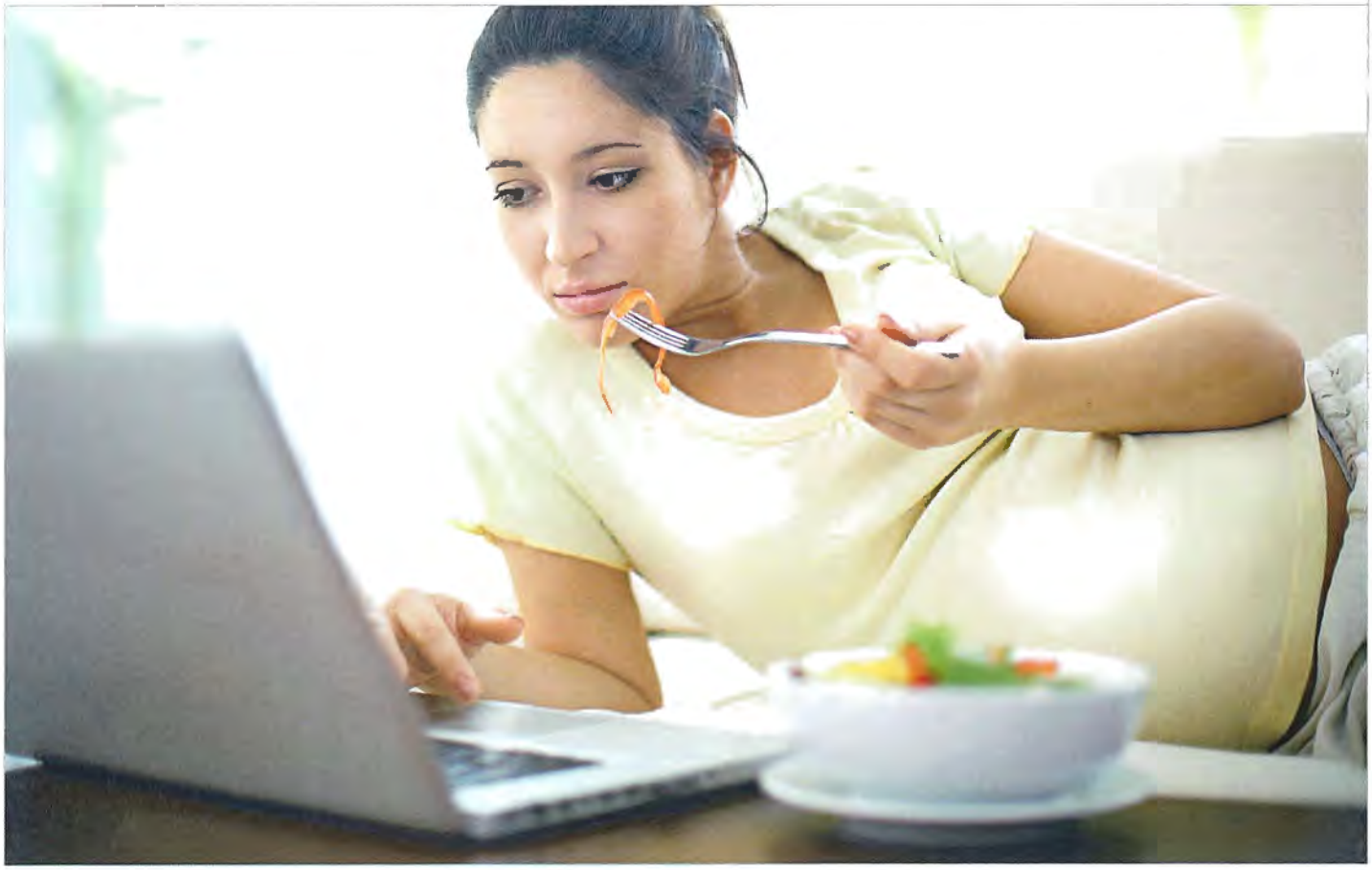
United States Food and Drug Administration (2014). "Food Safety for Moms-to-Be" [fact sheet]. www.fda.gov/Food/FoodborneIllnessContaminants/PeopleAtRisk/ucm083308.htm

United States Food and Drug Administration; Updated Advice by FDA and EPA. "Fish: What Pregnant Women and Parents Should Know". Updated: February 2015. www.fda.gov/food/foodborneillnesscontaminants/metals/ucm393070.htm

United States Preventive Services Task Force. *Final Update Summary: Folic Acid to Prevent Neural Tube Defects: Preventive Medication.* July 2015.

Wagner CL, Greer FR. American Academy of Pediatrics, Section on Breastfeeding and Committee on Nutrition. Prevention of rickets and vitamin D deficiency in infants, children, and adolescents [published correction appears in Pediatrics 2009;123(1):197]. *Pediatrics.* 2008;122(5):1142-1152.

World Health Organization (2016). Infant and young child feeding [fact sheet 342].



NOTES

NOTES

Medications During Pregnancy

Many women experience common discomforts and/or minor illness during their pregnancies that require intervention. Many natural remedies exist to help relieve symptoms, but when those remedies don't work, we have to make decisions about which medications are safe to take. Unfortunately, there is very little research to prove the safety of medications during pregnancy. Certain substances (like tobacco, alcohol, and elicit drugs) and some common medications (like ibuprofen and aspirin) are known to be unsafe during pregnancy, and it is important that women avoid these completely. Most other medications, however, have to be examined by a risk versus benefit analysis, meaning: *are there any risks associated with taking this medicine and do the potential benefits outweigh the possible risk to the fetus?*

All FDA-approved medications have a "Pregnancy Category" that is assigned by the FDA to suggest potential risk during pregnancy. These medication categories are defined below.

Category A:	No evidence of risk in humans. Adequate, well-controlled studies in pregnant women have not demonstrated risk to the fetus.
Category B:	No evidence of risk in humans. Either animal findings show risk, but human findings do not; or if no adequate human studies have been done, then animal studies are show no risk.
Category C:	Risk cannot be ruled out. Human studies are lacking and animal studies are either positive for fetal risk or lacking as well. However, potential benefits may justify the potential risk.
Category D:	Positive evidence of risk. Investigational or post-marketing data show risk to the fetus. Nevertheless, potential benefits may outweigh potential risk.
Category X:	Contraindicated in pregnancy. Studies in animals or humans, or investigational or post-marketing reports, have shown fetal risk which clearly outweighs any possible benefit to the patient.

Herbal supplements and vitamins do not have Pregnancy Categories because they are not FDA regulated.

There are currently no medications that are specifically approved for use during the first 12-14 weeks of pregnancy (the First Trimester). The first trimester is the baby's most sensitive time, because all of the major organ systems are being designed and are beginning to form. Medication exposure should be especially limited during this period because of the baby's sensitivity.

The back side of this sheet contains a list of symptoms that most women will experience at some point during their pregnancy, and remedies and medications that your doctors and midwives feel are safe to take for relief of those symptoms. All medications listed are available at local pharmacies without a prescription and can be taken as instructed on the packaging without consulting your doctor or midwife first; but please use sparingly and only as necessary. We recommend trying all natural remedies first, and only taking medicine if those remedies do not provide relief.

Please call the office before taking any medication that is not on the following list.

At-Home Remedies and Over-the-Counter Medications for Relief in Pregnancy

Symptom	Natural Remedies Safe in All Trimesters	Medications Safe in All Trimesters	Medications Safe in Second and Third Trimester ONLY	Special Notes	Do NOT Use UNSAFE in All Trimesters
Allergies	Saline Nasal Spray, Vaporizer or Humidifier at Bedside, Warm Mint Tea, Eucalyptus Cough Drops, Hot Water with Pure Honey	Benadryl	Claritin, Zyrtec		
Back Pain	Prenatal Cradle, Mild Stretching, Warm Packs to Lower Back, Warm Tub Baths	Acetaminophen (Tylenol)		*Notify provider if back pain is severe or accompanied by difficult or painful urination	Ibuprofen (Advil, Motrin), Naproxen (Aleve), Aspirin (Excedrine, BC Powder)
Cold Symptoms	Saline Nasal Spray, Vaporizer or Humidifier at Bedside, Warm Mint Tea, Eucalyptus Cough Drops, Hot Water with Pure Honey	Guaifenesin (Robitussin, Mucinex)	Oxymetazoline Nasal Spray (Afrin, Mucinex, Vicks)	*Please see your primary care provider if symptoms last longer than 1 week	Pseudoephedrine Hydrochloride (Sudafed), Dextromethorphan (Robitussin-D/DM, Mucinex-D/DM)
Constipation	Hydration, Increase Dietary Fiber (bran, prunes, green leafy vegetables), Prune Juice, Exercise	Psyllium (Metamucil, Fibercon, Citrucel, Fiberall), Colace, Senakot, Milk of Magnesia	Fleets Enema	*Notify provider if no bowel movement x 1 week	Stimulant Laxatives (Ex-Lax)
Cramping	Hydration, Rest, Prenatal Cradle	Acetaminophen (Tylenol)		*Notify provider if cramping accompanied by vaginal bleeding	Ibuprofen (Advil, Motrin), Naproxen (Aleve), Aspirin (Excedrine, BC Powder)
Diarrhea	BRAT Diet (bananas, rice, applesauce, toast)	Kaopectate, Psyllium (Metamucil, Fibercon, Citrucel, Fiberall)	Immodium		
Fever	Cold Compresses, Rest, Hydration	Acetaminophen (Tylenol)		*Untreated high fevers have been associated with fetal anomalies	
Headache	Rest, Hydration, Decrease Stimuli (noise, light, etc.)	Magnesium Supplement, Acetaminphen (Tylenol)		*Notify provider if headache after 20 Weeks Gestation is accompanied by visual changes, chest pain, or decreased fetal movement	
Hemorrhoids	Witch Hazel Compresses (Tucks), Avoid Activities that Cause Straining (constipation, heavy lifting)	Wyanoids	Preparation H, Anusol, Nupercainal		
Indigestion/Heartburn	Avoid Large Meals, Avoid Acidic and Spicy foods, Don't Lie Down after Eating, Elevate Head when Lying Down	Tums, Rolaids	Maalox, Mylanta, Peptid AC		Pepto-Bismol
Nausea and Vomiting	Small Frequent Meals (avoid being hungry and full), Bland Foods (crackers, toast, diluted juice), Ginger (flat ginger ale, ginger tea, ginger candy), Warm Liquids (miso soup, hot water and honey), Sea Bands Bracelets	Vitamin B6 + Doxylamine (Unisom), Emetrol		*Notify provider if unable to hold down any food or liquid for 24 hours	
Pain	Warm Compresses to Affected Area, Rest, Stretching	Acetaminophen (Tylenol)			Ibuprofen (Advil, Motrin), Naproxen (Aleve), Aspirin (Excedrine, BC Powder)

FDA U.S. FOOD & DRUG ADMINISTRATION

Medicine & Pregnancy

Pregnancy can be an exciting time. However, this time can also make you feel uneasy if you are not sure how your medicines will affect your baby. Not all medicines are safe to take when you are pregnant. Even headache or pain medicine may not be safe during certain times in your pregnancy.

Here are 4 tips to help you learn more about how prescription and over-the-counter medicines might affect you and your baby:

Ask Questions

Always talk to your doctor, nurse, or pharmacist before you start taking any medicines, herbs, or vitamins. Don't stop taking your medicines unless your healthcare provider says that it is OK.

Use These Questions:

- Will I need to change my medicine if I want to get pregnant?
- How might this medicine affect my baby?
- What medicines and herbs should I avoid?
- Will I need to take more or less of my medicine?
- What kind of vitamins should I take?
- Can I keep taking this medicine when I start breastfeeding?

Read the Label

Check the drug label and other information you get with your medicine to learn about the possible risks for women who are pregnant or breastfeeding.

The labeling tells you what is known about how the medicine might affect pregnant women. Your healthcare provider can help you decide if you should take the medicine.

Medicine & Pregnancy

Be Smart Online

Ask your doctor, nurse, or pharmacist about the information you get online.

Some websites say certain drugs are safe to take during pregnancy but you should check with your healthcare provider first. Every woman's body is different. It may not be safe for you.

- Do not trust that a product is safe just because it says "natural."
- Check with your healthcare provider before you use a product that you heard about in a chat room or group.

Report Problems

First, tell your healthcare provider about any problems you have with your medicine. Also, tell FDA about any serious problems you have after taking a medicine.

- Call **1-800-FDA-1088** to get a reporting form sent to you by mail.
- Report Problems Online: **www.fda.gov/MedWatch/report**

Sign Up for a Pregnancy Registry

Pregnancy Exposure Registries are research studies that get information from women who take prescription medicines or get a vaccine during pregnancy. Pregnancy registries help women and their doctors learn more about how medicines can be safely used during pregnancy.

- Help other pregnant women by sharing your experiences with medicines.
- You will not be asked to take any new medicines.
- You will provide information about your health and your baby's health.

FDA does not run pregnancy registry studies, but it keeps a list of registries.
See if there is a registry for your medicine at: www.fda.gov/pregnancyregistries

FDA Office of Women's Health
www.fda.gov/pregnancy

2016

Depression and Use of SSRI Medications During Pregnancy

Who has depression?

Depression occurs in about 7 of every 100 people in the United States. Depression is more common in women than in men, especially in women who are 15 to 44 years old. Pregnancy is also common during these ages. Depression can occur for the first time or get worse during pregnancy or even after the baby is born. There is no simple treatment, but for some women, especially those with severe depression, medications can help.

How do I know if I'm depressed?

These two questions will help you know if you are depressed:

1. Over the past 2 weeks, have you ever felt down, depressed, or hopeless?
2. Over the past 2 weeks, have you felt little interest or pleasure in doing things?

If you answer *yes* to both questions, contact your health care provider to discuss the possibility that you have depression. People with depression often say that *most days* they feel sad, lifeless, trapped, or hopeless and that the pleasure and joy have gone out of life. If you spend time thinking about how to kill yourself or others, you need to seek care *immediately*. Severe depression is linked to suicide (killing yourself).

What are SSRIs?

Selective serotonin reuptake inhibitors, also called SSRIs, are the most commonly used medications for depression. If counseling or changes in your life situation do not relieve depression, SSRIs may be a good choice for you, even during pregnancy. Some common SSRIs are:

- citalopram (Celexa)
- escitalopram oxalate (Lexapro)
- fluoxetine (Prozac)
- luvoxamine (Luvox)
- paroxetine (Paxil)
- sertraline (Zoloft)

How do SSRIs work?

These medications increase a brain chemical called serotonin in the areas of your brain that affect your general mood. Usually it takes a few weeks for you to notice any changes in depression, even when the medication works well. Very rarely, SSRIs can make you feel like committing suicide during the first few weeks of taking the medicine.

Should I stop taking a medication for depression if I'm planning to get pregnant or if I am pregnant?

Always contact your health care provider before stopping your medication. Pregnancy does not make depression worse, but the changes that happen to you during pregnancy can make it more difficult to cope with depression. Most women want to protect their babies by not taking medicines when pregnant, but some studies have found that women with untreated depression have a higher chance of having a premature baby and postpartum depression. In addition, stopping some depression medications too quickly can cause withdrawal symptoms.

Do SSRIs cause birth defects?

The chance that SSRIs will cause birth defects is very low. Because there is such a low chance, it is hard for scientists to study the question well. Your health care provider can give you the details of what is known at this time about SSRIs and birth defects.

1526-9523/09/$36.00 doi:10.1111/j.1542-2011.2011.00060.x

Journal of Midwifery & Women's Health

Can SSRIs harm my baby after birth?

Some SSRIs, but not all, may cause a mild withdrawal reaction in the baby after it is born. If this happens, the baby can be fussy and have problems eating well during the first few days after birth. Remind the health care provider who is caring for your baby about any medications you took during pregnancy.

Are SSRIs safe to take if I'm breastfeeding?

SSRIs get into your breast milk in very low amounts and are considered safe to take while you are breastfeeding. Talk with your health care provider about the best medication to take while you are breastfeeding. You do *not* have to stop breastfeeding.

FOR MORE INFORMATION

General Information About Women and Depression

Women and Depression: Discovering Hope, National Institute of Mental Health
www.nimh.nih.gov/health/publications/women-and-depression-discovering-hope/index.shtml
866-615-6464

Depression: Frequently Asked Questions, The National Women's Health Information Center
www.womenshealth.gov/faq/depression.cfm
800-994-9662

Depression During Pregnancy and Postpartum Depression

Depression During and After Pregnancy, The National Women's Health Information Center
www.womenshealth.gov/faq/depression-pregnancy.cfm
800-994-9662

Postpartum Depression, Postpartum Support International
www.postpartum.net
800-944-4PPD (800-944-4773)

Postpartum Depression, American Psychological Association
www.apa.org/pi/women/programs/depression/postpartum.aspx
800-374-2721

Avoid Fetal "Keepsake" Images, Heartbeat Monitors

Ultrasound scans, like the one pictured above, should be reserved for times when there is a medical need and performed by appropriately-trained operators.

Ultrasound imaging is the most widely used medical imaging method during pregnancy.

Fetal ultrasound imaging provides real-time images of the fetus. Doppler fetal ultrasound heartbeat monitors are hand-held ultrasound devices that let you listen to the heartbeat of the fetus. Both are prescription devices designed to be used by trained health care professionals. They are not intended for over-the-counter (OTC) sale or use, and the FDA strongly discourages their use for creating fetal keepsake images and videos.

"Although there is a lack of evidence of any harm due to ultrasound imaging and heartbeat monitors, prudent use of these devices by trained health care providers is important," says Shahram Vaezy, Ph.D., an FDA biomedical engineer. "Ultrasound can heat tissues slightly, and in some cases, it can also produce very small bubbles (cavitation) in some tissues."

The long-term effects of tissue heating and cavitation are not known. Therefore, ultrasound scans should be done only when there is a medical need, based on a prescrip- tion, and performed by appropri- ately-trained operators.

Fetal keepsake videos are controversial because there is no medical benefit gained from exposing the

"Proper use of ultrasound equipment pursuant to a prescription ensures that pregnant women will receive professional care that contributes to their health and to the health of their babies."

fetus to ultrasound. FDA is aware of several enterprises in the U.S. that are commercializing ultrasonic imaging by making fetal keepsake videos. In some cases, the ultrasound machine may be used for as long as an hour to get a video of the fetus.

While FDA recognizes that fetal imaging can promote bonding between the parents and the unborn baby, such opportunities are routinely provided during prenatal care. In creating fetal keepsake videos, there is no control on how long a single imaging session will last, how many sessions will take place, or whether the ultrasound systems will be operated properly. By contrast, Veazy says, "Proper use of ultrasound equipment pursuant to a prescription ensures that pregnant women will receive professional care that contributes to their health and to the health of their babies."

Doppler Ultrasound Heartbeat Monitors

Similar concerns surround the OTC sale and use of Doppler ultrasound heartbeat monitors. These devices, which are used for listening to the heartbeat of a fetus, are legally marketed as "prescription devices," and should only be used by, or under the supervision of, a health care professional.

"When the product is purchased over the counter and used without consultation with a health care professional taking care of the pregnant woman, there is no oversight of how the device is used. Also, there is little or no medical benefit expected from the exposure," Vaezy says. "Furthermore, the number of sessions or the length of a session in scanning a fetus is uncontrolled, and that increases the potential for harm to the fetus and eventually the mother."

Find this and other Consumer Updates at *www.fda.gov/ForConsumers/ConsumerUpdates*

Sign up for free e-mail subscriptions at *www.fda.gov/consumer/consumerenews.html*

TOBACCO FREE ENVIRONMENT

ARNOT OGDEN MEDICAL CENTER – PATIENT SMOKING POLICY

The policy is intended to eliminate tobacco use and offer treatment and counseling to patients and staff who use tobacco products so that a maximum effect of the treatment will be obtained, to reduce the risks of passive smoking (second-hand smoke), and to reduce the risk of fire.

What will this mean for me when I deliver my baby?

- You will not be able to smoke anywhere in the hospital.
- You will be counseled by the admitting staff on the risks of smoking and how it contributes to your current condition and well-being.
- You will be encouraged to consider smoking cessation.
- You may be offered nicotine replacement therapy after this is discussed with your physician to reduce the symptoms of withdrawal.
- You will be referred to the Arnot Ogden Medical Center Tobacco Cessation Program for further counseling and to explore participation in the Cessation Program.

What will happen if I go outside to smoke?

- This is a violation of the Tobacco Free Environment Policy.
- Going outside to smoke may be interpreted as an "act against medical advice" i.e. A.M.A. In this situation, you may be discharged from the hospital.

Depending on what time your baby was born or the condition of the baby, he or she may not be able to go home with you at that time and will be discharged at a later time.

1-866-NY-QUITS

New York State Smokers' Quitline

- The Quitline is a free service that provides New York State residents with help when they are ready to stop using tobacco.
- The Quitline is staffed by Quit Coaches who are specially trained to provide information and coaching on a variety of quitting tobacco use topics, such as stop smoking medications, withdrawal symptoms and developing a quit plan.
- Callers to the Quitline can leave a message and request a call back; or listen to motivational messages and daily tips.
- By phone or web, clients can request a variety of resources, including FREE nicotine replacement therapy (the nicotine patch) and fact sheets.
- Clients can join a growing on-line smokefree community, that includes blogs, a coaches forum, a savings calculator, and more.
- The Quitline also assists health professionals. Physicians and healthcare providers can use the Quitline service as a referral for their patients' stop smoking plans and to enhance recommended and/or prescribed stop smoking medications.
- Healthcare providers can also call the Quitline to obtain concise, up-to-date cessation information, order office materials that can be shared with their patients, or learn more about the referral program.
- The Quitline provides cessation services to a variety of other clients, including friends and family of tobacco users, health educators, businesses, parents, and students who are looking for information.
- All services of the Quitline are free and confidential. They are available in English and Spanish, with coaching offered in other languages. Services are also available for people who are deaf or hearing impaired.
- The Quitline is located at Roswell Park Cancer Institute and supported through the New York State Department of Health.

1-866-NY-QUITS (1-866-697-8487)

www.nysmokefree.com

Deaf, Hard of Hearing, and Speech Disabled: Call the NY Relay Service at 7-1-1 (Voice or TTY)

IS IT SAFE TO SMOKE MARIJUANA WHILE YOU ARE PREGNANT?

Rumors abound that marijuana has no effect on the unborn child, and that it is safe to smoke while pregnant. But research has shown that marijuana use by mom can cause numerous adverse effects on newborns and growing children. Some effects can linger into adulthood.

Birth

Newborns:
- Low birth weight and premature delivery
- Increased anxiety and depression symptoms
- Increased emotional reactions
- Reduced separation anxiety

3 Years

The Developmental Years:
- Less branching in nerve cells
- Reduced ability to pay attention
- Diminished problem-solving skills
- Difficulty with detail-oriented memory
- Decreased ability to organize and prioritize

18 Years

Adulthood:
- Altered brain functions and problems using working memory

22 Years and Beyond

No research has shown any safe level of marijuana use while a woman is pregnant.

Hayatbakhsh, M.R., et al. (2011). Pediatric Research, 71(2), 215-219.
Trezza, V., et al. (2012). Frontiers in Behavioral Neuroscience, 6, 1-12.
Campolongo, P., et al. (2011). Psychopharmacology, 214, 5-15.

USDTL
The Leader in Newborn Toxicology

Essential Oil Safety

General Use

General Guidelines

- Avoid prolonged use of the same essential oils
- Keep oils away from the eyes and ears
- Keep oils away from children and pets
- Use high-quality oils to minimize risk of adverse reaction

Proper Storage

- Proper storage is needed to prevent oxidation
- Store oils in a cool, dark place (refrigeration preferred)
- Keep caps on tight; do not leave caps off for extended time
- Transfer oils to smaller bottle as they run low
- Oils are highly flammable; keep away from direct contact with flames
- Be mindful of the shelf life of each oil

Inhalation + Diffusion

- Limit direct inhale (steam inhalation or personal inhaler) of oils to 15-20 minutes
- Diffuse oils intermittently rather than for extended periods of time.
  For exmaple, diffuse 30-60 minutes, then turn off for 30-60 minutes
- Ensure good ventilation when diffusing
- Use caution when diffusing around pets, children, or visitors

Oral + Internal Use

- Do not ingest essential oils unless advised to do so by a practitioner who is certified to prescribe essential oils in this way. Practitioners must be properly trained in chemistry, anatomy & physiology, appropriate formulations, and safety guidelines.
- Oral ingestion increases risks to the body, more so than other methods of application
- Never take essential oils undiluted or in water, as the risk of mouth/stomach irriation, and erosion of the mucous membrane tissue is high.
- Using oils to detox your body is a myth; essential oils can add more chemical constituents to the liver

Topical Use*

- Avoid use of undiluted (neat) essential oils on skin
- Do not use phototoxic oils at least 12 hours prior to going out in the sun or using a tanning hooth
- Never use essential oils undiluted in a bath; first dilute in vegetable (carrier) oil before adding to bath
- Dilute essential oils in a carrier oil prior to dermal application
- Ensure proper dilution rates based on population, health condition, and end use of product

*see dilution appendix

Essential Oil Safety

Pregnancy & Breastfeeding

Suggested Use

- Avoid use of essential oils during the first trimester
- Never take essential oils orally
- Never use oils neat (undiluted)
- Avoid rectal and vaginal administration
- Use 1% dillution for topical blends
- Avoid use of essential oils on breasts if breastfeeding
- Some essential oils are toxic to fetuses, and can cause fetal abnormality, abortion, etc.

Essential oils to avoid

*Anise	Hyssop (pinacamphone CT)
*Anise (star)	Lanyana
Araucaria	Lavender (Spanish)
Artemisia vestita	Mugwort
Birch (sweet)	*Myrrh
Black seed	Myrtle (aniseed)
Buchu (diophenol CT)	*Oregano
Buchu (pulegone CT)	Parsley leaf
Calamint (lesser)	Parsleyseed
*Carrot seed	Pennyroyal
Cassia	Rue
Chaste tree	Sage (Dalmation)
*Cinnamon bark	Sage (Spanish)
Costus	Savin
Cypress (blue)	Tansy
Dill seed (Indian)	Thuja
Fennel (bitter)	Western Red Cedar
*Fennel (sweet)	*Wintergreen
Feverfew	Wormwood
Genipi	Yarrow (green)
Hibawood	Zedory
Ho leaf (camphor CT)	

*Common in pre-made blends. Be sure to check labels

Essential oils to restrict

Essential Oil	Max. Topical
Basil (lemon)	1.4%
Boswellia papyrifera	1.7%
Champaca (orange) absolute	17.5%
Lemon balm (Australian)	3.4%
Lemon leaf	1.2%
Lemongrass	0.7%
May chang	0.8%
Melissa	0.9%
Myrtle (honey)	0.9%
Myrtle (lemon)	0.7%
Nasturtium absolute	0.26%
Tea tree (lemon-scented)	0.8%
Thyme (lemon)	3.7%
Verbena (lemon)	0.9%

Safe Essential Oils

Bergamot	Clary Sage	Lemon	Petitgrain	Spruce
Blue Tansy	Cypress	Lime	Pine	Tangerine
Cedarwood (Atlas)	Elemi	Mandarin	Rosalina	Tea Tree
Cedarwood (Himalayan)	Geranium	Neroli	Rose	Turmeric
Chamomile (German)	Ginger	Orange (sweet)	Rosewood	Valerian
Chamomile (Roman)	Helichrysum	Patchouli	Sandalwood	Vetiver
Cinnamon Leaf	Jasmine	Pepper (black)	Spearmint	Ylang Ylang
Citronella	Lavender	Peppermint	Spikenard	

Essential Oil Safety

Babies + Children

Suggested Use

- Essential oils not recommended topically for children under 2; herbs & hydrosols preferred.
- Keep oils away from face and nose of infants
- Keep essential oil bottles away from children. Drinking oils can be fatal to young children.
- Avoid all essential oils (topical, oral, inhalation) with premature infants
- Avoid topical application with infants, as their skin is too sensitive
- Slowly introduce oils one at a time to test for possible reaction

Topical Dilution Ranges

Up to 3 months	0.1-0.2%
3-24 months	0.25-0.5%
2-6 years	1-2%
6-15 years	1.5-3%
15 or older	2.5-5%

Essential Oils to Avoid

Under 2

Basil (lemon)
Benzoin
Black Seed
Cassia
Clove (all)
Garlic
Ginger Lily
Hyssop
Lemon Leaf
Lemon Petitgrain
Lemongrass
Massoia
May Chang
Melissa
Myrtle (lemon, honey)
Oakmoss
Opopanax
Oregano
Peru Balsam
Saffron
Sage (wild mountain)
Savory
Styrax
Tea Leaf
Tea Tree (lemon)
Treemoss
Tuberose
Turpentine
Verbena (lemon)
Ylang Ylang

Under 6

Anise
Anise Star
*Cajuput
*Cardamom
Cornmint
Fennel (sweet, bitter)
Galangal
*Ho leaf/Ravintsara
Laurel Leaf
*Marjoram (Spanish)
Myrtle (red, aniseed)
*Niaouli
Peppermint
*Rambiazana
*Sage (Greek, white)
*Samina
*Saro

Under 10

*Rosemary (1,8 cineole CT)
*Eucalyptus
camaldulensis, globulus, maidenii, plenissima, kochii, polybractea, radiata, Autraliana, phellandra, smithii, dives

All Ages

**Birch (sweet)
**Wintergreen

*Contain 1,8 cineole, which dangerously slow breathing in young children
**Contain methyl salicylate, which may lead children to develop Reye's syndrome. Not to be used on children with ADD/ADHD due to salicylate sensitivity

Safe for Children*

Bergamot
Black Pepper
Blue Tansy
Cedarwood
Chamomile (Cape)
Chamomile (German)
Chamomile (Roman)
Clary Sage
Copaiba
Coriander
Cypress
Frankincense
Geranium
Ginger
Grapefruit
Jasmine
Juuiper Berry
Helichrysum
Lavender
Lemon
Lime
Mandarin
Marjoram (sweet)
Neroli
Orange (sweet)
Palmarosa
Patchouli
Petitgrain
Pine, White
Plai
Rosalina
Sandalwood
Siberian Fir
Spearmint
Spikenard
Spruce (all)
Tangerine
Tea Tree
Thyme (linalol CT)
Turmeric
Vetiver

*Herbs & hydrosols are perferred for childen under 2

CONSENT FOR GENETIC SCREENING

Definitions

"Chromosomal Abnormality": a change in the genes that cause a variety of physical and mental problems for a baby

"Detection Rate": how often the test results are "positive" for people who actually have the condition being tested for; or, how often the test is right

"False Positive Rate": how often the test results are "positive" for people who DO NOT actually have the condition being tested for; or, how often the test is wrong

"Out-of-Pocket Cost": the approximate cost to the patient without insurance coverage

Summary of Screening Options

Cystic Fibrosis Carrier Screening

The American College of Obstetricians and Gynecologists (ACOG) recommends that all white women of childbearing age be screened for their cystic fibrosis carrier status.

This screen is for detection of the Cystic Fibrosis gene in the mother's DNA. This is a blood test that can be performed at any time in pregnancy, and the result does not change for future pregnancies. The result will come back either "Positive" or "Negative".

If a woman is a known carrier for Cystic Fibrosis, or tests positive as a carrier during this pregnancy, it is recommended that her partner also be screened. If both the mother and father of a baby are carriers of the Cystic Fibrosis gene, then the baby has a 25% (or 1-in-4) chance of having Cystic Fibrosis.

The detection rate for this test varies according to ethnicity, ranging from under 50% to 94%. The test is most likely to detect a Cystic Fibrosis mutation in non-Hispanic white and Ashkenazi Jewish populations.

The approximate out-of-pocket cost without insurance coverage is $250-$350.

Advantages	Disadvantages
*This is a safe, simple, and noninvasive screen that can be performed at any point in your pregnancy and does not have to be repeated for future pregnancies.	*Cystic Fibrosis testing can screen for some of the most common genes linked to Cystic Fibrosis, but not all genes. There is a low test sensitivity for certain populations, including Asian American, African American, and Hispanic white.

CONSENT FOR GENETIC SCREENING

Summary of Screening Options

The "First Trimester Screen" (aka Nuchal Translucency "NT" Scan)

This genetic screen is for the detection of Trisomy 21 (Down Syndrome), Trisomy 18 (Edwards Syndrome), and Trisomy 13 (Patau Syndrome). It is performed between 11 weeks gestation and 14 weeks gestation, and consists of an ultrasound and a small finger stick for a few drops of the mother's blood.

By looking at the mother's blood, this screen measures the mother's placental hormones (free beta hCG, PAPP-A, and AFP). On ultrasound, this screen measures a pocket of fluid behind that baby's neck (the "Nuchal Translucency", or "NT") and looks at the bones in the baby's nose. All this information together gives the result of the screen, which will come back either "High Risk" or "Low Risk" for the baby having one of the three genetic conditions listed above.

The screen has a detection rate of 96% for Down Syndrome, and 93% for Edwards Syndrome and Patau Syndrome. False positive rates are 2% for Down Syndrome, and 0.3% for Edwards Syndrome and Patau Syndrome.

The typical out-of-pocket cost without insurance coverage is $540.

Advantages	*Disadvantages*
*This is a safe, simple, and noninvasive screen with a high detection rate for Trisomy 21/13/18. Those shown to be high risk can receive expedited (fast) counseling and follow-up options such as Chorionic Villus Sampling (CVS) and Amniocentesis, if desired.	*This screen is time sensitive and limited to the detection of chromosomal abnormalities on chromosomes 21, 18, and 13 only. There is a 0.3-2.0% false positive rate. It is less sensitive at detecting abnormal results in twin gestations, and is not available for multiple gestations greater than twins. This screen, even when positive, does not diagnose a problem, but rather suggest that further testing should be done.

CONSENT FOR GENETIC SCREENING

Summary of Screening Options

MaterniT21

The MaterniT21 "Core" genetic screen is for the detection of Trisomy 21 (Down Syndrome), Trisomy 18 (Edwards Syndrome), and Trisomy 13 (Patau Syndrome), in addition to the sex chromosome abnormalities Triple X Syndrome, XYY Syndrome, Klinefelter Syndrome, and Turner Syndrome. This screen consists of a blood draw from the mother, and can be performed as early as 10 weeks gestation.

By looking at the mother's blood, this screen measures the "cell free DNA" from the baby. This information produces the result of the screen, which will come back as either "Positive" or "Negative", and will also tell the sex of the baby if the parents want to know.

The screen has a detection rate of 99% for Down Syndrome and Edwards Syndrome, 92% for Patau Syndrome, 99% for fetal sex determination, and 96% for the sex chromosome abnormalities listed above. Fetal sex identification is not available for multiple gestations, such as twins, triplets, etc.

The maximum out-of-pocket cost without insurance coverage is $695, however many patients are eligible for cost reduction.

**This screen is available to women age 35 or older. If you are under 35 years old and interested in this test, please discuss with your midwife or doctor.*

Advantages	Disadvantages
*An extensive, safe, simple, noninvasive, and early screen. Those shown to be high risk can receive expedited (fast) counseling and follow-up options such as Chorionic Villus Sampling (CVS) and Amniocentesis, if desired. There is no cost difference for the "Core" screen and "Enhanced" screen. False positive rate is less than 1% on Core screen.	*The "Core" screen detection is limited is limited to specific abnormalities on chromosomes 21, 18, 13, X, and Y. Fetal sex identification and sex chromosome abnormalities are not available for multiple gestations. Chromosomal abnormalities identified in multiple gestations will not identify which baby is affected.

CONSENT FOR GENETIC SCREENING

Summary of Screening Options

"The Second Trimester Screen" (aka MSAFP or Quad Screen)

The Second Trimester Screen may either be requested as one of two tests, depending on whether or not the First Trimester Screen was completed and if so, whether or not it the results were "low risk". The Second Trimester Screen consists of tube of the mother's blood, and can be completed between 15 and 19 weeks gestation. The Second Trimester Screen tests for the levels of certain natural chemicals and hormones in a woman's body, which may include msAFP, hCG, unconjugated estriol, and Inhibin A.

If the First Trimester Screen was completed and the results were low risk, the Second Trimester Screen will be ordered as the msAFP. The msAFP screens for abdominal wall defects (problems with the baby's stomach and intestines) and neural tube defects (problems with the baby's spine).

If the First Trimester Screen was NOT completed, or the results were high risk, the Second Trimester Screen will be ordered as the Quad Screen. The Quad Screen screens for Trisomy 21 (Down Syndrome), Trisomy 18 (Edwards Syndrome), and Trisomy 13 (Patau Syndrome), as well as abdominal wall defects and neural tube defects.

Detection rates:

The approximate out-of-pocket cost without insurance coverage is $380.

Advantages	Disadvantages
*This is a simple, safe, and noninvasive genetic screen that can be performed later in pregnancy than the First Trimester Screen. This is the only non-invasive genetic screen that offers screening for neural tube defects and abdominal wall defects.	* This genetic screen is limited to the conditions noted above. The Quad Screen has a lower sensitivity and specificity for Trisomy 13/18/21 than the First Trimester Screen. This screen, even when positive, does not diagnose a problem, but rather suggest that further testing should be done.

CONSENT FOR GENETIC SCREENING

My midwife or doctor has explained to me what my personal genetic risk is for my current pregnancy, and that I have the following genetic screening options available to me. They have also explained the advantages, disadvantages, limitations, and time lines for these screening tests. I have been given additional written information on these screening tests. I understand what the conditions that these tests are screening for. I understand that my insurance company may not pay for these optional tests, and that there may be an out-of-pocket cost to me, which I am willing to pay in full. I have been given the opportunity to ask questions, and my questions have been answered to my satisfaction.

Based on this information, I have decided that: (please initial)

	I do NOT desire this screen.	**I DO desire this screen.**	**I have not decided whether or not I want this screen yet.***
Cystic Fibrosis Carrier Screening			
First Trimester Screen ("NT Scan")			
MaterniT21 (if applicable)			
Second Trimester Screen ("Quad"/"MSAFP")			

*I understand that by initialling "I have not decided whether or not I want this screen yet.", it is my responsibility to notify my providers if I would like these tests ordered and/or scheduled.

Print Name: _____

Sign Name: _____

Witness Signature: _____

Date: _____

Welcome to The Second Trimester

(Weeks 13-27)

During these weeks you will notice the following changes:

- The nausea, headaches, and fatigue of the first trimester will disappear.
- Your provider will be able to hear the heartbeat at each of your visits.
- You will begin to feel movement between weeks 16-20.
- After 24 weeks, you should feel the baby move every day.
- Your partner may begin to feel movement around 24-28 weeks.
- This trimester is the most fun and the time you feel the healthiest.

Second Trimester FAQs:

1. *Are hemorrhoids avoidable?*
   To prevent hemorrhoids, avoid constipation and straining. To treat them, lie with a pillow under your buttocks, and apply ice or cold witch hazel pads to the painful area. You may also use over-the-counter medications like Preparation H® or Anusol®.

2. *How should I treat heartburn or indigestion?*
   Eat slowly and more frequently. Chew gum after eating. Eat dry food (crackers, toast, etc.) before bed. See also Approved OTC medications.

3. *Should I be concerned about vaginal discharge?*
   No. It's normal to experience a thin, milky discharge during your pregnancy. We recommend wearing panty liners and cotton underwear for more breathability. Avoid using tampons, and do not douche. Douching increases the risk of infection and may force air into your vagina, which can be hazardous to your baby.

4. *Is it safe to visit the dentist?*
   Regular checkups are perfectly fine. However, if you are undergoing a major procedure, please call your provider. X-rays and certain anesthetics may be dangerous to your baby's health. If you do require surgery and need your provider's permission, a letter from your provider is available upon request.

5. *What should I do about leg muscle cramps?*
   Muscle cramps are normal during pregnancy. To relieve tension, get plenty of exercise, and consume more magnesium oxide.

6. *How do I relieve nosebleeds?*
   Nosebleeds are the result of increased blood volume during pregnancy. To avoid nosebleeds, use Ocean® Nasal Spray, and place humidifiers throughout your house. To relieve a nosebleed, pinch the area right above your nostril for five minutes. Continue this three times, or until the bleeding stops. If the bleeding is still frequent and heavy, call our office.

7. *Can I prevent stretch marks?*

Unfortunately, approximately 90% of pregnant women experience stretch marks. Lotions and creams will help keep your skin moist and soft, but they will not prevent stretch marks. The good news is that your stretch marks will eventually fade into a light, silvery color after pregnancy.

8. *How do I relieve backaches?*

Backaches are the result of stretching ligaments and the weight of your baby. To relieve back tension, tighten your lower abdominal muscles or wear a pelvic support belt. Pelvic tilt exercises may also help.

9. *I occasionally get dizzy when I stand up or change positions, or I get warm. Is this a problem?*

No. Due to changes in blood flow and cardiac activity, these occasional dizzy episodes are normal and can be managed with slower movements, increased fluids, and keeping a fan nearby.

Comfort Measures:

- Leg cramps, groin pain - May be caused by lack of calcium. Increase consumption of dairy products or calcium carbonate tablets. Decrease cola consumption.
- Dizziness, fainting - Move slowly, lay down, and turn on your left side.
- Cravings - Eat a well-balanced diet and indulge yourself occasionally. Report cravings for non-food items or ice to your doctor.

Things to Purchase:

It's time to start thinking more seriously about your shopping list. Below, you'll find a basic list of items to consider purchasing during your second trimester. Remember to register at your favorite stores so friends and family will know exactly what to get.

- ☐ Baby book
- ☐ Baby clothes
- ☐ Breastfeeding supplies
- ☐ Maternity clothes
- ☐ Changing table
- ☐ Crib
- ☐ Comfortable shoes
- ☐ Dressers
- ☐ Glider/ rocker
- ☐ Maternity support belt
- ☐ Medical supplies
- ☐ Nursery accessories
- ☐ Supportive nursing bra

Exercise in Pregnancy

Is it safe for me to exercise while I'm pregnant?

Most exercise is safe for pregnant women. In fact, daily exercise during your pregnancy can help you and your baby be healthier and might decrease your chance of having some problems during pregnancy. If you had a medical problem before you became pregnant or have had complications during your pregnancy, you should talk about the safety of exercise with your health care provider before you start any activity.

How can exercising while I'm pregnant help me?

Exercise in pregnancy can help you in many ways. It can help you feel better and have less back pain, constipation, and tiredness. Exercise can also help you sleep better and improve your mood. Your body will be better prepared for labor. You may have a shorter labor with less chance of having a cesarean birth. You will gain less weight in pregnancy, which will help you get back to your prepregnancy weight more quickly after the baby comes. Exercise in pregnancy may also lower your chance of getting gestational diabetes or high blood pressure during pregnancy. Your baby is more likely to be born with a healthy birth weight. Exercise can also lower the chance of having postpartum depression.

How much exercise should I do while I'm pregnant?

You should try to do moderate exercise for at least 30 minutes most days of the week. Moderate exercise means you should start to sweat and your heart rate increases a bit, but you are still able to talk while you are exercising. If you exercised before pregnancy, you can probably continue the same physical activities. If you are not currently exercising, pregnancy is a good time to start. You want to start slow and gradually increase your exercise.

What exercises are safe for me to do while I'm pregnant?

Walking is a good exercise to start with. You will get moving and have less strain on your joints. Swimming, biking, yoga, and low-impact aerobics are also good choices. Light weight training is okay too. Being creative with your exercise will help you stay motivated. Hiking, dancing, and rowing can be fun activities to try. You do not need to pay money for an exercise class or activity. Walking up and down stairs or doing exercises at home are all good, free activities.

Are there other things I should consider when I'm exercising while I'm pregnant?

Be sure to stretch your muscles first and warm up and cool down each time you exercise. Drink water throughout your exercise so you can stay well hydrated. Make sure you do not get too hot, and do not overdo your exercise, especially on a hot day. During pregnancy, your balance changes as the baby grows, so it is important to move carefully and always make sure you are not in danger of falling. Avoid lying flat on your back. You can put a pillow or towel underneath one hip so that you can still participate in exercises that may require this position. Listen to your body for warning signs. See the following list for specific warning signs that tell you to stop your exercise.

What exercises are not recommended while I'm pregnant?

You should not do exercises that put you at risk for getting hit or kicked in the stomach or falling. Do not do exercises that involve contact with other persons or heavy lifting. Exercises to avoid are:

- Hockey
- Soccer
- Basketball
- Skiing
- Gymnastics
- Horseback riding

1526-9523/09/536.00 doi:10.1111/jmwh.12218

Journal of Midwifery & Women's Health

- High-intensity racquet sports
- Heavy weight lifting (over 50 pounds)
- Scuba diving
- Exercise at high altitudes

Use common sense. If you are not sure about an exercise, you should talk to your health care provider first.

Are there reasons I should not exercise while I'm pregnant?
You should talk to your health care provider before you exercise if you:

- Havea serious heart or lung disease
- Have high blood pressure before or during pregnancy
- Have premature labor or have had a threatened miscarriage during this pregnancy
- Have cervical incompetence (weakness) or havea cerclage in place
- Have placenta previa (your placenta is low or covering the opening to your cervix)
- Are carrying more than one baby
- Have had or are currently having any vaginal bleeding
- Think your membranes are ruptured (water is broken)

When should I stop my exercise?
Stop exercising if you:

- Have bleeding or are leaking fluid from your vagina
- Have trouble breathing
- Feel dizzy or lightheaded
  Have pain in your chest
- Have pain or swelling in your calf
- Have contractions before you are 37 weeks pregnant
- Are feeling the baby move less than normal

For More Information

Kid's Health
General information on exercise in pregnancy.
http://kidshealth.org/parent/nutrition_center/staying_fit/exercising_pregnancy.html#
http://www.cdc.gov/physicalactivity/everyone/guidelines/pregnancy.html

March of Dimes
Video and written information on exercise in pregnancy.
http://www.marchofdimes.com/pregnancy/exercise-during-pregnancy.aspx#

Mayo Clinic
Exercises you can do at home that strengthen your muscles and get your body ready for labor.
http://www.mayoclinic.org/healthy-living/pregnancy-week-by-week/multimedia/pregnancy-exercises/sls-20076779?s=1

Parents Magazine
Low-impact yoga exercises you can do at home to prepare for labor and stay healthy.
http://www.parents.com/pregnancy/my-body/fitness/prenatal-yoga-workout/#page=18

Danger Signs to Watch for During Pregnancy

If you experience any of the following, call the office as soon as possible, unless directed otherwise. DO NOT wait for your next appointment.

- **Vaginal bleeding** that is slight (less than menses) and occurs during the first four months is usually treated with pelvic rest only. Spotting can occur after intercourse or a vaginal exam, but it should not be heavy or last longer than 24 hours. Profuse bleeding (greater than menses) should be reported immediately. If heavy bleeding occurs after office hours, go to the emergency room or to labor and delivery at the hospital.

- **Puffiness of the face, eyes, or palm of your hand** that appears suddenly and persists for more than 24 hours. Swelling that disappears after a night's rest or after elevating your legs is not uncommon.

- **Severe headaches** that develop in the last half of pregnancy, persist for more than 24 hours, and are not relieved by Tylenol®.

- **Dimming or blurring vision** that lasts longer than one day during the last half of pregnancy.

- **Severe abdominal pain** that is constant and persistent, especially if associated with vomiting. This is different than common obstetrical discomforts such as round-ligament spasms, which feel more like pulling or stretching.

- **Vomiting** lasting more than 24 hours.

- **Fever** of 100.4 degrees or more lasting for more than 24 hours.

- **Rupture of membranes**. If your water breaks during the last six weeks of pregnancy, go directly to the hospital. Prior to the last six weeks, call the office for proper advice during the day or labor and delivery after office hours.

- **Dysuria** (burning with urination) usually indicates a urinary tract infection, especially when accompanied by urinary frequency, chills, and/or a fever.

- **Uterine contractions** that occur more frequently than every 10 minutes and don't go away with rest and fluids prior to 36 weeks.

- **Anything that is causing you or your partner concern.**

Breastfeeding Mothers' Bill of Rights

Choosing how to feed her new baby is one of the important decisions a mother can make in preparing for her infant's arrival. Doctors agree that for most women, breastfeeding is the safest and healthiest choice. It is your right to be informed about the benefits of breastfeeding, and to have your health care provider, maternal health care facility, and child day care facility encourage and support breastfeeding. You have the right to make your own choice about breastfeeding. Whether you choose to breastfeed or not, you have the rights listed below, regardless of your race, creed, national origin, sexual orientation, gender identity or expression, or source of payment for your health care. Maternal health care facilities have a responsibility to ensure that you understand these rights. They must provide this information clearly for you, and must provide an interpreter, if necessary. These rights may be limited only in cases where your health or the health of your baby requires it. If any of the following things are not medically right for you or your baby, you should be fully informed of the facts and be consulted.

(1) Before You Deliver:

If you attend prenatal childbirth education classes (those provided by the maternal health care facility and by all hospital clinics and diagnostic and treatment centers providing prenatal services in accordance with Article 28 of the Public Health Law), then you must receive the Breastfeeding Mothers' Bill of Rights. Each maternal health care facility shall provide the maternity information leaflet, including the Breastfeeding Mothers' Bill of Rights, to each patient or to the appointed personal representative at the time of prebooking or time of admission to a maternal health care facility.

You have the right to receive complete information about the benefits of breastfeeding for yourself and your baby. This will help you make an informed choice on how to feed your baby.

You have the right to receive information that is free of commercial interests and includes:

- How breastfeeding benefits you and your baby nutritionally, medically and emotionally;
- How to prepare yourself for breastfeeding;
- How to understand some of the problems you may face and how to solve them.

(2) In The Maternal Health Care Facility:

- You have the right to have your baby stay with you right after birth, whether you deliver vaginally or by cesarean section.
- You have the right to begin breastfeeding within one hour after birth.
- You have the right to get help from someone who is trained in breastfeeding.
- You have the right to have your baby not receive any bottle feeding or pacifiers.
- You have the right to know about and refuse any drugs that may dry up your milk.
- You have the right to have your baby in your room with you 24 hours a day.
- You have the right to breastfeed your baby at any time day or night.

- You have the right to know if your doctor or your baby's pediatrician is advising against breastfeeding before any feeding decisions are made.
- You have the right to have a sign on your baby's crib clearly stating that your baby is breastfeeding and that no bottle feeding of any type is to be offered.
- You have the right to receive full information about how you are doing with breastfeeding, and to get help on how to improve.
- You have the right to breastfeed your baby in the neonatal intensive care unit. If nursing is not possible, every attempt will be made to have your baby receive your pumped or expressed milk.
- If you – or your baby – are re-hospitalized in a maternal health care facility after the initial delivery stay, the hospital will make every effort to continue to support breastfeeding, and to provide hospital-grade electric pumps and rooming-in facilities.
- You have the right to get help from someone specially trained in breastfeeding support, if your baby has special needs.
- You have the right to have a family member or friend receive breastfeeding information from a staff member, if you request it.

(3) When You Leave The Maternal Health Care Facility:

- You have the right to printed breastfeeding information free of commercial material.
- You have the right, unless specifically requested by you, and available at the facility, to be discharged from the facility without discharge packs containing infant formula, or formula coupons unless ordered by your baby's health care provider.
- You have the right to get information about breastfeeding resources in your community, including information on availability of breastfeeding consultants, support groups, and breast pumps.
- You have the right to have the facility give you information to help you choose a medical provider for your baby, and to help you understand the importance of a follow-up appointment.
- You have the right to receive information about safely collecting and storing your breast milk.
- You have the right to breastfeed your baby in any location, public or private, where you are otherwise authorized to be. Complaints can be directed to the New York State Division of Human Rights.
- You have a right to breastfeed your baby at your place of employment or child day care center in an environment that does not discourage breastfeeding or the provision of breast milk.
- Under section 206-c of the Labor Law, for up to three years following childbirth, you have the right to take reasonable unpaid break time or to use paid break time or meal time each day, so that you can express breast milk at work. Your employer must make reasonable efforts to provide a room or another location, in close proximity to your work area, where you can express breast milk in private. Your employer may not discriminate against you based on your decision to express breast milk at work. Complaints can be directed to the New York State Department of Labor.

These are your rights. If the maternal health care facility does not honor these rights, you can seek help by contacting the New York State Department of Health, or by contacting the hospital complaint hotline at **1-800-804-5447**; or via email at **hospinfo@health.ny.gov**.

NEW YORK STATE | Department of Health

Classes for New Parents

ArnotHealth

Be Prepared

You wouldn't buy a car without researching its reliability. You wouldn't start a new job without learning about the prospective employer. And you certainly wouldn't marry someone you'd never met before… would you?

Our classes for new parents are all about being prepared for the life-changing event of having a baby. There is much to learn about the reality of having a tiny human being rely on you so completely. So why wouldn't you want to be as ready as you can be for "the big event?"

At Arnot Health, we've designed a series of classes, each one customized to the needs of first-time parents – or those who just need a refresher on the details of labor and delivery.

Call Health on Demand today at 607-737-4499 to sign up for the class that's right for you.

Options for New or Expectant Mothers

Arnot Health offers a series of classes for new moms, as well as those who have given birth before but need a refresher.

You'll learn about labor and delivery, comfort measures for labor, the role of your labor partner, newborn care, breast/bottle feeding, postpartum issues, and parenting, as well as procedures and options at Arnot Ogden Medical Center.

Specific meeting and start dates for individual classes may vary. Call Health on Demand at 607-737-4499 for a schedule of the class you want to attend.

Some fees apply. Registration is required for all classes.

In-Person Classes

The Baby on the Way course is a 4-week class meeting one night per week for three hours. Occasional weekend classes are available, dates and times vary. Classes are held on the Arnot Ogden Medical Center campus, exact locations may vary.

Call Health on Demand for dates and locations and to register, 607-737-4499.

We recommend registering 12 weeks before your due date to get the most out of this class. Classes should be started in your 7th month of pregnancy.

Online eClasses

We offer two online courses covering the same information as the in-person class.

- Understanding Birth
- Understanding Your Newborn

Online classes can be completed at your own pace with a 60-day access to the eClass site. Call Health on Demand to register at 607-737-4499.

Maternity Ward Tour

For a chance to see the Labor and Delivery Unit and meet some of the staff, call Labor & Delivery at 737-4261 to schedule an appointment. Tours are done by the staff of the department. Sometimes the unit gets very busy and tours must be cancelled so the staff can be with our new moms. In this event, tours can be rescheduled and we do apologize for the inconvenience.

Related Offerings

Arnot Health also offers the following classes to help parents with issues surrounding feeding and car seat safety.

Prenatal Breast Feeding Class

This free class meets 7-9 p.m. the third Wednesday of each month in the OB conference room on the second floor of
Arnot Ogden Medical Center.

The class covers the advantages of breast feeding, how to get off to a good start, bonding with mom and dad, and how to continue breast feeding upon your return to work. Breast pump information is also given, along with community resource contacts for support programs to follow up with after your discharge from the medical center.

Car Seat Safety Class

This free class meets 6-8 p.m. the second Thursday of each month on the Arnot Ogden Medical Center campus. Locations vary.

This class is for expecting parents, parents, grandparents and caregivers of children age newborn to 10 years old. Receive up-to-date car seat safety information. Learn about community resources to get your car seat checked.

Class is taught by a certified car seat technician. Please note, we will not be providing free car seats or installing your seat for you. Car seat checks are by appointment only. You can attend the class whether you have a car seat already or are planning your purchase. If you have questions about your specific car seat, please bring the owner's manual for your car and seat to class, as well as the seat itself.

Welcome to the Third Trimester
(Weeks 28-40)

This trimester can be the most difficult. You know the baby is almost here; waiting can be hard.

- The baby should be moving daily.
- You should be taking Lamaze (childbirth prep classes) and/or breastfeeding classes.
- You will have occasional back pain and low abdomen pain (stretching and pulling). If you have questions about your pains, don't hesitate to ask.
- The last month can be especially uncomfortable, but nature knows when labor should begin. Try to relax and enjoy this special time.

Third Trimester: FAQs

1. **Can I use a nurse midwife for my delivery?**
   We currently have nurse midwives available for low-risk deliveries.

2. **Should I be concerned about high blood pressure?**
   If high blood pressure goes undetected, it could lead to potential complications. However, if it's treated early, you should have nothing to worry about. Your provider will monitor your blood pressure on a regular basis to avoid any potential health hazards.

3. **Is it normal for my breasts to leak?**
   Yes. Most women begin to notice a yellowish fluid, called colostrum, during the last stages of pregnancy. If you experience this, use disposable breast pads inside your bra.

4. **How do I reduce body swelling?**
   As your body prepares for labor, it takes on more fluid, causing different parts to swell. To help relieve some of the swelling, drink water, avoid salt, elevate your feet, and rest.

Comfort Measures

* **Indigestion, heartburn** - Eat slowly and more frequently. Chew gum after eating. Eat something dry before bed.
* **Hemorrhoids** - Avoid constipation and straining. Lie with a pillow under your buttocks; apply ice or cold witch hazel to the painful area.
* **Insomnia Normal** - Take a warm bath or drink warm milk before bed. Music, a dull book and relaxation exercises will also help.

* **Joint pain** - Occurs with swelling, especially in the fingers. Pain in your hips occurs as joints relax before delivery. Exercise and get plenty of rest.

* **Backache** - The result of stretching ligaments and the weight of the baby. Tighten your lower abdominal muscles or wear a pelvic support belt. Pelvic tilt exercises may also help.

* **Incontinence** - Urinate constantly. Do pelvic floor muscle exercises.
  DO NOT stop drinking fluids

Third Trimester: Things to Purchase

It's almost time to make room for one more person in your family. Are you ready? Below, you'll find a basic list of items to purchase during your third trimester. Remember, it's not too late to register at your favorite stores so friends and family will know exactly what to get.

- ☐ Breast pump
- ☐ Extra breast pump membranes
- ☐ Lanolin® cream
- ☐ Breast shields
- ☐ Soft shells
- ☐ Nipple shields
- ☐ Disposable nursing bra pads
- ☐ Anti-bacterial wipes
- ☐ Nursing bras
- ☐ Micro-steam bags
- ☐ Stroller
- ☐ Baby monitor
- ☐ Nursing pillow
- ☐ Changing table
- ☐ Car seat
- ☐ Diapers/diaper bag
- ☐ Parenting books

Third Trimester: Early Labor Warning Signs

(Prior to 36 Weeks)

These signs may be normal, but if you experience any of them, contact your provider.

- Regular tightening of the uterus or belly four to six times per hour. It may feel like the baby is "balling up."
- "Period-like" cramps that come and go or happen constantly. You may also feel pain in your back.
- A low, dull backache that feels differently than previous backaches.
- Pressure or pain in the lower belly, back, or upper legs.
- Heavy drainage from the vagina or birth opening that feels or looks like water, mucus, or blood.
- If you are worried and feel like "something is not right."

IF YOU EXPERIENCE ANY OF THE ABOVE SYMPTOMS:

- Go to the bathroom and empty your bladder.
- Drink two to three large glasses of water.
- Lay down on your side for one hour.

If you are still experiencing early labor signs, call your provider or nurse midwife immediately.

AMS OBGYN and Midwifery

607.734.6544

What to Expect in Labor, Birth, and Postpartum

&

Your Birth Plan

As the time of your birth approaches, it is important to begin thinking about what your labor and birth will be like, and what your expectations are for your experience. This is especially true for first time mothers. Taking the time to fill out this birth plan is a way to communicate your preferences to your provider and give you some context from which to ask questions, both before and during your hospital stay.

It is important to remember that a birth plan is not a contract; there is no way of knowing the specifics of your labor ahead of time so it is a good idea to stay flexible. While we will do our best to nurture a positive birth experience, our main goal is safety: *Healthy Moms and Healthy Babies.*

We encourage you to participate in childbirth preparation classes at some point during your pregnancy. These classes can help you learn valuable relaxation and coping techniques to use in labor, as well as learning what to expect in labor, birth, and the postpartum (after birth) period. These classes are available through the hospital, and are taught by our own midwives and lactation consultant. More information on classes are provided in your Third Trimester Packet. Classes are scheduled through Health On Demand.

Please read through the following information and complete the attached birth plan. Bring your completed birth plan and any questions to review with one of your providers at an upcoming office visit.

The Beginning of Labor

The majority of women with uncomplicated pregnancies will enter labor on their own between 37 and 42 weeks of pregnancy. Spontaneous labor may begin with either contractions or rupture of membranes (water breaking).

The Mucus Plug

The mucus plug is made up of secretions from the cervix, and will fall out as your body prepares for labor. Most women describe this as a thick mucus-like discharge that is sometimes streaked with a very small amount of blood. It may come out in one large piece, or it may fall out gradually over time. While 'losing your mucus plug' is a sign that your body is getting ready for labor, it does not necessarily mean that your body is in labor.

Contractions

Labor is defined as the onset of regular, rhythmic contractions that cause cervical change. Over the course of labor, the cervix must go from thick to thin, and from closed (0cm) to fully dilated (10cm). The latent (or early) phase of labor is the point until your cervix becomes 5cm dilated; this phase takes the longest amount of time, and may last from a few weeks to a few hours. It is best to experience this phase of labor in the comfort of your own home, and to wait to come to the hospital until your labor is considered active. Active labor is defined as contractions occurring every 3-5min, lasting 60sec each, and continuing in that pattern for at least 1 hour, and the cervix is at least 5cm dilated. *If you think that you have entered the active phase of labor, please call the office to speak with your provider about whether or not it is time to come to the hospital.*

Rupture of Membranes

Your bag of waters may break with or without the onset of contractions. Sometimes it happens as a large unmistakable gush, while other times it is a slow leak. Amniotic fluid is usually clear, and may have some white flecks of vernix (the oily substance that coats babies' skin) in it. Sometimes it can be hard to tell the difference between normal vaginal discharge and slowly leaking fluid; if there is any question, please call us. Once this barrier is broken, the baby can be exposed to bacteria from the vagina. Because of this, *we ask that you notify your provider as soon as your water breaks.* If contractions do not begin within a few hours after your water breaks, we may suggest inducing your labor to prevent the risk of infection.

If at any point you notice bright red vaginal bleeding, or bleeding that looks like a period, please call the office immediately.

Induction of Labor

Induction of labor is the process of causing uterine contractions, and therefore cervical change, when it has not yet begun on its own. We may recommend induction of labor for a variety of reasons, the most common of which include pregnancies that have gone more than one week past their due date, women who have pregnancy-related or non-pregnancy-related medical conditions, and women whose water has broken before to the onset of labor. Inductions of labor are scheduled procedures, and can vary in their process depending on the readiness of your body to go in to labor. Prior to a scheduled induction date, your midwife or doctor will assess your cervix to determine if it is ready for labor. If it is not, you will require cervical ripening, which is the process of using medications to make your cervix favorable to dilating.

The following medications are commonly used during induction of labor:

Cytotec: A medication that is given orally or vaginally for cervical ripening. It is administered at the hospital and requires continuous fetal monitoring.

Cervidil: A medication that is inserted vaginally for cervical ripening. This is administered at the hospital and requires continuous fetal monitoring.

Cook® Cervical Ripening Balloon: A thin catheter that is inserted through the cervix, with small balloons on the end to mechanically dilate the cervix.

Pitocin: A medication that is a synthetic version of Oxytocin, the hormone your body naturally produces during labor to stimulate contractions, and after birth to prevent bleeding. This medication is administered through your IV and may be given during induction of labor or during labor if your contractions slow down and labor is not progressing. The use of Pitocin during labor requires continuous fetal monitoring.

Admission to the Hospital

When you arrive at the hospital, you will be evaluated on the Labor and Delivery Unit to determine if you are in labor and decide on a plan of care with your provider. If your midwife or doctor determines that you have not yet entered active labor, or that your water has not broken, you may be sent home to continue the process of latent labor.

Once you are admitted, your nurse will draw blood for labs and place an IV. IV's are necessary to allow for intravenous access during an emergency, to replenish fluids for hydration, and to administer IV medications when they are needed. Your IV will only be connected to an IV line if it is necessary.

While in labor, you are encouraged to try positions other than lying in bed. Moving around and being upright help labor progress more quickly, assist your baby's position in the pelvis, and help you cope with the discomforts of labor. If your situation requires continuous fetal monitoring, such as with an induction or labor or certain medical conditions, your movements may be limited to your room, but the prior statements are still true.

Pain Relief During Labor

Labor and birth can be very uncomfortable, and therefore we have a few different options for pain relief at the hospital. These options can be used throughout the labor process, but we recommend saving the medicines for active labor. Pain medicines given before active labor may make your labor slow down, and sometimes stop all together. Options for pain management during labor include natural coping techniques, IV pain medication, nitrous oxide gas, and epidural anesthesia. These methods are outlined below.

Natural pain caping techniques include any imaginable method that does not involve pharmacologic intervention. When properly prepared, most women who desire a pain medication free birth are able to achieve one. Some common non-pharmacological methods used to relieve pain during labor include: movement, position change, massage, paced breathing, hydrotherapy (bath tubs and/or showers), hot and cold compresses, aromatherapy and essential oils, and music. *Doulas* are women who are trained specifically in labor support, and play a key role in many medication free births. Doulas often specialize in massage, hypnobirthing, and aromatherapy, among other things. If you are interested in hiring a doula for your birth, please ask for a list of local resources.

Common *IV pain medications* used during labor include Demerol, Nubain, and Stadol, all of which are narcotics. While these medications do not take the pain away completely, they do help to 'take the edge off' for women who are having trouble coping.

Nitrous Oxide is a pain relieving gas that is inhaled through a face mask during labor. It enters and exits the body very quickly, so it is usually inhaled with each contraction, and normal air is breathed between contractions.

Epidural anesthesia is administered by an anesthesiologist and given through a catheter in the lower part of the back. It results in numbness from the upper abdomen down through the toes and it runs continuously from the time it is placed until the baby is born.

Procedures During Labor

Please refer to the "Informed Consent for OB Procedures" for information on all interventions in Labor and Delivery

Cesarean Section: This is a major abdominal surgery that carries greater risk and potential injury to the mother than a vaginal birth. This is not to be undertaken lightly, but there are some situations in which a Cesarean Section is required to ensure the safety of the mother and/or baby. The most common reasons that necessitate a Cesarean Section are:

1) The baby is in distress and needs to be born as quickly as possible in order to avoid injury or death.
2) The baby is in a position that is unfavorable or risky for vaginal birth.
3) The baby's size is disproportionate to the mother's birth canal.

Operative Birth: This term is used for when instruments are needed to safely birth your baby during the pushing phase of labor. A *vacuum extractor* is the most commonly used tool for this situation and involves placing suction on the baby's head in order to assist the mother's pushing efforts if either the mother or baby are at risk.

After The Baby is Born

If your baby is born healthy and vigorous it will be placed directly on your chest to promote immediate skin-to-skin contact. We delay cord clamping until the cord has stopped pulsating, unless you ask us not to. When you are ready, the nurses will take your baby to the warmer near your bed to do an initial examination, get foot prints, and administer the Vitamin K shot in the baby's leg and antibiotics to the baby's eyes.

If your baby is born showing signs of stress, or if we anticipate it needing extra help transitioning to life outside of the uterus, we will cut the cord immediately and hand the baby to the nurses or NICU team for further assistance. While we do our best to predict these circumstances, sometimes decisions have to be made quickly.

After the baby has been evaluated, it will be swaddled and brought back to you for initial bonding. The first hour of life is the best time to initiate breastfeeding, so we will assist you in achieving the first latch if that is your chosen feeding method. Because the first hour is such a precious time for the immediate family unit, we recommend delaying any visitors until after this hour and feeding has passed.

Arnot Ogden Medical Center promotes a practice called "rooming in", meaning the baby will stay with its mother in her room at all times to help you and your baby become acquainted and bond. During this time, nurses will be able to assist you with any concerns regarding the care of your baby. If you wish, the baby can be brought to the nursery to allow you rest.

Labor and Birth Preferences

My Name:

My Primary Support Person's Name:

My Baby's Name:

My Emergency Contact's Name:

Pediatrician's Name or Group:

Childbirth Class Attended:

I Plan to Have The Following Support People with Me During Birth:*

1) _____ (Primary Support Person)
2) _____
3) _____

During Labor

◯ I would prefer to walk and be mobile in labor
◯ I would like to be offered different position to help cope with pain during labor
◯ If available, I would like to use the bathtub during labor
◯ I would like to use natural pain relief techniques
◯ I would like to be offered IV narcotic pain medicine
◯ I would like to be offered Nitrous Oxide
◯ I would like to be offered an Epidural
◯ I prefer an Epidural as early as possible in active labor
◯ Please do not mention pain medicine to me in labor; I will ask for it if I need it
◯ I plan to hire a doula to assist me during the labor process. Their name is _____.

◯ I prefer my baby's heart rate to be monitored intermittently (only when necessary) in labor
◯ I prefer my baby's heart rate to be monitored continuously (all the time) in labor
◯ If I need continuous monitoring for the baby, I would prefer a wireless monitor

◯ I would prefer to receive Pitocin only if absolutely necessary to achieve a vaginal birth
- I understand that I will receive Pitocin IV after the baby is born to prevent to postpartum hemorrhage

◯ I would like a mirror available to see the baby as it is born
◯ I would like the baby to be placed directly on my abdomen/chest immediately after birth
◯ I would like my partner/provider/other to cut the umbilical cord *(please circle one)*
◯ I would like to delay cord clamping, unless medically necessary to cut the cord immediately
◯ I would like the first hour after birth to be uninterrupted skin-to-skin bonding
◯ I am planning on banking the umbilical cord blood *(this must be arranged privately before birth)*
◯ I am planning on taking my placenta home with me

After Birth

◯ I will accept a blood transfusion if it is absolutely medically necessary
◯ I will NOT accept a blood transfusion for any reason, even if it would be life saving

◯ I understand that I will be rooming-in with my baby
◯ I understand that my baby's first bath will be delayed for 24 hours
- o I prefer to have my baby bathed within the first 24 hours
- o I prefer not to have my baby bathed at the hospital

◯ I understand that my baby will be given a Vitamin K injection right after birth, in accordance with NYS
◯ I understand that my baby will be given Erythromycin ointment in their eyes right after birth
◯ I understand that my baby will have the New York State Screening performed while in the hospital
◯ I understand that my baby will have a hearing screen while in the hospital
◯ I plan to have my baby's first Hepatitis B vaccination in the hospital, as recommended

◯ I plan to breastfeed my baby
◯ I plan to formula feed my baby
◯ I do not want my baby to be given a pacifier
◯ I do not want my baby to be offered a bottle, unless medically necessary

I would like my son to be circumcised***
◯ YES ◯ NO

◯ I prefer to stay only 24 hours, unless medically necessary to stay longer
◯ I prefer to stay for 48 hours, unless medically necessary to stay longer

Please list any other specific preferences you have for your birth:

I have read through this packet of information and have reviewed my birth plan with my provider.

_____

(Sign & Date)

*Labor and Delivery allows up to three support people in the room during the birth of your baby. You may have unlimited visitors, within reason, during your labor. Please note, children under the age of 12 are not allowed on Labor and Delivery unless they are your own children. If you plan to have your other children with you during your labor and/or birth, you must have an adult (other than your primary support person) designated to look after them. All of these policies are for the comfort and safety of you and your baby

**Circumcision is an elective procedure. There is little-to-no scientific evidence to prove any health benefit, except in certain circumstances. Our best attempt will be made to circumcise your baby before you are discharged from the hospital; if we are unable, and outpatient procedure can be scheduled.

AMS OBGYN and Midwifery

Pain Relief For Labor and Birth

1) Medication Free Childbirth

Commonly called "Natural Childbirth", medication free childbirth involves the use of non-pharmacologic pain management techniques to cope with the pain of labor and birth. Natural pain coping techniques include any imaginable method that does not involve pharmacologic intervention. When properly prepared, most women who desire a medication free birth are able to achieve it. Some common non-pharmacological methods used to relieve pain during labor include: movement, position change, massage, paced breathing, hydrotherapy (bath tubs and/or showers), hot and cold compresses, aromatherapy and essential oils, and music.

2) IV Pain Medication

Several types of narcotics are available for pain relief during labor, the most common being Demerol, Nubain, and Stadol. These medications function to relieve labor pain and allow for rest between contractions. In safe doses, they do not take the pain away entirely, but can significantly reduce pain. Safe doses are used to protect your ability to breathe and keep exposure to your baby low. In addition to providing pain relief, these medications make many women feel sleepy, nauseated, and 'loopy'. They also may make the baby sleepy and groggy after it is born. Occasionally, the baby is sleepy to the point where it needs stimulation or assistance breathing after it is born. There is a medication readily available (called Narcan) which can rapidly reverse the effects of these medications within seconds.

3) Nitrous Oxide Analgesia

Nitrous Oxide Analgesia (often called "Nitrous" or, colloquially, "laughing gas"), is a mixture of Nitrous Oxide and Oxygen that is inhaled during labor through a face mask. Nitrous Oxide is used in low doses in labor, and helps relieve pain by promoting relaxation and reducing the perception (or, the experience) of pain. Nitrous Oxide use in labor is considered very safe, because it enters and exits the body very quickly, does not have a negative effect the baby, and does not affect the labor process. Another benefit of Nitrous Oxide that is that is "patient controlled", meaning the woman is in charge of when she breathes the gas in, and when she wants the effects to end. Side effects of Nitrous Oxide include dizziness, euphoria, fatigue, hazy memory, hallucinations, headache, and sedation. Some women are not candidates for Nitrous Oxide because of their medical history

4) Epidural Block Anesthesia

Epidurals provide pain relief without loss of awareness. Epidurals take away pain and temperature sensation from roughly the level of you upper abdomen down through your toes, usually without affecting your ability to use your muscles. In this method, an anesthetic agent is introduced through a small plastic tube placed through your back into the space just outside of the spinal canal. Epidurals run continuously from the moment they are placed through the birth of your baby. There is a small chance (approx. 5-10%) that the pain block will not be complete, but some pain relief will still be present.

Epidurals usually provide excellent pain relief but require closer monitoring or your vital functions. This monitoring may take the form of a heart monitor, blood pressure monitor, IV fluid hydration, and continuous fetal heart monitoring. The most common change in your vital signs is a drop in your blood pressure, which can effect blood flow to the baby and cause fetal heart rate changes. There is a medication readily available, ephedrine, to reverse this effect and increase your blood pressure if necessary.

Because the skin is being broken with the insertion of the catheter, there is the risk of infection and bleeding. Some people have a temporary backache or headache after an epidural. Damage to the tissue surrounding the spinal cord or the spinal cord itself is rare (<1/10,000), and usually temporary. Serious risks, such as death and permanent damage, such as paralysis, is very rare (<1/30,000).

5) Spinal Anesthesia

Spinals are similar to epidurals but the anesthetic is directly placed into the fluid surrounding the spinal cord. They are a "one-time" technique and give good pain relief ranging from 30min through to several hours, depending on the anesthetic agent used. It is less likely than an epidural to provide incomplete relief, but is more likely to have side effects of headaches and a rapid drop in blood pressure. The headaches that do occur after spinal anesthesia usually go away on their own and have no lasting effect. However, it may occasionally be severe and require prolonged use of pain medications or a spinal blood patch. Too much medication can cause a "total spinal", where it may be necessary to give you a breathing tube until the medication wears off; this is a rare occurrence.

Spinals are rarely used during vaginal births, but are the preferred method of anesthesia during a cesarean section.

6) General Anesthesia

General anesthesia is also known as "going under" or "put to sleep". It is rarely used in vaginal delivery, and usually only used during cesarean sections in emergency situations.

General anesthesia uses medications through the IV and/or gasses that the woman breathes. With this technique, the baby receives a large dose of medication, which are likely to make them sleepy, occasionally the point where they needs to be stimulated or helped to breathe. The risks to the woman include vomiting with potential aspiration of the vomit into the lungs, which can cause significant damage. The risk of adverse reactions to the medications used include cardiac arrhythmias (abnormal heart beats) or arrest (no heart beat). Although maternal death from anesthesia overall is very rare, general anesthesia is the biggest contributor.

The Regional Perinatal Center

Arnot Ogden Medical Center

The birth of your baby is a joyous occasion that we encourage you to share with your family and friends. While having a baby is one of life's most wonderful occasions, it's a physically demanding experience for every new mother. Brand new mothers need plenty of rest and relaxation to replenish all the energy childbirth requires.
We ask new families to be extra watchful, and to grant new mothers time to sleep and recover quietly before baby's first trip home.

Visiting rules in L&D: for mothers-to-be to know…

1. You may have three people with you during your labor and delivery; your primary support person and two other people.
2. If you have a C-Section birth your primary support person may go in the surgical suite with you if spinal or epidural anesthesia is administered; the other two people may view the birth through an observation window.
3. Due to confidentiality, the staff is not allowed to give out information about your labor progress. Please ask friends and family not to call L&D or the information line for information about your progress. Instead, arrange for your support person to call a key family member with periodic progress reports. Family
   and friends can then call that key family member to stay informed, allowing our professional staff to concentrate on caring for you. Our visiting policies are designed to give new families valuable private time together and to give new mothers the rest they need.

Visiting hours in patient rooms:

- New parent/Significant other: Unlimited
- Siblings (with adult supervision): 11 a.m. to 8 p.m.
- Grandparents, friends, and extended family (Over the age of 12-years-old): 11 a.m. to 8 p.m.

1. At the time of delivery, new parents or a significant other will be given an identification band with the same numbers that are on the mother's and baby's identification band.

2. All visitors, including siblings, must be healthy with no rashes, infections, colds, runny noses, diarrhea, or recent exposure to infectious diseases.
3. We encourage sharing the birth of your new baby with its siblings. However, we can only allow children of the new parents to visit the maternity center rooms. We ask other children to please plan to visit you and your family at home.

Caring for our community. It's what we do.

Arnot Health Pediatricians look forward to helping your children start a long, happy and healthy life. Contact our providers for your first appointment.

AOMC Pediatrics - Elmira | 200 Madison Avenue | Suite 2D | Elmira, NY 14901 | 607-271-3442

Jeffrey Gardner, MD

Alison Eason, PA

AOMC Pediatrics - Horseheads | 100 John Roemmelt Drive | Suite 203 | Horseheads, NY 14845 | 607-481-2059

Ravi Raj Kavuda, MD

Yada Cain, FNP-C

Now accepting new patients.
Call 607-271-3442 (Elmira Office)
or **607-481-2059** (Horseheads Office)
www.arnothealth.org

ArnotHealth
It's what we do

The Benefits ofWell-Child Visits:

- Prevention. Your child gets scheduled immunizations to prevent illness. You also can ask your pediatrician about nutrition and safety in the home and at school.

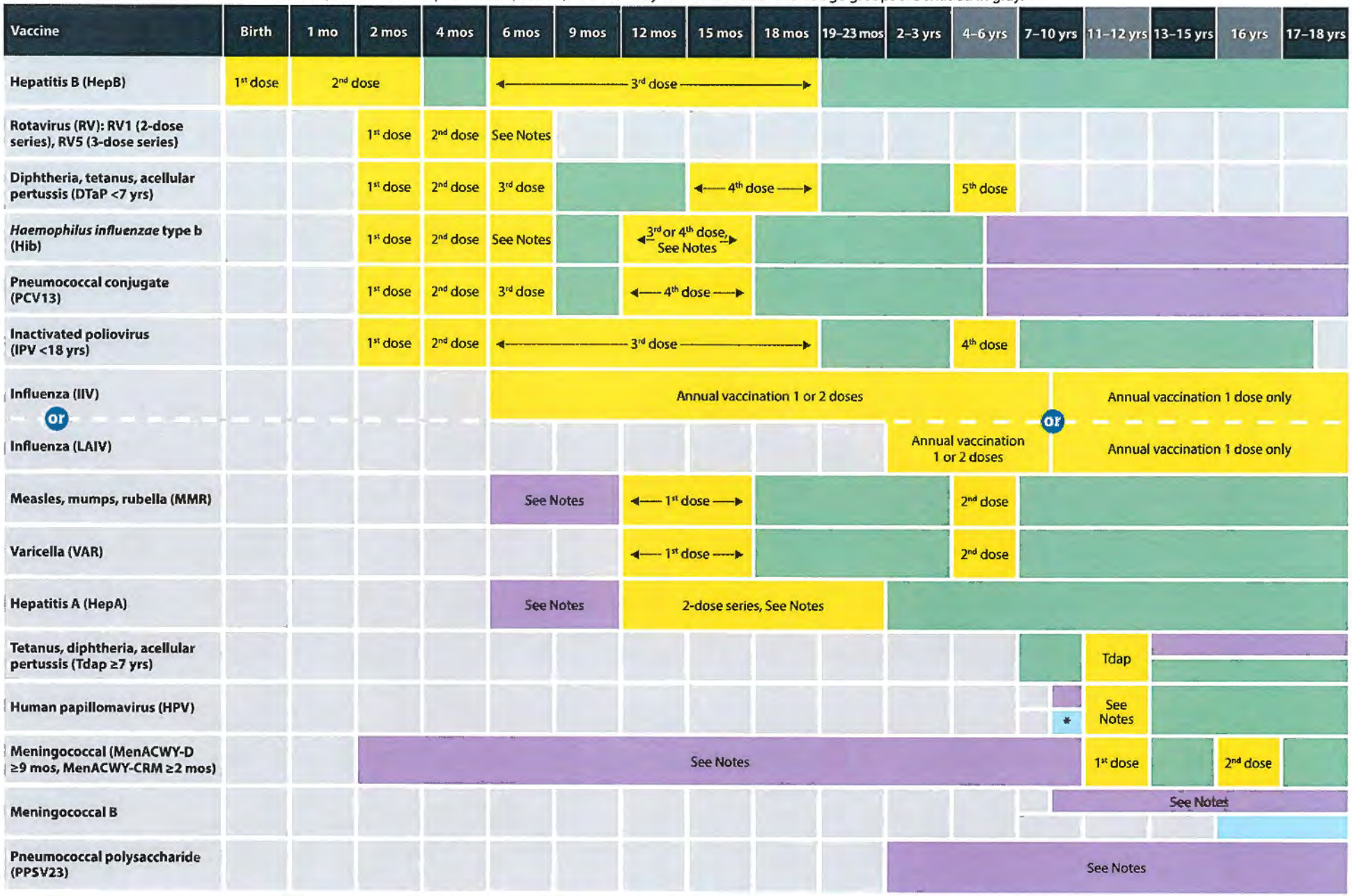
- Tracking growth and development. See how much your child has grown in the time since your last visit, and talk with your doctor about your child's development. You can discuss your child's milestones, social behaviors and learning.

- Raising concerns. Make a list of topics you want to talk about with your child's pediatrician such as development, behavior, sleep, eating or getting along with other family members. Bring your top three to five questions or concerns with you to talk with your pediatrician at the start of the visit.

- Team approach. Regular visits create strong, trustworthy relationships among pediatrician, parent and child. The AAP recommends well-child visits as a way for pediatricians and parents to serve the needs of children. This team approach helps develop optimal physical, mental and social health of a child.

Table 1 Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2020

These recommendations must be read with the notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars. To determine minimum intervals between doses, see the catch-up schedule (Table 2). School entry and adolescent vaccine age groups are shaded in gray.



Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger

UNITED STATES 2020

Vaccines in the Child and Adolescent Immunization Schedule*

Vaccines	Abbreviations	Trade names
Diphtheria, tetanus, and acellular pertussis vaccine	**DTaP**	Daptacel® Infanrix®
Diphtheria, tetanus vaccine	**DT**	No trade name
Haemophilus influenzae type b vaccine	**Hib (PRP-T)**	ActHIB® Hiberix®
	Hib (PRP-OMP)	PedvaxHIB®
Hepatitis A vaccine	**HepA**	Havrix® Vaqta®
Hepatitis B vaccine	**HepB**	Engerix-B® Recombivax HB®
Human papillomavirus vaccine	**HPV**	Gardasil 9®
Influenza vaccine (inactivated)	**IIV**	Multiple
Influenza vaccine (live, attenuated)	**LAIV**	FluMist® Quadrivalent
Measles, mumps, and rubella vaccine	**MMR**	M-M-R® II
Meningococcal serogroups A, C, W, Y vaccine	**MenACWY-D**	Menactra®
	MenACWY-CRM	Menveo®
Meningococcal serogroup B vaccine	**MenB-4C**	Bexsero®
	MenB-FHbp	Trumenba®
Pneumococcal 13-valent conjugate vaccine	**PCV13**	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	**PPSV23**	Pneumovax® 23
Poliovirus vaccine (inactivated)	**IPV**	IPOL®
Rotavirus vaccine	**RV1**	Rotarix®
	RV5	RotaTeq®
Tetanus, diphtheria, and acellular pertussis vaccine	**Tdap**	Adacel® Boostrix®
Tetanus and diphtheria vaccine	**Td**	Tenivac® Tdvax™
Varicella vaccine	**VAR**	Varivax®
Combination vaccines *(use combination vaccines instead of separate injections when appropriate)*		
DTaP, hepatitis B, and inactivated poliovirus vaccine	**DTaP-HepB-IPV**	Pediarix®
DTaP, inactivated poliovirus, and *Haemophilus influenzae* type b vaccine	**DTaP-IPV/Hib**	Pentacel®
DTaP and inactivated poliovirus vaccine	**DTaP-IPV**	Kinrix® Quadracel®
Measles, mumps, rubella, and varicella vaccine	**MMRV**	ProQuad®

*Administer recommended vaccines if immunization history is incomplete or unknown. Do not restart or add doses to vaccine series for extended intervals between doses. When a vaccine is not administered at the recommended age, administer at a subsequent visit. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

How to use the child/adolescent immunization schedule

1 Determine recommended vaccine by age **(Table 1)**

2 Determine recommended interval for catch-up vaccination **(Table 2)**

3 Assess need for additional recommended vaccines by medical condition and other indications **(Table 3)**

4 Review vaccine types, frequencies, intervals, and considerations for special situations **(Notes)**

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip) and approved by the Centers for Disease Control and Prevention (www.cdc.gov), American Academy of Pediatrics (www.aap.org), American Academy of Family Physicians (www.aafp.org), American College of Obstetricians and Gynecologists (www.acog.org), and American College of Nurse-Midwives (www.midwife.org).

Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to your state or local health department
- Clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or 800-822-7967

Download the CDC Vaccine Schedules App for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

Helpful information

- Complete ACIP recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- General Best Practice Guidelines for Immunization: www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Outbreak information (including case identification and outbreak response), see Manual for the Surveillance of Vaccine-Preventable Diseases: www.cdc.gov/vaccines/pubs/surv-manual

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Hepatitis B Shots Are Recommended for All New Babies. Hepatitis B Vaccine Helps Protect Your Baby's Future!

What is hepatitis B and why do I need to protect my baby now?

Hepatitis B is a serious disease caused by the hepatitis B virus. The virus can enter the bloodstream, attack the liver, and cause serious damage. When babies get infected, the virus usually remains in the body for a lifetime (this is called chronic hepatitis B). About 1 out of 4 infected babies will die of liver failure or liver cancer as adults. Hepatitis B is a deadly disease – but it's preventable with vaccination.

How is hepatitis B virus spread?

Anyone can become infected with hepatitis B virus at anytime during their lives. Hepatitis B virus is spread by contact with an infected person's blood or certain body fluids. For example, babies can get hepatitis B virus from their infected mothers at birth, and children can get it if they live with or are cared for by an infected person, or even if they share personal care items (e.g., toothbrush) with an infected person.

Currently, about 1 out of 172 people in the United States have been infected with the hepatitis B virus.

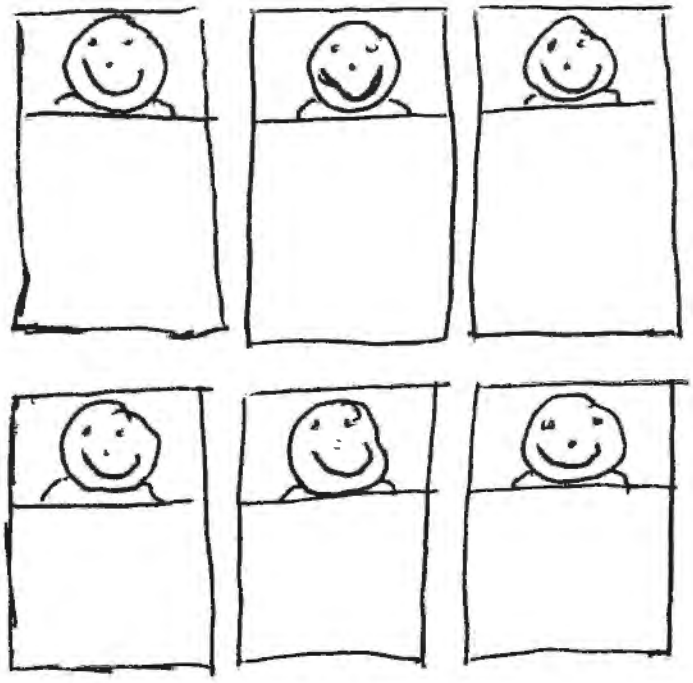
How many people have hepatitis B?

In the United States, tens of thousands of people get infected with the hepatitis B virus each year. About one million people in the U.S. are already infected. Every year, about 4,000 Americans die from liver failure or liver cancer caused by hepatitis B. Worldwide, 257 million people are infected.

It is impossible to know if a person is infected with the hepatitis B virus by looking at them. Most people have no symptoms, do not feel sick, and don't know they are infected. As a result, they can spread the virus to others without knowing it. The only way to know if a person is infected is with a blood test.

Is there a cure for hepatitis B?

No. Although there are several medicines to help people who have life-long hepatitis B virus infection, there is no medicine that "cures" it. The good news is that hepatitis B can be prevented by vaccination.



Who recommends that all babies get hepatitis B vaccination at birth?

Medical groups such as the American Academy of Pediatrics, the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists, and the Centers for Disease Control and Prevention recommend that every baby get hepatitis B vaccine within the first 24 hours of birth. These are the same groups that recommend babies get vaccinated against whooping cough (pertussis), measles, tetanus, polio, and other serious diseases.

Why does my baby need a hepatitis B shot at birth?

It is important to vaccinate babies at birth so they will be protected as early as possible from any exposure to the hepatitis B virus. Babies and young children are not able to fight off hepatitis B virus infection as well as older people. A baby who gets infected with the hepatitis B virus during the first five years of life has a 15% to 25% risk for premature death from liver disease, including liver failure or liver cancer. Hepatitis B vaccine is your baby's "insurance policy" against being infected with the hepatitis B virus.

CONTINUED ON THE NEXT PAGE ▶

immunization action coalition
immunize.org
Saint Paul, Minnesota • 651-647-9009 • www.immunize.org • www.vaccineinformation.org
www.immunize.org/catg.d/p4110.pdf • Item #P4110 (1/19)

Experts recommend vaccination against hepatitis B as a routine part of a newborn's hospital care, just like checking the baby's hearing.

How could my baby come in contact with the hepatitis B virus?

In many cases, the hepatitis B virus passes from mother to baby during birth when the mother does not know she is infected. In other cases, the virus is spread to the baby during close contact with an infected family member, caregiver, or friend. Most people who are infected with hepatitis B do not feel sick and have no idea they carry this virus. They are surprised when they are told they are infected. Many people have no idea how they became infected with the virus in the first place. To protect your baby from infection with the hepatitis B virus, make sure your baby receives the first dose of hepatitis B vaccine before leaving the hospital.

Won't my baby just recover from hepatitis B?

Babies are not able to fight off hepatitis B as well as adults. About 9 out of 10 babies who get infected in the first year of life will stay infected for life.

How many doses of hepatitis B vaccine will my baby receive?

The basic series is 3 or 4 doses. The first dose should be given in the hospital within 24 hours of birth, the second dose 1–2 months later, and the third dose at age 6 months or later. Because healthcare providers may choose to use a combination vaccine during well baby check-ups, some infants will receive 4 doses of hepatitis B vaccine. Either alternative is considered routine and acceptable.

How effective is hepatitis B vaccine?

Very effective. More than 95% of infants, children, and adolescents develop immunity to the hepatitis B virus after 3 doses of properly spaced vaccine.

Is hepatitis B vaccine safe?

Yes. Hepatitis B vaccine has been shown to be very safe when given to people of all ages. More than one billion hepatitis B shots have been given worldwide. In the United States, more than 120 million people, including infants, children, and adults have received hepatitis B vaccine. The most common side effects from hepatitis B vaccine are soreness at the injection site or slight fever. Serious side effects are rare.

Some parents worry that their baby's immune system is immature and cannot handle vaccination at such a young age. Actually, as soon as they are born, babies start effectively dealing with trillions of bacteria and viruses. The challenge to their immune systems from vaccines is tiny compared to the everyday challenges from living!

Why does my baby need so many vaccinations?

It's true that little babies get lots of shots, which can cause temporary discomfort. The good news is that more vaccines mean more protection from serious diseases than in the past. Like hepatitis B, many of these diseases such as rotavirus, whooping cough, and meningitis can result in severe illness, hospitalization, and even death.

Make sure your baby gets all his or her vaccines at the recommended ages. It's the safest and surest way to protect children from deadly infectious diseases. Your baby is counting on you!

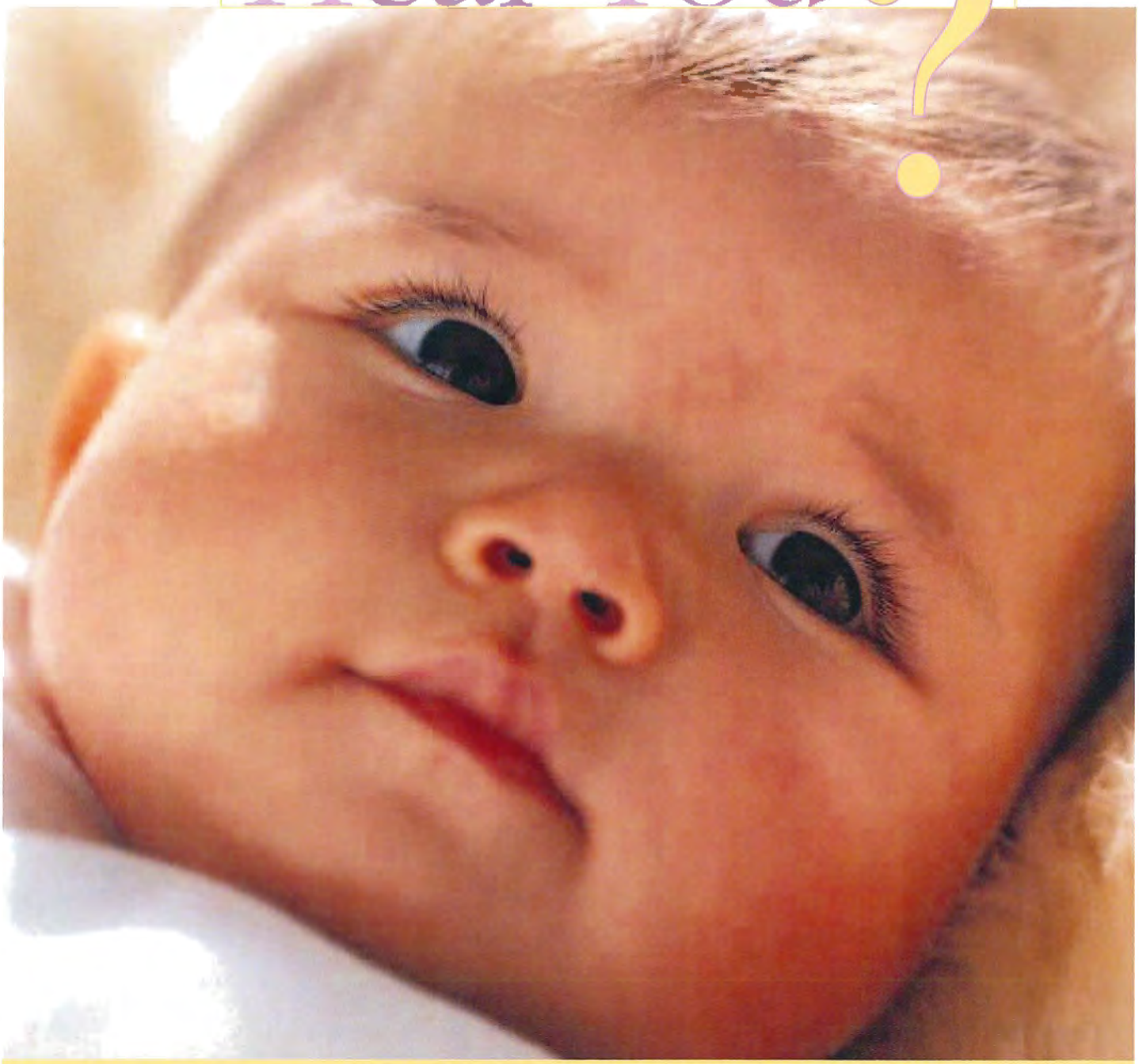
EVERYONE NEEDS VACCINATIONS!

If you can't afford shots or don't know where to get them, contact your local or state health department to find out where to go for affordable vaccinations.

You can access a listing of telephone numbers for state immunization programs at www.immunize.org/coordinators.

For more information, go to www.vaccineinformation.org or www.cdc.gov/hepatitis.

Can Your Baby Hear You?



Information for Parents

New York State Department of Health

Can Your Baby Hear You?

All babies born in a New York State hospital will have their hearing checked.

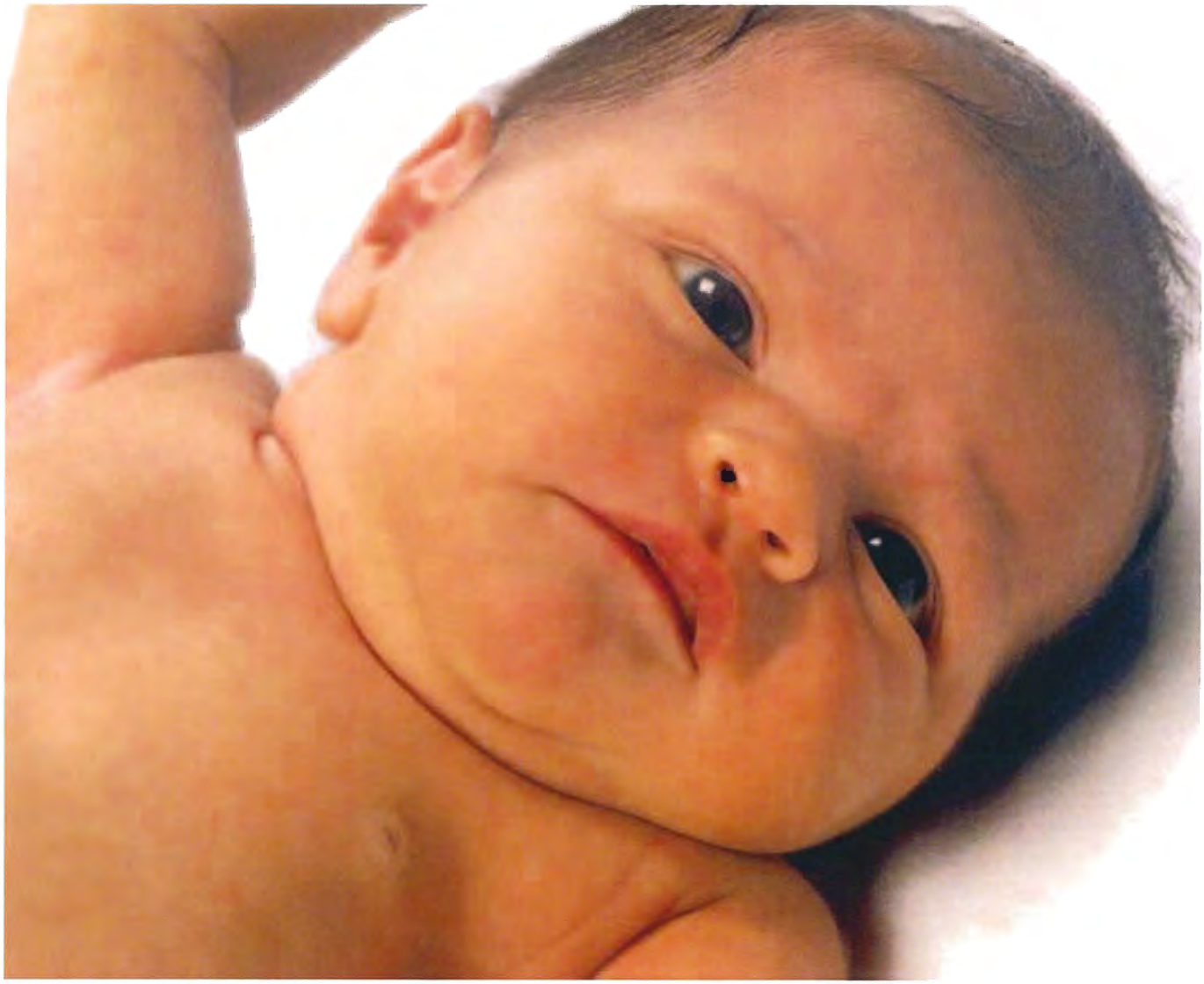
Hearing is very important. Your baby needs to hear sounds to learn how to talk and learn about the world. Hearing is very important in the early months to prevent possible problems with language or schoolwork later on.

A screening is a quick check to see if your baby hears. Either:

- Your baby's hearing may be screened before you leave the hospital, or,
- You will be told how to have your baby's hearing screened close to your home.

If your baby is not born in a hospital, you should ask your doctor or clinic how to have your baby's hearing checked.

Every baby's hearing should be checked as soon after birth as possible. If your baby has a hearing loss, the sooner you know it, the better. Out of 1,000 babies, about two to four will have a serious hearing loss.



What Causes Hearing Loss?

Sometimes we don't know what causes hearing loss in a baby. And sometimes it is caused by:

- Deafness that runs in families
- Ear infections
- Meningitis
- Other serious infections

Talk to your baby's doctor or clinic if you have any questions or concerns.

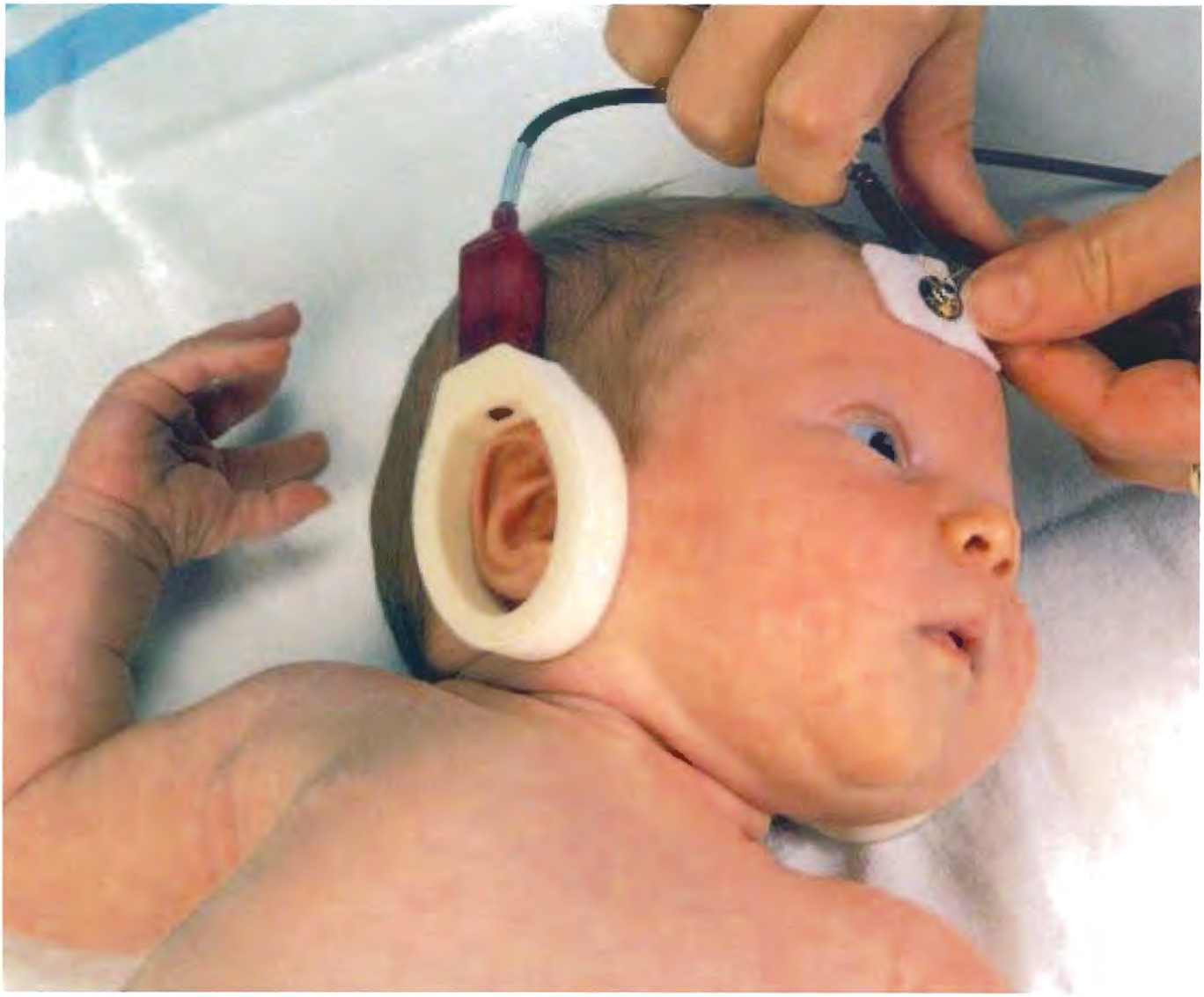
How Your Baby's Hearing Will Be Checked

A trained person will check your baby's hearing. The screening takes only a short time. It is okay if your baby is asleep while this is done. To screen your baby, either:

- A tiny microphone may be placed in your baby's ear, or,
- Your baby may wear special earphones and have tiny pads placed on his or her head.

Then, soft sounds will be played and your baby's hearing will be measured.

You will be given a brochure telling you what your baby's screening results mean. Your baby may need a second screening to be sure he or she hears. Your baby's movements, noise in the room, or fluid in the ear after birth may lead to false results. If your baby needs to be checked again, you will be told how to have this done.



Check Your Child's Hearing and Speech

Most babies will "pass" the hearing screening. This means that your baby is hearing **now**. Even if your baby "passes" the screening, it is still important to check your baby's hearing often. The following checklist will help you keep track of your baby's hearing as he or she grows. Good hearing helps babies do the things on this checklist. If you have any concerns about your child's hearing, at any age, call your baby's doctor or clinic.

GOOD HEARING CHECKLIST*

Birth to 3 Months	• Becomes quiet when around everyday voices or sounds • Reacts to loud sounds: baby startles, blinks, stops sucking, cries, or wakes up • Makes soft sounds when awake: baby gurgles
3 to 6 Months	• Turns eyes or head toward sounds: voices, toys that make noise, a barking dog • Starts to make speech-like sounds: "ga," "ooh," "ba," and p, b, m sounds • Reacts to a change in your tone of voice
6 to 9 Months	• Responds to soft sounds, especially talking • Responds to own name and looks when called • Understands simple words: "no," "bye-bye," "juice" • Babbles: "da da da," "ma ma ma," "ba ba ba"
9 to 12 Months	• Consistently responds to both soft and loud sounds • Repeats single words and copies animal sounds • Points to favorite toys or foods when asked
12 to 18 Months	• Uses 10 or more words • Follows simple spoken directions: "get the ball" • Points to people, body parts or toys when asked • "Bounces" to music
18 to 24 Months	• Uses 20 or more words • Combines two or more words: "more juice," "what's that?" • Uses many different consonant sounds at the beginning of words: b, g, m • Listens to simple stories and songs
2 to 3 Years	• Uses sentences with two or three words • At 2 years, the child's speech is understood some of the time (25%-50%) • At 3 years, the child's speech is understood most of the time (50%-75%) • Follows two-step instructions: "get the ball and put it in the box"

Your child's hearing can and should be checked at any age.

** Adapted from the California Department of Health Services' checklist.*

More Help For Your Baby

If your baby has a hearing loss, or may have a hearing loss, you might need more help. Infants, toddlers with special needs, and their families may get help from the New York State Health Department's Early Intervention Program (EIP). EIP offers hearing screening and testing, and support for you, your baby, and your family. To learn more, call your doctor, clinic, or the EIP in your county or borough.

To learn more about newborn hearing screening or EIP, please call (518) 473-7016.

Visit the Early Intervention Program Web page at:
www.health.ny.gov/community/infants_children/early_intervention/

To reach your local EIP, call:
Growing Up Healthy
24-Hour Hotline
1-800-522-5006
TTY: 1-800-655-1789

In New York City, call: 311

Can Your Baby Hear You?

Follow us on:
health.ny.gov
facebook.com/NYSDOH
twitter.com/HealthNYGov
youtube.com/NYSDOH

State of New York
Department of Health

4877 10/11

Newborn Screening

For Your Baby's Health

NEW YORK STATE | Department of Health

Why is my baby tested?

To help make sure your baby will be as healthy as possible. The blood test provides important information about your baby's health that you and your doctor might not otherwise know. The Newborn Screening Program identifies infants who may have one of several rare, but treatable diseases that don't show symptoms right away. With early diagnosis and medical treatment, serious illness, and even death, can often be prevented, so it is very important for us to test your baby's sample and report the results to your baby's doctor. Ask your baby's doctor for your baby's results.

Is newborn screening new?

No. Every state has a newborn screening program. The New York State program is mandated by Public Health Law, and it began in 1965. Some diseases can affect a child very early in life – even within the first few days. Timely testing and diagnosis are important for treatments to work the best.

For how many diseases is my baby tested?

The number has increased from one in 1965 to more than 45 today. They are listed in this booklet. Although these diseases are rare, 1 in 300 babies born in New York every day has one of these diseases. Most of the diseases are serious and can even be fatal. Some may slow down a baby's development, cause intellectual disabilities, increase a baby's risk for infection, or cause other problems if undetected and untreated.

That is why:

Early treatment is very important!

But my baby seems very healthy. Are these tests still needed?

Yes. Most infants with a disease identified by the Newborn Screening Program show no signs of the disease right after birth and look healthy. With these special laboratory tests, we can identify a baby who may have one of these diseases and tell the baby's doctor of the need for more tests and special care. Most of the time, it is very important to start treatment before your baby shows symptoms or becomes sick. Many of the diseases are genetic, and they are inherited from the baby's parents.

Every baby has two sets of genes – one from their mother and the other from their father. Sometimes only one set of the genes has a problem, but because the other set doesn't, the baby is not sick. These babies are called carriers. Although these babies are not sick, this means that at least one or sometimes even both of their parents are also carriers. Newborn screening tests can identify carriers for some genetic

diseases some of the time, but the program is not designed to find **all** carriers. *It is important to get genetic counseling if your baby has a carrier result because most parents who are carriers do not know. Counselors can help you understand this information.*

But children in our family have never had any of those health problems.

Parents who have already had healthy children do not expect any problems, and they are almost always right. But there is still a chance your new baby may have one of these diseases. Each of these diseases is very rare, and the chances are excellent that your child will not have one of them, but altogether 1 in 300 babies born in New York every day does have one of them. A negative newborn screen for your new baby does not guarantee that your future children will be negative too. Some babies and parents can be carriers for diseases even if no one in your family has a disease. Many families go for genetic counseling to better understand these risks to their future children and other family members. *It is also important to remember that newborn screening does NOT find all babies who are carriers for these genetic diseases.* The tests are designed to find most babies with these genetic diseases.

How is my baby tested?

All the tests are performed on a tiny sample of blood taken by pricking the baby's heel. The blood is put on a special filter paper. The sample is usually taken when the baby is one or two days old. The sample is sent for testing to the laboratory at the State Health Department in Albany.

Will I get the test results?

Be sure to tell the nurse at the hospital the name and office information for your baby's doctor or clinic. This doctor will be told of the results and will contact you immediately if anything is wrong. To be sure, ask about the result when you bring your baby to the doctor or clinic for his or her first check-up. The hospital nurse should give you a pink form, which will tell you how to get the test results from your baby's doctor.

If all the tests are screen-negative, does that mean my baby will be healthy?

The Newborn Screening Program only looks for a few of many diseases a baby could have. In addition, some babies with these diseases may not be identified for several reasons. You should bring your baby to the doctor or clinic for all their check-ups. Always watch your baby for unexpected symptoms or behavior, and call the doctor immediately if things don't seem right.

A negative newborn screen for your new baby does not guarantee that your future children will not have a disease. Also, newborn screening does NOT find all babies who are carriers for these genetic diseases. Carriers have one gene mutation but are healthy. Babies and their parents can be carriers without any family history of a disease. Many families go to genetic counseling to better understand disease and carrier risks to their future children and other family members.

1 in 300 babies born each day in NYS has one of the screened diseases!

Does a "repeat test" mean my baby may have a disease?

Not necessarily. Repeat testing may be needed for a number of reasons. The most common is that the blood was put on the special filter paper incorrectly. Usually this does not mean there is anything wrong with your baby. It simply means that another blood sample must be taken as soon as possible.

When the first test results suggest a problem, the results are not considered final until the screening tests are done again. This requires a new blood sample. In general, a doctor will discuss the need for further diagnostic testing only after a baby's second screen is also abnormal. On very rare occasions, because a disease may cause a baby to become very sick quickly, the doctor will treat the baby immediately while waiting for the results of the second series of tests. If you are asked to have your baby retested, please bring in your baby as soon as possible, so the repeat test can be done immediately, to determine if your baby needs treatment.

What if my baby has one of these diseases?

The tested diseases all have treatments that can lessen the effects of the disease.

Sometimes the symptoms can be completely prevented if a special diet or other medical treatment is started early. Most of these diseases are very complicated to treat, and medical care should be coordinated by a doctor who specializes in the specific disease.

If my new baby has a disease, will my future children have it?

That depends on the disease. Most of these diseases are genetic and inherited by children from their parents. A negative newborn screen does not guarantee that future children will not have the disease. Also, newborn screening does NOT

find all babies who are carriers for these genetic diseases. Carriers have one gene mutation and are healthy. Babies and their parents can be carriers without any family history of the disease. Many families seek genetic counseling to better understand how their child got the disease, and to understand disease and carrier risks to their future children and other family members. Some diseases are not inherited. For example, congenital hypothyroidism has many causes, while HIV infection is caused by a virus, not a gene mutation.

Why is my baby tested for HIV?

We test the baby for HIV antibodies. If the test is positive, that means the mother has the virus and we want to be sure the baby is not infected with the virus. HIV can be transmitted by an infected mother to her baby before it is born, during delivery or from breastfeeding. In NYS, most pregnant women are tested for HIV before the baby is born. Ideally, the mother should get medicine during pregnancy and labor to protect the baby from the HIV infection.

How much will these tests cost me?

Nothing. These tests are done at no cost to families.

How can I make it easier for the doctor to help my baby?

First, be sure you tell the nurse at the hospital where your baby was born the name of your baby's doctor so we can contact the doctor if we need to. If you change your doctor, let us know by emailing or calling us (see back of this booklet). If your doctor asks you to bring your baby in for a repeat test, do so as soon as you can. If your baby ***does*** have a disease, quick action is very important.

If you do not have a telephone, give your doctor the phone number of someone who can contact you immediately. If you move soon after your baby is born, tell your doctor or clinic your new address and phone number right away. Then your doctor will know where to reach you if your child needs more tests or treatment.

Remember, time is very important. As a parent, you can help the Newborn Screening Program make sure that your baby is as healthy as possible by making sure your baby's doctor knows how to reach you.

Be Informed: Get your baby's newborn screening results from his or her doctor!

See our website for much more information on newborn screening.

Diseases Identified by the New York State Newborn Screening Program

Group		Diseases
Endocrinology		Congenital adrenal hyperplasia (CAH)
		Congenital hypothyroidism (CH)
Hematology, Hemoglobinopathies		Hb SS disease (Sickle cell anemia)
		Hb SC disease
		Hb CC disease
		Other hemoglobinopathies
Infectious Disease		HIV exposure
Inborn Errors of Metabolism	Amino Acid Diseases	Homocystinuria (HCY)
		Hypermethioninemia (HMET)
		Maple syrup urine disease (MSUD)
		Phenylketonuria (PKU) and Hyperphenylalaninemia (HyperPhe)
		Tyrosinemia (TYR-I, TYR-II, TYR-III)
	Fatty Acid Oxidation Diseases	Carnitine-acylcarnitine translocase deficiency (CAT)
		Carnitine palmitoyltransferase I (CPT-I) and II (CPT-II) deficiencies
		Carnitine uptake defect (CUD)
		2,4-Dienoyl-CoA reductase deficiency (2,4DI)
		Long-chain 3-hydroxyacyl-CoA dehydrogenase deficiency (LCHAD)
		Medium-chain acyl-CoA dehydrogenase deficiency (MCAD)
		Medium-chain ketoacyl-CoA thiolase deficiency (MCKAT)
		Medium/short-chain hydroxyacyl-CoA dehydrogenase deficiency (M/SCHAD)
		Mitochondrial trifunctional protein deficiency (TFP)
		Multiple acyl-CoA dehydrogenase deficiency (MADD) (also known as Glutaric acidemia type II (GA-II))
		Short-chain acyl-CoA dehydrogenase deficiency (SCAD)
		Very long-chain acyl-CoA dehydrogenase deficiency (VLCAD)

Group		Diseases
Inborn Errors of Metabolism	Organic Acid Diseases	Glutaric acidemia type I (GA-I)
		3-Hydroxy-3-methylglutaryl-CoA lyase deficiency (HMG)
		Isobutyryl-CoA dehydrogenase deficiency (IBCD)
		Isovaleric acidemia (IVA)
		Malonic acidemia (MA)
		2-Methylbutyryl-CoA dehydrogenase deficiency (2-MBCD)
		3-Methylcrotonyl-CoA carboxylase deficiency (3-MCC)
		3-Methylglutaconic acidemia (3-MGA)
		2-Methyl-3-hydroxybutyryl-CoA dehydrogenase deficiency (MHBD)
		Methylmalonyl-CoA mutase deficiency (MUT), Cobalamin A,B (Cbl A,B) and Cobalamin C,D (Cbl C,D) cofactor deficiencies and other Methylmalonic acidemias (MMA)
		Mitochondrial acetoacetyl-CoA thiolase deficiency (Beta-ketothiolase deficiency) (BKT)
		Multiple carboxylase deficiency (MCD)
		Propionic acidemia (PA)
	Urea Cycle Diseases	Argininemia (ARG)
		Argininosuccinic acidemia (ASA)
		Citrullinemia (CIT)
Other Genetic Diseases		Adrenoleukodystrophy (X-linked)
		Biotinidase deficiency (BIOT)
		Cystic Fibrosis (CF)
		Galactosemia (GALT)
		Krabbe Disease
		Pompe Disease
		Severe Combined Immunodeficiency Disease (SCID)

For more information on the New York State Newborn Screening Program and the diseases in the panel please visit our webpage at **www.wadsworth.org/programs/newborn**

The New York State Newborn Screening Program is a service provided by the State Health Department to families with newborn babies.

Important: Questions about newborn screening?
Need to let us know information about your baby's doctor?
Write, call or visit our website:

Newborn Screening Program
Wadsworth Center
New York State Department of Health
P.O. Box 22002
Albany NY 12201- 2002

Email: nbsinfo@health.ny.gov

www.wadsworth.org/programs/newborn

Dear Parents,

Your child's specimen(s) will be stored by the Newborn Screening Program for up to 27 years under secure conditions where access is strictly controlled. Should the need arise, the specimen(s) may be used for diagnostic purposes for your child with your consent. A portion of the specimen will also be stripped of all information that might identify your child and may be used in public health research that has been reviewed ond approved by a Boord charged with overseeing compliance with all applicable laws and ethical guidelines. You may arrange to have your child's specimen(s) destroyed or prevented from being used in public health research by calling (518) 473-7552 for instructions. You may visit our website for more information or to download a copy of the form we need to honor your written request. Note: Upon request, we will completely destroy specimens. We cannot do this until 8 weeks after you give birth.

NEW YORK STATE | Department of Health

Birth Certificate Information

Why is a birth certificate important?
A child's birth certificate is a very important document. It is the official record of the child's full name, date of birth, and place of birth. Throughout the child's lifetime, it provides proof of identity and age. As a child grows from childhood to adulthood, information in the birth certificate will be needed for many important events such as: entrance to school, obtaining a work permit, driver's license or marriage license, entrance in the Armed Forces, employment collection of Social Security and retirement benefits and for a passport to travel in foreign lands.

Why should I complete the birth certificate work booklet carefully?
The birth certificate is such an important document, great care must be taken to make certain that it is correct in every detail. By completing the birth certificate work booklet carefully, you can help assure the accuracy of the child's birth certificate.

Who should I give the completed work booklet to?
Please give the completed birth certificate work booklet to a Unit Clerk wearing an Arnot Ogden Medical Center Identification Card. If you are being discharged and have not handed in a birth certificate work booklet to a Unit Clerk, please let the nurse know so the nurse can contact a Unit Clerk immediately.

Are there any fees associated with a birth certificate?
The Arnot Ogden Medical Center will file the original birth certificate with the Department of Vital Statistics, New York State Health Department at no charge to you. However, if you made any errors on the birth certificate work booklet, the Department of Vital Statistics charges a $30.00 fee for any corrections to the original birth certificate. You may access forms at www.health.state.ny.us/vital_records/birth.htm or visit the Department of Vital Statistics to complete forms and pay the $30.00 fee for corrections. Additional charges may apply. Please be sure that all information is accurate.

How long will it take to receive my baby's birth certificate?
It takes approximately 6-8 weeks to receive your child's birth certificate in the mail. If you do not receive the birth certificate in the mail with 6-8 weeks, please contact Arnot Health at 737-4188 to let us know.

ArnotHealth

HELP FOR PARENTS COMPLETING THE NEW YORK STATE BIRTH CERTIFICATE BOOKLET

A child's birth certificate is a very important document. It is the official record of the child's full name, date of birth and place of birth. Throughout the child's lifetime, it provides proof of identity and age. As a child grows from childhood to adulthood, information in the birth certificate will be needed for many important events such as: entrance to school, obtaining a work permit, driver's license or marriage license, entrance in the Armed Forces, employment, collection of Social Security and retirement benefits, and for a passport to travel in foreign lands. Because the birth certificate is such an important document, great care must be taken to make certain that it is correct in every detail. By completing this work booklet carefully, you can help assure the accuracy of the child's birth certificate.

For the birth certificate, parents must complete all sections of the unshaded portions of The New York State Birth Certificate and SPDS work booklet, pages: 4, 10 – 11 & 14 (see attached). The shaded portions will be completed by hospital staff.

COMMON QUESTIONS:

Page 4:

Last Name on Mother's Birth Certificate
This is commonly referred to as "maiden name." If the mother was adopted, it would be the last name on her birth certificate *after* the adoption.

Infant's Pediatrician/Family Practitioner
Enter the name of the doctor who will care for the infant after he/she is released from the hospital. This may or may not be the same as the doctor who cared for the infant while in the hospital.

Page 10:

Residence Address
The residence address is referring to the city, township, village, etc. that you live in. This is often different from the mailing address that you use. For example, someone may live in Southport or Pine City and have an Elmira Address.

Page 11:

Last Name on Father's / Second Parent's Birth Certificate
Father: This is usually the same as his current last name. In the event that a man has changed his last name through marriage, the name on his birth certificate should be entered here. This may or may not be the same as his current last name depending on whether his name was changed by marriage only or changed through a court proceeding which resulted in an amendment to his birth certificate.
Mother (Second Parent): This is commonly referred to as maiden name and is the name on her birth certificate.
If the Second Parent was Adopted: If the second parent was adopted it would be the last name on his or her birth Certificate *after* the adoption.

Page 14:

Survey of Mother
The in-hospital survey is voluntary and does not affect the processing of your baby's birth certificate.

ADDITIONAL INFORMATION:

Information that is not labeled "QI", "IMM" or "NBS" in the work booklet will be used to prepare the official birth certificate. The completed birth certificate is filed with the Local Registrar of Vital Statistics of the municipality where the child was born within five (5) business days after the birth and with the New York State Department of Health. When the filing process is completed, the mother will receive a Certified Copy of the birth certificate. This is an official form that may be used as proof of age, parentage, and identity. Receiving it confirms that the child's birth certificate is officially registered in the State of New York. Additional copies of the birth certificate may be obtained from the Local Registrar or the New York State Department of Health, P.O. Box 2602, Albany, New York 12220-2602. For further information about obtaining copies, please call (518) 474-3077 or visit the New York State Department of Health web site at: www.health.ny.gov/vital_records/.

All information (including personal/identifying information) is shared with the County Health Departments or other Local Health Units where the child was born and where the mother resides, if different. County Health Departments and Local Health Units may use this data for Public Health Programs. The Social Security Administration receives a minimal set of data ONLY when the parents have indicated, in this work booklet, that they wish to participate in the Social Security Administration's Enumeration at Birth program.

While individual information is important, public health workers will use medical and demographic data in their efforts to identify, monitor, and reduce maternal and newborn risk factors. This information also provides physicians and medical scientists with the basis to develop new maternal and childcare programs for New York State residents.

Statewide Perinatal Data System (SPDS) – Quality Improvement (QI), Immunization Registry (IMM), Hearing Screening (HS) and Newborn Screening Program (NBS) Information:
The information labeled "QI" will be used by medical providers and scientists to perform data analyses aimed at improving services provided to pregnant women and their babies. "IMM" information will be used by New York State's Immunization Information System (NYSIIS). A birthing hospital's obligation to report immunizations for newborns can be met by recording the information in SPDS, including the manufacturer and lot number as required by law. "HS" information will be used to improve the Newborn Hearing Screening program. Information labeled "NBS" will result in significant improvements in the Newborn Screening Program such as better identification and earlier treatment of infants at risk for a variety of disorders.
provides physicians and medical scientists with the basis to develop new maternal and childcare programs for New York State residents.

Mother's Name:	Mother's Med. Rec. Number:

New Birth Registration

Parents – Mother

Mother's First Name:	Mother's Middle Name:
Mother's Current Last Name :	Last Name on Mother's Birth Certificate:
Social Security Number: – –	Mother's Date of Birth: *(MM/DD/YYYY)* / /

Infant

Infant's First Name:	Infant's Middle Name:
Infant's Last Name:	Infant's Name Suffix *(e.g. Jr., 2nd, III)*:

Sex: ☐ Male ☐ Female ☐ Undetermined	Plurality:	Birth Order:	Medical Record No.:
Date of Birth: *(MM/DD/YYYY)* / /	Time of Birth: *(HH:MM)* :	☐ am ☐ pm ☐ military (24-hour time)	

Parents – Infant

Was child born in this facility? ☐ Yes ☐ No If child was **not** born in this facility, please answer the following questions:

In what type of place was the infant born?	If New York State Birthing Center, enter its name:
☐ Freestanding Birth Center (regulated by DOH) ☐ Home (unknown intent) ☐ Home (intended) ☐ Clinic / Doctor's Office (not regulated by DOH) ☐ Home (unintended) ☐ Other	In what county was the child born?

Birthplace

Institution

Site of Birth, If **Other** Type of Place:	Street Address – if other than Hospital / Birthing Center:
If place of infant's birth was other than Hospital or Birthing Center: City, town or village where birth occurred:	Zip / Postal Code:

Infant's Pediatrician/Family Practitioner: NBS

Attendant

Attendant's Information:

License Number:	Name: *First*	*Middle*	*Last*

Title: *(Select one)*
☐ Medical Doctor ☐ Doctor of Osteopathy ☐ Licensed Midwife (CNM) ☐ Licensed Midwife (CM) ☐ Other

Certifier

Certifier's Information:
☐ Check here if the Certifier is the same as the Attendant *(otherwise enter information below)*

License Number:	Name: *First*	*Middle*	*Last*

Title: *(Select one)*
☐ Medical Doctor ☐ Doctor of Osteopathy ☐ Licensed Midwife (CNM) ☐ Licensed Midwife (CM) ☐ Other

Parents – Payor

Primary Payor for this Delivery:

Select one:
☐ Medicaid / Family Health Plus ☐ Private Insurance ☐ Indian Health Service
☐ CHAMPUS / TRICARE ☐ Other Government / Child Health Plus B ☐ Other
☐ Self-pay

If Medicaid is not the primary payor, is it a secondary payor for this delivery? ☐ Yes ☐ No	Is the mother enrolled in an HMO or other managed care plan? ☐ Yes ☐ No QI

Mother's Name:	Mother's Med. Rec. Number:

Mother

Medical Record Number:

Parents

Mother's Demographics

Mother's Education: *(select one)*

- ☐ 8th grade or less
- ☐ 9th – 12th grade; no diploma
- ☐ High school graduate; or GED
- ☐ Some college credit, but no degree
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctorate degree

City of Birth:	State/Terr./Province of Birth:	Country of Birth, if not USA:

Hispanic Origin:

Select all that apply

- ☐ No, not Spanish/Hispanic/Latina
- ☐ Yes, Cuban
- ☐ Yes, Mexican, Mexican American, Chicana
- ☐ Yes, Other Spanish/Hispanic/Latina
- ☐ Yes, Puerto Rican

Specify:

Mother's Demographics

Race:

Select all that apply

- ☐ White/Caucasian
- ☐ Chinese
- ☐ Korean
- ☐ Guamanian or Chamorro
- ☐ American Indian or Alaska Native **Tribe:**
- ☐ Other Asian **Specify:**
- ☐ Other Pacific Islander **Specify:**
- ☐ Other **Specify:**
- ☐ Black or African American
- ☐ Filipino
- ☐ Vietnamese
- ☐ Samoan
- ☐ Asian Indian
- ☐ Japanese
- ☐ Native Hawaiian

Mother's Residence

Residence Address

Street Address:

State/Terr./Province:	County:	City, Town or Village:

Zip/Postal Code:	Mother's Country of Residence, if not USA:	U.S./Canadian Phone Number: ( ) –

Mother's Mailing Address

Mailing Address – Most Recent

☐ Check here if the mailing address is the same as the residence address *(otherwise enter information below)*

Mailing Address:

City, Town or Village:	State/Terr./Province:	Country, if not USA:	Zip/Postal Code:

Employment

Employment History

Employed while Pregnant: ☐ Yes ☐ No	Current / Most Recent Occupation:	Kind of Business / Industry:

Name of Company or Firm:	Address:

City:	State/Territory/Province:	Zip / Postal Code:

Mother's Name:	Mother's Med. Rec. Number:

Father or Second Parent

Will the mother and father be executing an Acknowledgement of Paternity? ☐ Yes ☐ No ☐ Not required

What type of certificate is required? ☐ Mother / Father ☐ Mother / Mother

Parents

Father's or Second Parent's Demographics

Parent's First Name:	Parent's Middle Name:
Parent's Current Last Name:	Last Name on Parent's Birth Certificate:
Parent's Name Suffix *(e.g. Jr., 2nd, III)*:	Social Security Number: – –

Demographics

Parent's Date of Birth: *(MM/DD/YYYY)*
/ /

Education: *(select one)*

- ☐ 8th grade or less
- ☐ 9th – 12th grade; no diploma
- ☐ High school graduate; or GED
- ☐ Some college credit, but no degree
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctorate degree

City of Birth:	State/Terr./Province of Birth:	Country of Birth, if not USA:

Hispanic Origin:

Select all that apply

- ☐ No, not Spanish/Hispanic/Latino
- ☐ Yes, Cuban
- ☐ Yes, Mexican, Mexican American, Chicano
- ☐ Yes, Other Spanish/Hispanic/Latino
  Specify:
- ☐ Yes, Puerto Rican

Race:

Select all that apply

- ☐ White/Caucasian
- ☐ Chinese
- ☐ Korean
- ☐ Guamanian or Chamorro
- ☐ American Indian or Alaska Native **Tribe:**
- ☐ Other Asian **Specify:**
- ☐ Other Pacific Islander **Specify:**
- ☐ Other **Specify:**
- ☐ Black or African American
- ☐ Filipino
- ☐ Vietnamese
- ☐ Samoan
- ☐ Asian Indian
- ☐ Japanese
- ☐ Native Hawaiian

Parent's Residence

Residence Address

☐ Check here if the parent's residence address is the same as the mother's address *(otherwise enter information below)*

Street Address:	
City, Town or Village:	State / Territory / Province:
Parent's Country of Residence, if not USA:	Zip / Postal Code:

Employment

Employment History

Current / Most Recent Occupation:	Kind of Business / Industry:
Name of Company or Firm:	Address:
City:	State / Territory / Province: / Zip / Postal Code:

Mother's Name:	Mother's Med. Rec. Number:

Interview/Records QI

Parents

Survey of Mother (in hospital)

Survey of Mother (in hospital)

Did you receive prenatal care? ☐ Yes ☐ No *(If 'Yes' please answer question 1. Otherwise skip to question 2.)*

1. During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about any of the things listed below?

	Yes	No
a. How smoking during pregnancy could affect your baby?	☐	☐
b. How drinking alcohol during your pregnancy could affect your baby?	☐	☐
c. How using illegal drugs could affect your baby?	☐	☐
d. How long to wait before having another baby?	☐	☐
e. Birth control methods to use after your pregnancy?	☐	☐
f. What to do if your labor starts early?	☐	☐
g. How to keep from getting HIV (the virus that causes AIDS)?	☐	☐
h. Physical abuse to women by their husbands or partners?	☐	☐

2. How many times per week during your current pregnancy did you exercise for 30 minutes or more, above your usual activities? — Times per week:

3. Did you have any problems with your gums at any time during pregnancy, for example, swollen or bleeding gums? ☐ Yes ☐ No

4. During your pregnancy, would you say that you were: *(select one)*
   ☐ Not depressed at all ☐ A little depressed
   ☐ Moderately depressed ☐ Very depressed
   ☐ Very depressed and had to get help

5. Thinking back to just before you were pregnant, how did you feel about becoming pregnant?
   ☐ You wanted to be pregnant sooner ☐ You wanted to be pregnant later
   ☐ You wanted to be pregnant then ☐ You didn't want to be pregnant then or at any time in the future

Chart Review (Prenatal and Medical)

Chart Review (Prenatal and Medical)

1a. Copy of prenatal record in chart?
   ☐ Yes, Full Record ☐ Yes, Prenatal Summary Only
   ☐ No

1b. Was formal risk assessment in prenatal chart?
   ☐ Yes, with Social Assessment ☐ Yes, without Social Assessment
   ☐ No

1c. Was MSAFP / triple screen test offered?
   ☐ Yes ☐ No
   ☐ No, Too Late

1d. Was MSAFP / triple screen test done?
   ☐ Yes ☐ No

2. How many times was the mother hospitalized during this pregnancy, not including hospitalization for delivery?

Admission & Discharge

Admission and Discharge Information

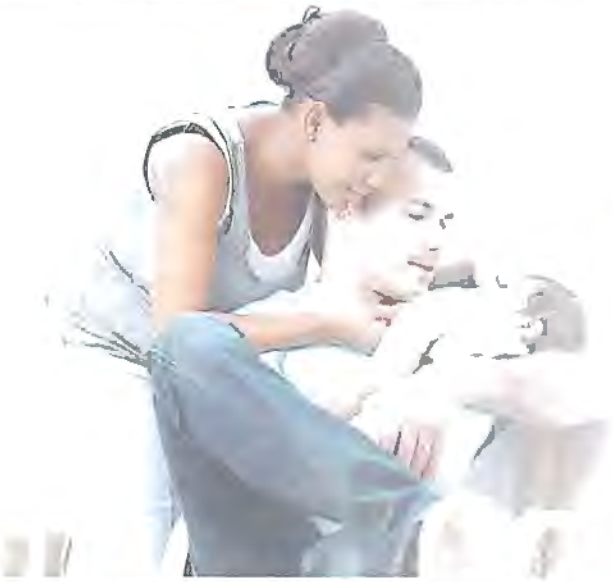
Mother

Admission Date for Delivery *(MM/DD/YYYY)* / / — Discharge Date *(MM/DD/YYYY)* / /

Infant

Discharge Date *(MM/DD/YYYY)* / /

☐ Discharged Home ☐ Infant Died at Birth Hospital
☐ Infant Still in Hospital ☐ Infant Discharged to Foster Care/Adoption
☐ Infant Transferred Out ☐ Unknown



Circumcision

What Parents Should Know

Urology Care FOUNDATION™

The Official Foundation of the American Urological Association

Circumcision is the removal of the skin that covers the tip of a baby's penis. In recent years, newborn circumcision has been a hot topic of debate. Differing opinions and advice may leave many new parents with more questions than answers.

Your choice of whether to circumcise your son may be a question of religion or custom. For instance, circumcision is part of Jewish and Muslim traditions. In other cases, parents may simply want their son to look like his father or other male family members.

But the trend in the United States is clearly changing. The rate of circumcision is falling. In the 1970s and 1980s, about 8 of every 10 boys born in the US were circumcised. Today, 5 or 6 of every 10 boys are circumcised. Circumcision rates in the US vary by region. Fewer boys in Western states are circumcised. The north central region has the highest rates of circumcision.

Only about one in three males are circumcised worldwide. Around the world, the highest rates for circumcision are in the Middle East, South Korea and the US. In Latin America, most of Asia and in Europe, circumcision is rare. It is on the rise in Africa, where studies have shown that circumcision lowers the risk of getting HIV. This is because the foreskin is different from skin on other parts of your body. It's not like the skin on your arm, for instance. The foreskin has a type of cell called Langerhans cells, which are more likely to attach to HIV cells. Based on these findings, in 2007 the World Health Organization endorsed circumcision as a way to help stop the spread of HIV. Still, this thinking has not taken hold in parts of the world where HIV is not as wide spread. In fact, the Royal Dutch Medical Association in the Netherlands called for a ban on circumcision in 2010. They stated that the procedure is "medically unnecessary and violates children's rights."

In the US, the American Urological Association (AUA) and the American Academy of Pediatrics (AAP) each have policy statements on circumcision. Both groups recommend the procedure be offered as a choice to parents. The AUA "believes that neonatal circumcision has potential medical benefits and advantages as well as disadvantages and risks." The AAP states that "health benefits [from circumcision] are not great enough to recommend routine circumcision for all male newborns… [But are enough] to justify access for families choosing it." Parents should talk with their child's doctor about the health risks and benefits. With those facts, parents should then think over what will work for their family. They should keep in mind their own religious, ethical, and cultural beliefs and practices.

The rate of circumcision is falling. Today 5 or 6 out of every 10 boys born in the United States are circumcised.

So what should parents know about the health risks and benefits of circumcision? Of course, circumcision can cause pain and stress for the patient. To lessen pain for newborns,

National Headquarters: 1000 Corporate Boulevard, Linthicum, MD 21090

Phone: 410-689-3990 • Fax: 410-689-3878 • 1-800-828-7866 • info@UrologyCareFoundation.org • www.UrologyHealth.org

Circumcision
What Parents Should Know

Urology Care FOUNDATION™
The Official Foundation of the American Urological Association

an anesthetic (pain killer) may be used. With newborns, there is some evidence that babies may be less likely to feel discomfort 7 to 10 days after birth. This is because newborns have a high level of endorphins (substances made by the body that reduce pain). Also, as with any surgery—even a minor one—there is also a risk of bad side effects. When circumcision is not done properly, the urethra (the tube that carries urine out of the body) or penis may be hurt. In rare cases, death has even occurred. Still, circumcisions done by skilled doctors rarely have bad side effects. And the problems that result are often not serious. The most common side effect is bleeding or infection. To help avoid problems, parents choosing to circumcise should make sure that whoever is doing it is skilled and practiced. Parents should also feel free to ask any questions they may have.

After circumcision, caring for the penis is simple but important. Wash the area gently with warm water. Pat dry and put on a new bandage with antibiotic ointment each time you change the diaper. The healing process should take about a week. It is normal for there to be a little swelling, redness and maybe blood at first. Still, it is important to have your baby seen by his doctor if these problems last several days or get worse. Also talk to a doctor if the baby gets a fever or does not have a wet diaper within 12 hours of circumcision. Almost all side effects are easily treated.

On the plus side, circumcised boys are less likely to have a urinary tract infection (UTI) in their first six months. As they grow older, circumcised males are also less likely to get penile cancer. Still, this type of cancer is rare in the US. And uncircumcised males can prevent penile cancer with good hygiene and keeping the area under the foreskin clean.

Parents who opt out of circumcision should wash their baby's penis with soap and water with each bath. Parents should also be sure to teach their son good hygiene and care for his penis as he grows older. Treat the foreskin gently and make sure not to pull it back forcibly. Once it starts to retract, often around age five, it is important to clean under the foreskin with soap and water often. See a doctor if there is any swelling, pain or if the foreskin is itchy.

In the end, circumcision is a family decision. And different choices work for different families. "When parents ask me whether to have their son circumcised, I tell them whatever they feel is best for their son is the right decision," said Dr. Anthony Atala, AUA member and Director of the Wake Forest Institute for Regenerative Medicine. "In the end, if he is kept safe, clean and well cared for, then the parents are doing the right thing."

RESOURCES

FamilyDoctor.org

In English: http://familydoctor.org/familydoctor/en/pregnancy-newborns/caring-for-newborns/infant-care/circumcision.html

In Spanish: http://familydoctor.org/familydoctor/es/pregnancy-newborns/caring-for-newborns/infant-care/circumcision.html

MedlinePlus, U.S. National Library of Medicine, National Institutes of Health

In English: http://www.nlm.nih.gov/medlineplus/ency/article/002998.htm

In Spanish: http://www.nlm.nih.gov/medlineplus/spanish/ency/article/002998.htm

Urology Care Foundation

UrologyHealth.org

You may download this and print it yourself from **UrologyHealth.org/CircumcisionFS.** For copies of printed materials about other urologic conditions, visit **UrologyHealth.org/Order** or call 800-828-7866.

National Headquarters: 1000 Corporate Boulevard, Linthicum, MD 21090

Phone: 410-689-3990 • Fax: 410-689-3878 • 1-800-828-7866 • info@UrologyCareFoundation.org • www.UrologyHealth.org

The American College of Obstetricians and Gynecologists

FREQUENTLY ASKED QUESTIONS
FAQ039
LABOR, DELIVERY, AND POSTPARTUM CARE

Newborn Circumcision

What is circumcision?

Circumcision is the surgical removal of the layer of skin, called the ***foreskin***, that covers the ***glans*** (head) of the penis.

When is circumcision performed?

Circumcision on infants may be performed before or after the mother and baby leave the hospital. It only is performed if the baby is healthy. If the baby has a medical condition, circumcision may be postponed. Circumcision also can be performed on older children or adults. However, recovery may take longer when circumcision is done on an older child or adult. The risks of complications also are increased.

Is circumcision a required procedure?

Circumcision is an elective procedure. That means that it is the parents' choice whether to have their infant sons circumcised. It is not required by law or by hospital policy. Because it is an elective procedure, circumcision may not be covered by your insurance policy. To find out, call your insurance provider or check your policy.

Is circumcision a common practice?

Although many newborn boys in the United States are circumcised, the number of circumcisions has decreased in recent years. It is less common in other parts of the world.

Why do some parents choose to have their sons circumcised?

There are hygienic reasons for circumcision. ***Smegma*** is a thick white discharge containing dead cells. It can build up under the foreskin of males who are not circumcised. This can lead to odor or infection. However, a boy who has not been circumcised can be taught to wash his penis to get rid of smegma as a part of his bathing routine.

For some people, circumcision is a part of certain religious practices. Muslims and Jews, for example, have circumcised their male newborns for centuries. Others may choose circumcision so that the child does not look different from his father or other boys.

Why do some parents choose not to have their sons circumcised?

Some parents choose not to circumcise their sons because they are worried about the pain the baby may feel or the risks involved with the surgery. Others believe it is a decision a boy should make himself when he is older.

Are there any health benefits associated with circumcision?

Circumcised infants appear to have less risk of urinary tract infections than uncircumcised infants. The risk of urinary tract infection in both groups is low. It may help prevent cancer of the penis, a rare condition.

Some research suggests that circumcision may decrease the risk of a man getting ***human immunodeficiency virus (HIV)*** from an infected female partner. It is possible that circumcision may decrease the risk of passing HIV and other ***sexually transmitted diseases*** from an infected man to a female partner. At the present time, there is not enough information to recommend routine newborn circumcision for health reasons.

Are there any risks associated with circumcision?

Possible complications include bleeding, infection, and scarring. In rare cases, too much of the foreskin or not enough foreskin is removed. More surgery sometimes is needed to correct these problems.

How is circumcision performed?

Circumcision takes only a few minutes. During the procedure, the baby is placed on a special table. It is recommended that an ***anesthetic*** be used for pain relief. Various surgical techniques are used, but they follow the same steps:

- The penis and foreskin are cleaned.
- A special clamp is attached to the penis and the foreskin is removed.
- After the procedure, a bandage and petroleum jelly are placed over the wound to protect it from rubbing against the diaper.

What should I expect after my baby boy has been circumcised?

If your baby boy has been circumcised, a bandage with petroleum jelly may be placed over the head of the penis after surgery. The bandage typically falls off the next time the baby urinates. Some heath care providers recommend keeping a clean bandage on until the penis is healed, while others recommend leaving it off. In most cases, the skin will heal in 7–10 days. You may notice that the tip of the penis is red and there may be a small amount of yellow fluid. This usually is normal.

How do I keep the circumcised area clean?

Use a mild soap and water to clean off any stool that gets on the penis. Change the diapers often so that urine and stool do not cause infection. Signs of infection include redness that does not go away, swelling, or fluid that looks cloudy and forms a crust.

If I decide not to have my son circumcised, how do I clean his penis and foreskin?

If your baby boy has not been circumcised, washing the baby's penis and foreskin properly is important. The outside of the penis should be washed with a mild soap and water. Do not attempt to pull back the infant's foreskin. The foreskin may not be able to pull back completely until the child is about 3–5 years old. This is normal.

As your child gets older, teach your son how to wash his penis. He should pull back the foreskin and clean the area with soap and water. The foreskin then should be pushed back into place.

Glossary

Anesthetic: A drug used to relieve pain.

Foreskin: A layer of skin covering the end of the penis.

Glans: The head of the penis.

Human Immunodeficiency Virus (HIV): A virus that attacks certain cells of the body's immune system and causes acquired immunodeficiency syndrome (AIDS).

Sexually Transmitted Diseases: Diseases that are spread by sexual contact, including chlamydia, gonorrhea, genital warts, herpes, syphilis, and infection with human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

Smegma: A whitish, cheesy substance normally built up and shed from under the male foreskin.

If you have further questions, contact your obstetrician–gynecologist.

The Fourth Trimester:

The Postpartum and Newborn Period

Guidance and Information for Mothers

and Their Families

Adapted from the student project of D. Conti, J. Chijioke, T. Crum, A. Fraundorf, R. Poersch, A. Schweitzer, J. Share, and K. Weaver at Frontier Nursing University

Postpartum Warning Signs

Call your midwife immediately if you have any of these signs or symptoms:

- You have a **fever** of 100.4° F or higher, chills, or if your vaginal bleeding has a bad odor; these could be signs of infection.
- You develop a **bad headache** that doesn't go away with rest or a mild pain reliever.
- You start seeing spots, have blurry vision, or other **vision changes**.
- You have **pain in one leg** or the other; especially if it's swollen, warm, and reddened. These could be symptoms of a blood clot.
- You have **trouble emptying your bladder** or it hurts when you do. An infection of the bladder or urinary tract could cause you to feel this way.
- You are **soaking a pad** in an hour or less.
- Your **bleeding is returning** to bright red and getting heavier, after it had begun to get lighter and less heavy.
- You pass more than one blood clot that is as big as a golf ball, or larger.
- You think your perineal stitches or abdominal incision are getting infected. Signs include: **swelling, redness, draining pus, bad odor**.
- You have pain, swelling, heat, redness, or streaks in your breast, a fever of 100.4 ° F or higher, chills and flu like symptoms: these are signs of a **breast infection**.

You should go to the emergency room or call 911 if you have the following:

- **A seizure**
- **Chest pain**
- **Difficulty breathing**

Lochia

"How long will I bleed for?"

Lochia is the name for the vaginal bleeding that you experience after having a baby. It is made up of blood, tissue, and mucus and may last for 4-8 weeks; although it should be very light in amount and color at the end. At birth, and for 2-4 days after, it will be bright red and similar to a heavy period. Around the third to fourth day, the color will change to a light red or pink. Your bleeding should lighten in amount and color each day. It will change to a whitish or yellowish color around 7-10 days after birth and will only be a small amount. Around 7-14 days after birth, you may experience bright red bleeding again. This should only last for a few hours. This is known as eschar, and happens when your body releases the scab where your placenta was attached. **If this heavier bleeding continues for more than a few hours, you should contact your midwife.**

Cramping pain after birth

After you have a baby your uterus must stay contracted to decrease the amount of bleeding. This can cause you to feel cramping. The more times you have given birth the more work it is for your uterus to stay contracted. This can make the cramping feel worse. There are several things that you can try to decrease the pain and cramping.

- Empty your bladder before you breastfeed the baby.
- Lie on your stomach, this may help with the cramping.
- Take ibuprofen 600 mg every 6 hours as needed or another pain reliever recommended by your midwife.

If severe cramping continues beyond a few days after birth you should let your midwife know

Caring for your Perineum

After having a baby your perineal area may be very swollen and tender. This is normal. The swelling and discomfort should decrease within a few days. If you have stitches, these will heal in about 3 weeks. The vagina and perineum may be sensitive for several months after delivery. However, if you are still having a lot of pain after the 3rd day after birth you should let your midwife know. Report any signs of infection (increased swelling, redness, draining pus, bad odor) to your midwife right away. It is very important to keep this area clean and to wash hands to decrease chances of infection. Use only pads; no tampons or anything inside of the vagina and no sexual intercourse until your midwife says it is okay. This is usually at least 4- 6 weeks after birth. To help with healing and comfort you may:

Rinse the area with clean, warm water from a peri-bottle or squirt bottle each time you use the bathroom. If you start rinsing before you urinate, this may help with burning in the first day or two after giving birth.

Perineal Care:

- Pat the area dry instead of wiping.
- Use ice packs to help with swelling.
- Use benzocaine spray (Dermoplast ®) on your stitches. This helps the pain.
- Tucks® pads or witch hazel compresses applied to your pad and placed against your skin are soothing.

- Sit in a sitz bath three times daily. This is a plastic container that fits into your toilet seat. You may use cool or warm water, whichever feels better. This helps your tissues to heal, stitches to dissolve, and helps keep the area clean. You may also sit in a shallow tub of water. Make sure the tub is cleaned beforehand so you don't get an infection.
- If you have pain requiring medication, use these as directed by your provider

Pelvic floor exercises (Kegels)

You may begin performing Kegel exercises as soon as comfortable for you. To do this you should tighten up your perineal muscles and draw them up, and in. Try to hold this for 5-10 seconds. Aim to do this 10 times each, three times per day. These exercises will increase your muscle tone and strength. This helps decrease urine leakage and improves sexual function after giving birth. (See page 9 for detailed instructions.)

Hemorrhoids

Hemorrhoids are swollen blood vessels in the rectum. These sometimes develop during pregnancy. They can become quite swollen and painful after having a baby. Some of the same things that help with pain in the perineum will also be helpful for hemorrhoid pain, such as ice packs, sitz baths, and Tucks® pads. You may also use ointments that are made for hemorrhoids, and pain relieving ointments or sprays. It is important to eat foods that have plenty of fiber and drink plenty of water to avoid straining with a hard bowel movement. You may want to take a stool softener as well.

Cesarean Birth

Self-care:

- It is important to get plenty of rest after having surgery.
- You should eat a healthy diet and drink plenty of water.
- Keep your incision clean and dry.
- It is okay to shower. You do not need to cover your incision, but do not scrub it.
- You should not lift anything heavier than your baby, or do any activity that could put pressure on your incision until your provider says it's okay.
- Pain management: take the pain medications prescribed by your provider as directed. You should not drive while taking narcotic pain medications.

Tell your provider right away if:

- You have any signs of infection to your incision. These are redness, drainage, swelling, increased pain, and fever over 100.4°F.
- You think any part of your incision is opening up
- You have signs of a blood clot: pain in one leg or the other, swelling, redness, heat.

You should go to the emergency room or call 911 if you have chest pain or trouble breathing.

"Why am I urinating and sweating so much?"

- Your kidneys (part of your body that makes urine) and bladder (where urine is stored in your body) work hard to get rid of the water you were holding onto during pregnancy.
- Holding onto water when you were pregnant made you add a lot of weight.
- After giving birth to your baby, your body will try to remove the water that made you add weight by urinating and sweating.
- It is normal for you to feel like you have to go to the bathroom or sweat a lot after giving birth to your baby.
- The feeling of going to the bathroom and sweating a lot may start 12 hours after birth. You have to take care of yourself during the period of increase urination and sweating by: drinking a lot of water (keep water by your bedside), taking showers as needed, and dress in proper clothing to suit the weather and your body changes.
- Remember that your body is trying to return to your before-pregnancy condition.
- It may take up to 6 to 8 weeks for your bladder tone to fully return to your before-pregnancy condition
- Your urinary system may take up to 2 to 3 months to return to your non pregnant condition
- Women are at increased risk of urinary tract infection and urinary retention after birth.

If you feel like you are having difficulty urinating or pain when you urinate, or the pain will not go away for some time even after urinating, call your midwife.

"Will it be hard for me to have a bowel movement?"

Your belly muscle tone becomes relaxed making it difficult to move the bowel after giving birth to your baby.

- It is normal for your bowel movements to restart 2 - 3 days after birth
- Normal bowel movements may take close to 1 - 2 weeks to return fully after birth
- Your gut is working slightly different after birth compared to when you were not pregnant. You may feel some bloating due to increased fluid and gas, change in your belly size, and difficulty emptying your bowel with hardened stool (constipation).
- Although your bottom may be sore, do not resist the urge to empty your bowel.
- To help your bowel work better after giving birth, eat a high fiber diet like fruits, prunes, vegetables, whole grains, and drink a lot of fluids
- If diet alone is not helping, your healthcare provider may recommend a stool softener or mild laxative to help you empty your bowel

Diet and Nutrition

A good diet after giving birth is important to rebuild your body's nutrient stores used up during pregnancy

- Your body needs 300 extra calories per day if you are breastfeeding
- A reduced-calorie diet for weight loss is not recommended until 6 weeks postpartum
- You are not expected to diet at all if you are breast feeding
- Your body will naturally get rid of excess water retained during pregnancy through sweating and urination
- Drink plenty of water when you are thirsty so that your body does not lose a large amount of water (dehydration)
- Eat foods rich in folate- or folic acid- daily, such as dark green leafy vegetables, (400 mcg of folic acid from foods and supplements is recommended).

The following tips will help you to be healthy after childbirth:

- Low fat or **lean protein** like chicken, turkey, fish and cooked beans will provide the required energy to your body
- Avoid sodas, drink at least **8 glasses of** water/fluid every day
- Make sure you drink a full glass of water/fluid any time you sit to breastfeed your baby
- To keep your bowel movements regular: eat **a high fiber diet** which may include bran enriched foods, fruits, and vegetables
- Eat **foods rich in calcium** like dark green leafy vegetables, milk, and yogurt
- **Keep away from taking nicotine and alcohol**, and make your home free from secondhand smoke. This protects your baby from developing conditions caused by being exposed to nicotine, alcohol, and smoke. **These can be serious conditions such as Sudden Infant Death Syndrome (SIDS), asthma, and other respiratory problems and infections**
- Remember to **talk to your healthcare provider** if you are having a hard time choosing the right combination of foods.

"What kind of activity or exercise should I do?"

Pregnancy and childbirth results to a lot of changes in your body. Exercise is important to help your body return to your normal pre-pregnancy condition

- Start with **light activity** soon after giving birth to your baby, for example, walking will not only help you feel better, it will help you reduce the chances of having blood clot in your pelvis and lower legs
- Make an exercise schedule for yourself. **Begin with 10 minutes**, then increase to 20-30 minutes 3 to 4 times a week
- Exercises that can help you be in good shape include: Stand up straight; gradually tighten your belly as you move to take the pressure off the muscles of your back; focus on relaxing your neck and shoulder muscles.
- When you are in bed or sitting in a chair, do not cross your legs, or bend them tightly. These positions or any position that places pressure against the back of the knee may keep your blood from flowing and increase your risk for blood clots.
- Your legs can be exercised while you are in bed by bending and straightening your knees

Kegel exercise will help to return tone to the muscles of your bladder and pelvis.

- Squeeze the muscles you use to control the flow of urine, tighten and relax the muscles up to 10 times for about 10 seconds each time, followed by a period of rest. Exercise will help your perineum to heal faster.
- Exercise your pelvic muscles in this way: Lie on your back, tighten your lower abdomen while supporting your lower back; Gently lift your hip for 5 seconds, then release for 2 seconds, do it as many times as you can to firm your loosened belly muscles
- Tuck your hips forward, firm your belly and buttocks muscles, keep your back straight and your arm stretched in front for balance, slowly and smoothly bend your knees and squat until your thighs are parallel to the floor, hold for 2 to 5 seconds, then slowly and smoothly stand up.

Rest and Sleep

It is important that you rest and sleep well because your body needs energy to take care of your new tasks as a mother

- Find time to sleep and relax
- The best time to nap is when your baby is napping
- Keep noise devices (TV/music) off in your environment during rest periods
- Make a schedule for your chores and pay particular attention to your plan
- Remember to manage your visiting time with visitors and phone calls
- You can improve your relaxation by taking a warm bath, listening to music, take a walk, or get a gentle massage

Make the time you feed your baby a bonding and relaxation time

"Is it normal for me to feel like this?"

In the postpartum time, your body is going through many changes. One of the most significant is the adaptation of having a newborn to care for along with the hormonal changes of your body. It is normal to feel overwhelmed by the changes to you and your family's routine, the lack of order and the overall confusion that may go along with having a newborn in the household. These typical changes of the body may also lead to a common occurrence termed **"baby blues" or postpartum blues**. This is a period of time shortly after the birth of the baby, up to two weeks postpartum, where you may experience feelings of sadness, mood swings, fatigue, impatience, irritability or crying spells.

Postpartum depression is a disorder that can happen anytime in the first year after giving birth where severe feelings of sadness and despair may occur that lasts longer than 2 weeks.

If you begin to experience these symptoms, it is very important to contact your health care provider immediately and possibly obtain treatment. Treatment for postpartum depression may include medication, counseling, support groups, or a combination these options.

Help at home and being nurtured

Whether a new mom is experiencing these hormonal changes or not, a woman who has just given birth needs help around the house with childcare, cooking, cleaning, laundry and other daily tasks. If you have people willing to help, such as family members, friends, neighbors or others, some suggestions to give them to assist you at home include:

- Meal preparation
- Grocery shopping
- Cooking
- Laundry
- Childcare

- **Anything** else that you can think of that may alleviate you in anyway.

Sometimes people in your life want to help but may not offer, so it is reasonable to ASK for help.

Having a loved one help you with your house or caring for your baby is beneficial for both parties. Having just given birth, you need this type of nurturing and your loved one feels needed and important to you and your baby. Nurturing from a significant other can be of value too. It is common for the baby to get a great deal of care and physical and emotional comfort, but as a woman who has just given birth, it is equally important for you as well.

Family adjustment and prioritizing

Communication with members of your family is key during this challenging time. Other children in the household may feel neglected or not needed so it is important to give them ample time to share their feelings and time for you to spend alone with them.

Your Relationship and Post-Baby Sexuality

It is essential for a woman who has just given birth and her significant other to make time for each other. In order to do this, you and your significant other, as a couple, may have to plan a "date" day or night without baby so that you can be sure both are able to give undivided attention. Even a few hours is beneficial.

Open and honest communication is also important between a new mom and her partner/s, especially when it comes to sex. There is not a set time when a woman is ready to start having sex again following giving birth. The recommendation to allow for healing is to wait 4-6 weeks after birth, but that may not be long enough for some women to truly feel ready. This is a personal decision that should not be taken lightly. A few things that may impact postpartum sexuality include fatigue, body image insecurity, breastfeeding, vaginal discomfort, fear of fertility, and other factors.

If you experience discomfort during sex, contact your provider.

Resumption of menses and contraception

There is no set time frame after giving birth that your period will restart. If you are bottle-feeding your baby, your period may start 4-6 weeks after birth. If you are breastfeeding your baby, it is possible that your period could start 2-18 months after birth. The reason for the delay is a hormonal shift and it delays ovulation as well as the start of your period. You should be aware that pregnancy is a possibility even before your period starts following giving birth.

The initiation of contraception methods is key to resuming sexual activities. Deciding which form or method of contraception (birth control) to start in the postpartum period is a topic that should be addressed early, as some methods are contraindicated. The birth control method you choose is important as some may take time to become effective and you may not realize it but becoming pregnant again is a possibility.

Danger signs and when to call

After you leave the hospital, you will be following up with the pediatrician regularly for check-ups. However, if your baby starts showing signs of not feeling well or if you have any questions, contact the pediatrician right away. Since babies cannot tell us what is bothering them, it's important to look for signs. Here is a list of things to look for:

- Check the baby's temperature under the arm or using a temporal thermometer (over the forehead), and call if the temperature is 100.4 or higher, or if it is 97.8 or lower.
- Coughing, sneezing, or changes in the way the baby is breathing
- Bluish skin color around the baby's mouth, nose, fingertips, skin
- Yellow tint to the baby's skin or eyes
- Signs of infection at the cord and belly button: redness, drainage, foul odor
- Changes in your baby's stools: diarrhea (watery stools), bloody or black stools
- Projectile vomiting or blood in the vomit
- Belly is firm or swollen
- Eyes are red, swollen, or there is drainage coming from one or both eyes
- Soft spot on the baby's head is bulging or sunken
- Baby is weak- not moving his arms and legs like normal
- Extremely sleepy and difficult to wake up (lethargic)
- Not feeding well

Baby Care

"How should I bathe my baby?"

Only give your baby a sponge bath until the belly button and circumcision have healed. Once healed, you can give your baby a tub bath. It is okay to bathe your baby daily or 2-3 times a week according your preference. When bathing the baby- use warm water and a baby soap (or mild soap).

- Use an infant tub and fill it with 2-3 inches of warm water, never enough for baby's head to be submerged.
- Wash the baby's face with warm water first and then wash the rest of the body with warm soapy water.
- Be sure to thoroughly clean in the skin folds (particularly under the neck/chin).
- Never pull back the foreskin of an uncircumcised penis for cleaning. Wash the penis externally only, with water.
- Wash and rinse the baby's hair at the end of the bath.
- Quickly dry and dress the infant after the bath.
- Never leave a baby unattended in a bath! If the parent must leave the room during a bath, wrap the baby in a towel and bring him/her with you.

Cord Care

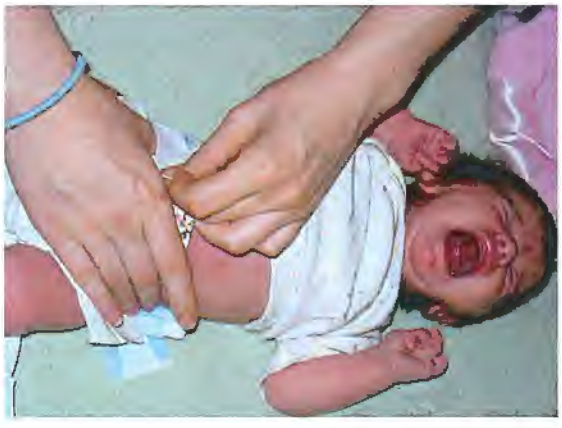
The cord stump will dry and fall off on its own in about 7-10 days. You do not need to apply anything to the cord to help it dry. Until the cord falls off, fold the top of the diaper down to avoid rubbing. Keep the belly button dry and only give sponge baths until the cord falls off and is healed. Call the pediatrician if you see any signs of infection:

- Drainage at the cord site
- Bleeding
- Foul odor
- Redness of the skin around the cord

Diaper Changing

Changing your baby's diaper can be tricky at first but with practice, it will get easier.

1. Lay baby on a flat, clean surface.
2. Hold baby's legs at the ankles and lift up the legs.
3. Remove soiled diaper.
4. Cleanse the diaper area with a clean cloth and warm water or a mild soap. Wipes are okay to use. Always wipe front to back. This helps prevent urinary tract infection which can happen when bacteria from the stool enters the urethra (where urine passes from). This is especially important with female babies, who are at a higher risk of getting a urinary tract infection.
5. Place a new diaper under your baby with the tabs behind his back.
6. Fasten the tabs around to the front of the diaper. To help prevent leaking- make sure the diaper is securely fastened with no loose areas.



Skin Care

"What do I do if my baby gets a diaper rash?"

Diaper rash is red, irritated skin in the baby's diaper area that is caused by exposure to stool and urine. The rash can be painful and may worsen if not treated.

To heal the rash:

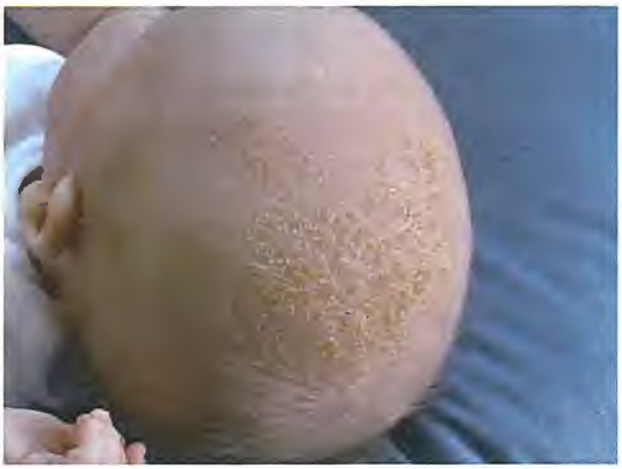
- Change the baby's diaper frequently to minimize skin exposure to urine and stool
- Gently clean the area with warm water, allow to air-dry before securing the new diaper.
- Apply a diaper **cream** to protect the skin at each diaper change (zinc oxide).

If the diaper rash appears red with bumps- call the pediatrician. This may be a yeast rash, which will need a prescription medication to heal (miconazole, nystatin).

Cradle Cap

Cradle cap is flakey, oily, yellow-brown scales that appear on the baby's scalp. It is a normal finding in babies and is not harmful or contagious. It looks much worse than actually is and bothers parents more than the babies. While it will resolve on its own, there are steps you can take to help treat it:

- Apply an oil to the scalp (vegetable, olive, coconut oil) and gently comb the scales. Then follow with a shampooing.
- Regular shampooing also helps.



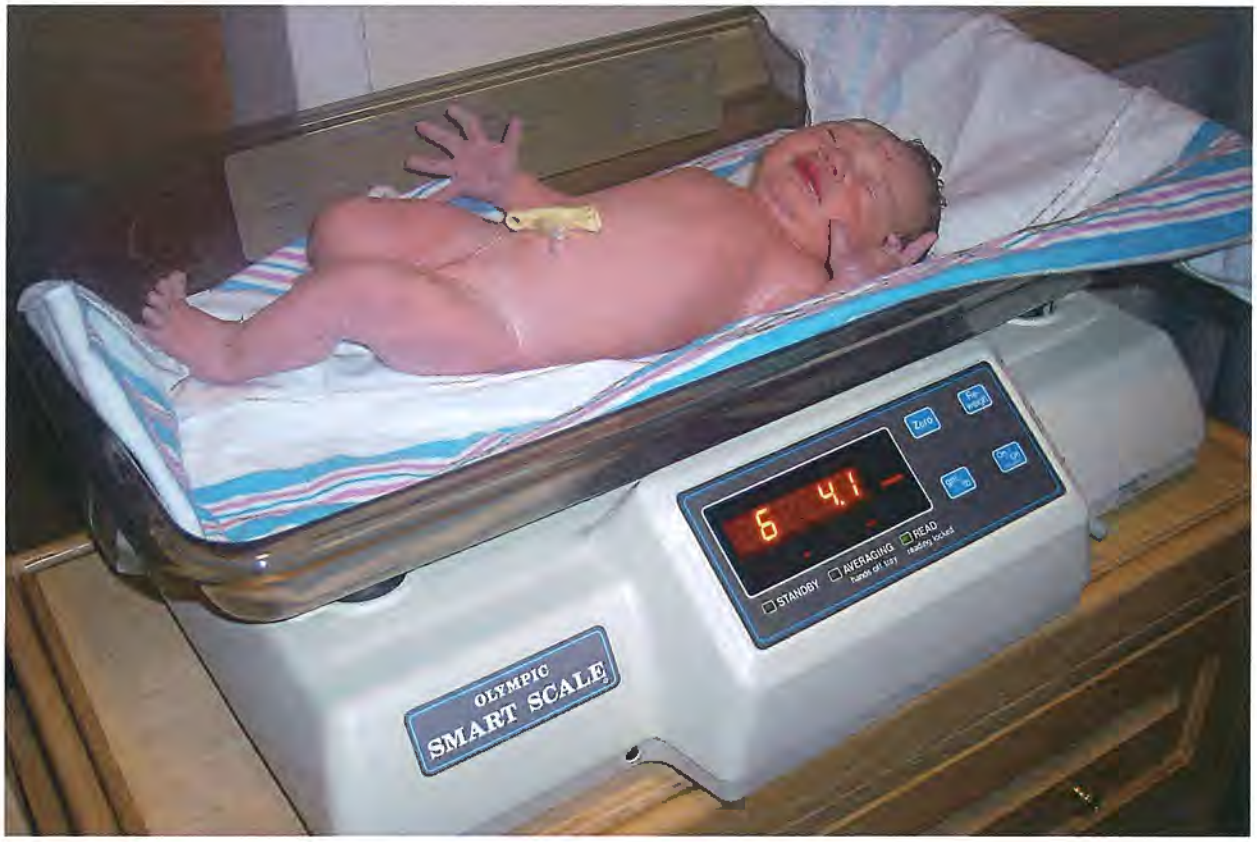
Newborn Rash (Erythema Toxicum Neonatum)

Newborn rash is tiny red bumps on the baby's face and/or body. They look like tiny pimples and are sometimes called newborn acne. It is thought to be caused by the baby's exposure to mom's hormones. It is not contagious and will clear up on its own in a few weeks or months.

Circumcision Care

Circumcision is the surgical removal of the foreskin on the penis. It takes about 1-2 weeks to heal. For a few days after the procedure, you may notice a small amount of blood on the bandage or diaper- this is normal. Also, mild swelling and a yellow crust is normal while it heals. Follow these steps to keep it clean and help it heal:

- Depending on the procedure used for the circumcision, petroleum jelly alone or with a gauze dressing may be necessary with each diaper change. Make sure you understand whether this is required when your provider performs the procedure.
- During bath time, wash with warm water and mild soap. If a Plastibell® was used, it is necessary to keep the area dry until this comes off.
-  Watch for signs of infection: green/yellow drainage, increasing swelling, continued bleeding, increasing redness. Call your pediatrician.



"Is it normal that my baby has lost weight since birth?"

All babies are expected to lose weight after they are born- but the amount they lose varies depending on how they are being fed. Formula fed babies typically lose about 5% of their birth weight and breastfed babies can lose up to 10% of their birth weight. By 7-10 days, the baby should regain the lost weight.

Feeding your baby

While breast milk is considered the best form of nutrition for babies there may be reasons why a mother would chose or need to formula feed or supplement the baby with formula. These reasons could be medical or health related (for mom or baby), personal preference, or the baby may not be gaining enough weight with breastfeeding alone.

Choosing a formula can be confusing because there are so many options. Unless there is a medical indication to avoid cow's milk, choose an infant formula that is cow's milk-based since this is closest to breast milk. If the baby has issues digesting cow's milk you may need to switch to a soy-based formula, or a formula specially designed for babies with milk protein allergies. Do not change formulas frequently, as this may be difficult for baby's digestion. Always discuss the options with the pediatrician to help make the best decision for your baby.

Vitamins/Iron

Depending on your feeding method, there may be some supplements your pediatrician will recommend for you or baby. For breastfeeding moms, it is often recommended that they continue taking prenatal vitamins.

Iron

Babies are born needing iron in their diets to help prevent iron deficiency anemia. If your baby was born early, the amount of iron he or she needs may be increased. Luckily, iron is in breast milk and most formulas are iron fortified. If you are breastfeeding, make sure you are taking in adequate iron in your diet, (such as red meat, beans, or dark leafy greens,) or talk to your doctor about taking an iron supplement. If you are formula feeding, check to make sure the formula is iron fortified.

Vitamin D

Vitamin D is important because it helps absorb calcium into our bodies. Our bodies make vitamin D when we are exposed to sunlight. Babies should not spend much time out in the sun so it is important that they have vitamin D added to their food. Breast milk contains very little amounts of vitamin D so it is recommended that breastfed babies and partially breastfed babies have 400 IU of vitamin D each day. Formula is already fortified with vitamin D so if your baby is fed with only formula then there is no need to add vitamin D

DHA

DHA is an omega-3 that is important for your baby's brain and eye development. If you are breastfeeding, it is important that you consume DHA in your diet. DHA is found in seafood so if you do not consume adequate amounts of DHA in your diet (usually 1-2 servings of fish per week) you may need to take a DHA supplement. Formula is fortified with DHA.

B12

If you follow a strict vegetarian or vegan diet, it is important to ensure adequate intake of vitamin B12. This vitamin is involved in the development of baby's nervous system, and amounts in breastmilk are related to mother's diet. Food sources include eggs, dairy products such as milk and cheese, and meats/poultry. Vegans may need a supplement or fortified cereal or soy foods.

Sleep/activity

Newborns spend a lot of time sleeping (16 or more hours each day) in the first month of life. They spend their days and nights taking short naps (light sleep) and waking up every 2-4 hours to eat. As babies get older, there is a shift towards less napping during the day and longer periods of deep sleep at night. They also start becoming more alert and interactive with their environment. Sleeping through the night (6-8 hours straight) may start around 3 months old but may not happen until 1 year old for some babies.

The following are the different categories of newborn sleep and awake states:

Sleep States

Deep Sleep- baby is still, appears relaxed, does not wake easily to stimuli around him.

Light Sleep- baby is moving a little, responds to stimuli and hunger

Awake States

Drowsy- baby appears sleepy, eyes are beginning to close, may still respond to stimuli

Quiet Alert- baby is wide-eyed and attentive, responds quickly to stimuli

Active Alert- baby is moving, eyes are open, and responds to stimuli (may be slow)

Crying- baby is moving a lot, crying or fussing, very responsive to stimuli

Temperament

- There are three primary infant temperaments. Babies can be dominantly one type or a mix of any of the three.
    - easy/flexible
        - happy, readily adapts to new situations and people, calm, not easy to upset, regular sleeping and eating habits
    - active/feisty/difficult
        - fussy, long and frequent crying episodes, fearful or withdraws from new situations and people, easily upset by stimulation and noises, intense in their reactions, irregular sleeping and eating habits
    - slow to warm up/cautious
        - fussy, less active, react negatively or withdraws from new situations, take several exposures to warm up to a new person, situation, or object.
- Ideas to console your baby
    - check/change your baby's diaper
    - offer a pacifier or a feed
    - talking face to face to your baby
    - swaddling
    - turning off lights or eliminating loud music/noise
    - cuddle or rock your baby
    - go for a walk, car ride, or bounce/move with your baby

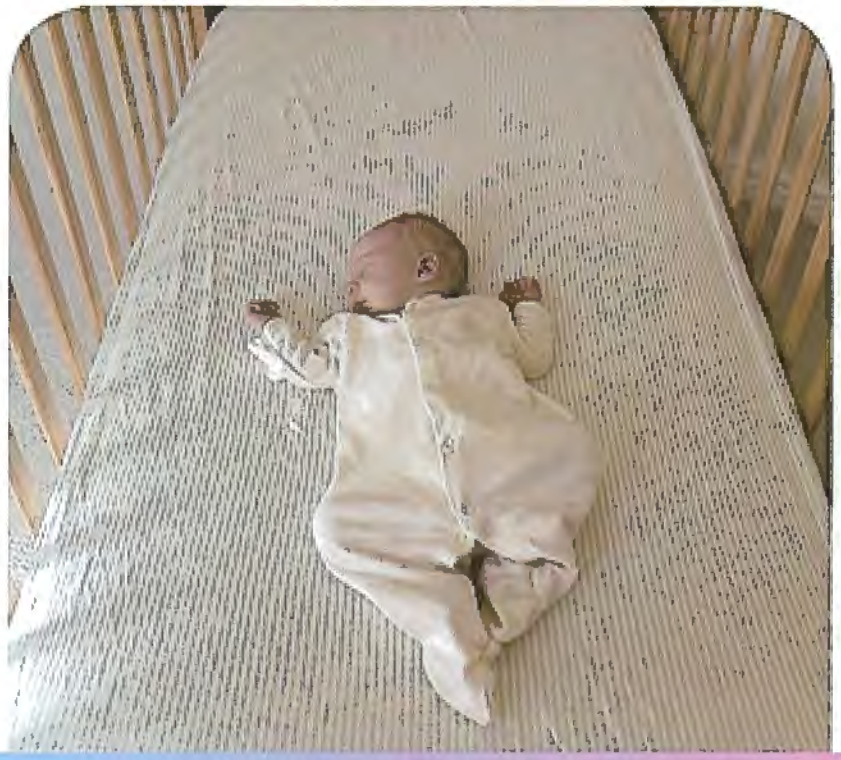
Shaken Baby Syndrome

- Shaken Baby Syndrome, or "Abusive Head Trauma" is an injury to the baby's brain as a result of child abuse involving shaking the child or striking the child's head against a surface.
- Normal activity, such as gently bouncing a baby, will not cause these injuries.
- A baby should NEVER be shaken under any circumstances.
- **Shaken Baby Syndrome is 100% preventable.**

- **All babies cry**. Some tips to deal with your crying baby:
  - Ensure that your baby's basic needs are met, such as feeding and changing diapers, and making sure they are comfortable
  - Sing or talk to your baby
  - Hold your baby on your body and breathe slowly and calmly
  - Give your baby a warm bath
  - Offer your baby a pacifier or a toy
  - Rock or walk with your baby, holding your baby or in a stroller
  - Check for any signs of illness, which could include swollen gums or fever
  - Take your baby for a car ride in a rear-facing car seat
  - Rub and pat your baby's back
  - Call a friend or family member to help take care of your baby so you can take a break
  - If none of the above work, put your baby on his or her back in her crib, close the door, and check on your baby in 10 minutes.
  -  If nothing seems to help your baby, call your doctor in case there is a medical reason for the fussiness.

BARE is Best!

for your baby's sleep environment



Keep your Baby Cozy

- Always place baby on back to sleep
- Use a crib that meets current CPSC standards
- Keep pillows, quilts, comforters and cushions out of baby's crib, bassinet or play yard
- Use a firm, tight-fitting mattress
- Positioning devices are unnecessary and can be deadly
- For warmth, dress baby in footed pajamas

Without the Clutter

Never add pillows, quilts, comforters or cushions to your baby's crib, bassinet or play yard.

Nearly half of the infant crib deaths and two-thirds of bassinet deaths reported to CPSC each year are suffocations from a baby being placed on top of pillows and thick quilts or because of overcrowding in baby's sleep environment.

NSN

www.CPSC.gov

Co-sleeping and Safe Sleep Guidelines

- Your baby should always sleep alone. Co-sleeping with another person or animal is not recommended by the American Association of Pediatricians (AAP) due to increased risk of Sudden Infant Death Syndrome (SIDS) and infant suffocation.
- Your baby should sleep in his or her crib or bassinet. This can be located close to parents and in the same room, but should be a separate surface from parents.
- Your baby should not sleep in an adult bed, a couch, or a chair. Have your baby sleep on a firm sleep surface covered with a fitted sheet, such as a mattress in a safety-approved crib.
- Do not use a blanket to put over your baby in the crib. Instead, dress your baby in light sleep clothing, such as a one-piece sleeper.
- Ensure that nothing is covering your baby's face or head.
- Your baby should always be placed on his or her back to sleep and nap.

"Everyone I know who breastfeeds said they co-sleep..."

***While the AAP recommends against co-sleeping, we recognize that some families will continue to choose to do so. Some precautions to create the safest sleep environment possible should be used:**

- Co-sleeping should only be used to enhance exclusive breastfeeding, and baby should not be partially or fully formula-fed
- Continue to observe precautions such as a firm mattress, no pillows or thick blankets near or over baby, and no using couches/chairs or furniture
- **NEVER** co-sleep when anyone in the bed is a smoker or under the influence of drugs or alcohol
- Only parents of the baby should be in the bed- no pets, non-parents, or siblings
- Baby should still sleep on his/her back, be unwrapped and free to wiggle, and not be near any edges or walls where a fall or entrapment could occur
- Consider a co-sleeping bed attachment with a crib-like surface that allows for closeness

Sibling Adjustment

- Make sure to **set aside special one-on-one time** to spend with your older child and allow your child to choose the activity.
- **Take time to listen** to your child's feelings about the baby. Never deny your child's feelings.
- Allow your child to express negative feelings about the baby, but **teach them no hurting** is allowed.
- **Suggest ways to express bad feelings**, such as drawing pictures.
- **Your child may regress**, but instead of scolding your child, give them more attention.
- **Consider "a gift from baby"** for the older sibling so that when everyone shows up with baby gifts, the older child will feel included.
- **Let your child participate** in your baby's cares.

Car Seat Safety

Newborns should *always* travel in rear-facing car seats

Read your seat's manual to ensure you understand how to use and adjust it

Ensure that the car seat is installed properly by having the car seat verified or installed by a car seat technician, whom are available at Arnot Ogden Medical Center before you go home

A baby should **never** be left alone in a vehicle

A previously used seat or a car seat that is not sold by a retailer should not be used (safety devices have expiration dates, usually within 5 years of manufacture)

A car seat that has been in a moderate to severe motor vehicle accident MUST be replaced with a new car seat.

Minor crashes not requiring car seat replacement include ALL of the following:

- if you are able to drive the car away from the crash and the door closest to the car seat is not damaged
- there were no injuries to the occupants and the airbags did not deploy
- there is no visible damage to the car seat

References

Allard, L. T. & Hunter, A. (2010). *Understanding temperament in infants and toddlers.* Retrieved from http://csefel.vanderbilt.edu/resources/wwb/wwb23.html

American Academy of Pediatrics. (2015). *Car seats: Information for families for 2015.* Retrieved from https://www.healthychildren.org/English/safety-prevention/on-the-go/Pages/Car-Safety-Seats-Information-for-Families.aspx

Andrighetti, T.P. & Karsnitz, D.B. (2014). Components of postnatal care. In Jordan, R.G., Engstrom, J.L., Marfell, J.A., & Farley, C.L. (Eds.), *Prenatal and Postnatal Care: A Woman-Centered Approach* (pp. 423-440). IA: John Wiley & Sons, Inc.

Bhatia, J. S & Greer, F. R. (2008). Soy formulas should be used sparingly, according to new report. *AAP News.* Retrieved from http://www.aappublications.org/content/29/5/39.2

Boyse, Kyla. (2009). *New baby sibling: Helping your older child (children) adjust.* Retrieved from http://www.med.umich.edu/yourchild/topics/newbaby.htm

Brucker, M. C. & McHugh, M. K. (2015). Neonatal care. In T.L King, M.C.Brucker, J.M. Kriebs. J.O. Fahey, C.L. Gregor, S.H. Varney (Eds.) *Varney's Midwifery* 5th ed. (pp. 1238-1252).Burlington, MA: Jones & Bartlett.

Center for Disease Control and Prevention. (2015a). *Immunization schedule for infants and children in easy-to-read formats.* Retrieved from http://www.cdc.gov/vaccines/schedules/easy-to-read/child.html

Center for Disease Control and Prevention. (2015b). *Sudden unexpected death and sudden unexpected death syndrome.* Retrieved from http://www.cdc.gov/sids/parents-caregivers.htm

Committee on Nutrition. (1999). Iron fortification of infant formulas. *Pediatrics, 104*(1). Retrieved from http://pediatrics.aappublications.org/content/104/1/119

Couch, K.A. & DeCocker-Geist, K. (2014). Physiological alterations during the postnatal period. In Jordan, R.G., Engstrom, J.L., Marfell, J.A., & Farley, C.L. (Eds.), *Prenatal and Postnatal Care: A Woman-Centered Approach* (pp. 419-440). IA: John Wiley & Sons, Inc.

Fahey, J.O., (2015). *Anatomy and physiology of postpartum.* In T.L King, M.C.Brucker, J.M. Kriebs. J.O. Fahey, C.L. Gregor, S.H. Varney (Eds.) Varney's Midwifery 5th ed. (PP 1101-1109).Burlington, MA: Jones & Bartlett.

Hershberger, M. (2014). *Abusive head trauma (shaken baby syndrome).* Retrieved from http://kidshealth.org/parent/medical/brain/shaken.html

Hoover, K. (2016). Perinatal and intrapartum care. In K. Wambach & J. Riordan (Eds.), *Breastfeeding and Human Lactation* (227-264) Burlington, MA: Jones & Bartlett Learning

Johnston, M., Landers, S., Noble, L., Szucs, K., & Viehmann, L. (2012). Breastfeeding and the use of human milk. *Pediatrics, 129*(3). Retrieved from http://pediatrics.aappublications.org/content/129/3/e827

Karsnitz, D.B. (2014). Common complications during the postnatal period. In Jordan, R.G., Engstrom, J.L., Marfell, J.A., & Farley, C.L. (Eds.), *Prenatal and Postnatal Care: A Woman-Centered Approach* (pp. 441-461). IA: John Wiley & Sons, Inc.

Karsnitz, D.B. (2015). Postpartum complications. In King, T.L., Brucker, M.C., Kriebs, J.M., Fahey, J.O., Gegor, C.L., & Varney, H. (Eds.), *Varney's Midwifery* (pp. 1143-1155). MA: Jones & Bartlett Learning.

Katrowitz-Gordon, I. (2015). Postpartum care. In King, T.L., Brucker, M.C., Kriebs, J.M., Fahey, J.O., Gegor, C.L., & Varney, H. (Eds.), *Varney's Midwifery* (pp. 1111-1140). MA: Jones & Bartlett Learning.

March of Dimes. (2012). Changing your baby's diaper. Retrieved from http://www.marchofdimes.org/baby/changing-your-babys-diaper.aspx

March of Dimes. (2012). Circumcision. Retrieved from http://www.marchofdimes.org/baby/circumcision.aspx

March of Dimes. (2012). Formula feeding. Retrieved from http://www.marchofdimes.org/baby/formula-feeding.aspx

March of Dimes. (2011). Giving your baby a bath. Retrieved from https://www.marchofdimes.org/baby/giving-your-baby-a-bath.aspx

March of Dimes. (2011). When to call your baby's provider. Retrieved from http://www.marchofdimes.org/baby/when-to-call-your-babys-provider.aspx

Mayo Clinic. (2015). Postpartum care: What to expect after a vaginal delivery. Retrieved from http://www.mayoclinic.org/healthy-lifestyle/labor-and-delivery/in-depth/postpartum-care/art-20047233

National Highway Traffic Safety Administration. (http://www.nhtsa.gov/people/injury/childps/childrestraints/reuse/restraintreuse.htm

Pupillo, J. (2008). Bone up on new vitamin D recommendations. *AAP News, 29*(10). Retrieved from http://www.aappublications.org/content/29/10/1.1?sso=1&sso_redirect_count=2&nfstatus=401&nftoken=00000000-0000-0000-0000-000000000000&nfstatusdescription=ERROR%3A%20No%20local%20token&nfstatus=401&nftoken=00000000-0000-0000-0000-000000000000&nfstatusdescription=ERROR%3a+No+local+token

St. Vincent's Women's Hospital. (2015). Postpartum discharge teaching. Retrieved from https://www.stvincent.org/uploadedFiles/SV_Health/Locations/St_Vincent_Womens/Healthcare_Services/Maternity/Postpartum_Support_Services/Womens-Postpartum-Teaching-Sheet.pdf

Summit Medical Group. (2014). *Breastfeeding positions.* Retrieved from http://www.summitmedicalgroup.com/library/pediatric_health/pa-nfbreast_post/

Smith, L. (2016). Postpartum Care. In K. Wambach & J. Riordan (Eds.) *Breastfeeding and Human Lactation* (273-309). Burlington, MA: Jones & Bartlett Learning

Stanford Children's Health. Newborn-sleep patterns. Retrieved from http://www.stanfordchildrens.org/en/topic/default%3Fid%3Dnewborn-sleep-patterns-90-P02632&sa=U&ei=58e3VM6CIIr5yATNnIGwAg&ved=0CG8QFjAT&usg=AFQjCNFvyKhlh5_8yFZvCBirEv-fTY56pQ

U.S. Department of Health and Human Services, Office on Women's Health. (2011, January). Your guide to breastfeeding. Retrieved from https://www.womenshealth.gov/publications/our-publications/breastfeeding-guide/breastfeedingguide-general-english.pdf

Walker, M. (2014). Common breastfeeding problems. In Jordan, R.G., Engstrom, J.L., Marfell, J.A., & Farley, C.L. (Eds.), *Prenatal and Postnatal Care: A Woman-Centered Approach* (pp. 499-513). IA: John Wiley & Sons, Inc.

Wambach, K. (2016). The familial and social context of breastfeeding. In K. Wambach & J. Riordan (Eds). *Breastfeeding and Human Lactation* (915-935) Burlington, MA: Jones & Bartlett Learning

Information for new families

Parenting Tips for Siblings

DURING PREGNANCY

❖Depending on his age, consider telling your child about the baby before he overhears your conversation or hears it from someone else. Kids at any age hear more than we think and may become confused or have hurt feelings. Most experts agree to wait until after the 1st trimester or until you are comfortable sharing the news. For younger children, generalize the "due date" in relation to a family event, birthday or holiday. For older children a calendar is helpful, but give a couple weeks' range for the baby's birthday.

❖Younger children, 11 - 24 months are still "babies" and shouldn't be encouraged to "grow up" just because they will have a younger sibling. They will regress after the baby is born due to the stress and changes in the family and need a lot of support and understanding, not pressure to be a "big kid."

❖For a younger child, avoid big changes like potty training, switching beds, rooms, giving up a bottle or pacifier close to the new baby's birth, unless it's his idea.

❖Younger children's levels of understanding are very simple and attention span is very short. Don't start preparing for the new baby too soon or too frequently. Best to read books and play with baby dolls the last couple months, concentrating on babies in general and baby's needs, e.g. feeding, crying, changing etc. Closer to the due date, become more specific that a baby will be joining your family soon.

❖For all ages, answer specific questions simply. Most younger sibs' questions are very specific and don't need a lot of elaboration on other issues, e.g., where's the baby growing, how's the baby coming out. Take advantage of the curious, teachable moments; don't plan "talks." Answer older sibling's questions honestly using correct names of body parts, books, etc., but again only elaborating when asked.

❖If >2-2.5 years, schedule your child(ren) for a sibling class at your hospital/birth center. Please call ahead for information and to register. This will familiarize him with the environment, as well as allowing him to participate in fun learning activities.

❖Read books about babies, new brothers/sisters. The best book is your child's photo album! Discuss all the growth and changes he's gone through and of course how much you love him! Let him know the family spent much time holding, feeding, and caring for him when he was a baby. The new baby will need the same.

❖Visit friends or family with a new baby to introduce him to the baby.

❖Let your child pick a special baby doll/stuffed animal so he can practice some baby care. He can wash his hands before holding, change diapers and learn to treat the "baby" gently. Let your child stroke Mom's belly, feel the baby kick and talk to the baby.

❖Encourage your child to draw pictures of the new baby and your growing family. You will learn a lot about what your child understands and you can correct any misconceptions.

Information for new families

Parenting Tips for Siblings

THE BIRTHDAY

❖Make plans ahead of time for your child's care when you go to the hospital/birth center. Younger children cope best staying in their own beds/home and being cared for by a trusted adult relative or friend. Have a back-up plan in case of changes! As your due date approaches, explain to your child who "will take good care of him" when you're not there. You can record yourself reading bedtime stories or singing lullabies that he can play before bedtime. Reassure him he can call you on the phone and visit you and the baby in the hospital. You can tell him how many "nights" you may be away as your due date approaches. Be general and flexible in case of complications.

❖All children, especially younger ones thrive, feel secure and will act better if their routines are kept the same, e.g. naps, meals, bedtime, day-care, pre-school. Try your best to keep things stable around the birth and the first few weeks. Encourage grandparents and care providers to do the same.

❖Please inquire about visitation policies for siblings. Have Dad or a relative bring your child to the hospital when you and the baby have stabilized. Greet him with open arms (baby in basinet) for a good hug. Have him bring his photo and a drawing for the baby so you can tape it to the basinet. This helps to have your child identify with the baby and reminds staff that there's a sibling. Don't be surprised if your child is more interested in playing with the bed than in looking at the baby! Follow his lead and curiosity; don't force the baby on him.

❖Some parents shop ahead and have the child buy a special gift for the new baby that he can give as a birthday present at the hospital. Parents can reciprocate with a special "Congratulations-New Brother/Sister Gift" from them or from the baby. Some families sing "Happy Birthday" and have a simple "birthday party" in the room (no candles!) or at homecoming.

❖Please don't bring a sick child to the hospital, especially with a fever in the last 24-48 hrs, coughing, vomiting, diarrhea, unknown rashes or a possibility of chicken pox or flu. Please consult with your pediatrician for the safety of your new baby as well as the other new babies on the unit.

Information for new families

Parenting Tips for Siblings

HOMECOMING AND BEYOND

❖Decide if you want your child to "help" bring the baby home or if it's best that he stays at home or daycare until you arrive and get settled at home. Make the decision that's best for your family. Again, keeping his routine on as much as possible will help, although some siblings may feel left out if not included.

❖Expect a honeymoon phase the first few days with all the excitement. Most families are more challenged the first few weeks after routines are off and sleep deprivation sets in. It's common for the sibling to ask "how long is the baby staying?" Reassure him that Mom and Dad are challenged too with the care of a new baby. Reserve some paternity leave and help from family and friends for later. You will need help for many weeks!

❖Young children will have many strong feelings about the new baby. For that reason, never leave the child and the new baby alone at anytime. Your child may try to pick the baby up by himself. Safety first! Teach your child to always ask for permission when he wants to hold the baby. He should always wash his hands and be sitting down with an adult helping to support and supervise the baby.

❖Sometimes kisses turn into bites, strokes turn into slaps and hugs turn into strong squeezes even with supervision! Please let your child know that you love him, but his behavior is unacceptable. Reinforce and praise good behavior frequently. Encourage activities to help your child release his energy: play dates at a friend's house, playing or running outside, kicking or throwing a ball, pounding clay, gentle roughhousing on the floor or a pillow-play.

❖When visitors come, have your child greet them at the door and lead them to the baby. He can courteously, ask then to wash their hands before touching the baby. Much cuter than you asking your mother-in-law! Spend some time praising your child in front of the visitors, instead of only talking about how cute the new baby is.

Information for new families

Parenting Tips for Siblings

HOMECOMING AND BEYOND, cont'd

❖Your older child can open all the baby presents! They usually don't care if they're not for them. Some visitors will bring a "Big Brother/Sister" gift to include them. Have a goody bag of inexpensive gifts, stickers, etc to occasionally reward your child for good behavior.

❖Some siblings love to help get things like diapers, wipes, shampoo, etc and can be a big help to Mom and Dad. Again, it should be his idea!

❖Have different toys and activities available for the child during baby's feeding times. You can try cuddling with your child while feeding the baby. Or, try reading a book or watching a video together.

❖Plan a "Big Brother/Sister" date with Mom or Dad. No babies allowed! You can put it on the calendar or use a sticker reward system to build "good behavior" points for redemption. Keep it simple: lunch, trip to library, playground, mall, special friend's house.

❖The only way to prevent sibling rivalry is to have one child! You will have many ups and downs and sometimes feel that you aren't a good parent. Don't be so hard on yourself and look at the big picture not the day-to-day happenings.

❖The best part of having a child is watching that child unfold into his own unique person. Reassure your children that you love them for who they are and how very special they each are. You will see all the benefits of your wonderful parenting as you watch your children get to know each other. Babies adore their big brothers and sisters! Have a camera and video nearby!

❖Please take care of yourselves and your relationship. Your children learn all about relationships from watching yours. Help, support and nurture each other.

your guide to BREASTFEEDING

LEARN ABOUT THE HEALTH BENEFITS FOR MOM AND BABY! *Page 4*

OWH
OFFICE ON WOMEN'S HEALTH

The U.S. Department of Health and Human Services Office on Women's Health (OWH) is raising awareness of the importance of breastfeeding to help mothers give their babies the best start possible in life. In addition to this guide, OWH offers online content at **www.womenshealth.gov/breastfeeding** and **www.womenshealth.gov/itsonlynatural**. OWH also runs the National Breastfeeding Helpline at **800-994-9662**.

Through its Supporting Nursing Moms at Work: Employer Solutions site, OWH helps businesses support nursing mothers with cost-effective tips and time and space solutions, listed by industry. Learn more at **www.womenshealth.gov/breastfeeding/employer-solutions**. OWH also partners with the Health Resources and Services Administration's Maternal and Child Health Bureau to educate employers about the needs of breastfeeding mothers via The Business Case for Breastfeeding.

The Affordable Care Act helps pregnant women and breastfeeding mothers get the medical care and support they and their children need. Learn more at **www.HealthCare.gov**.

There are so many reasons to breastfeed

- The joyful closeness and bonding with your baby
- The specific nutrition only you can provide
- The cost savings
- Health benefits for mother and baby

KEEP IN MIND THAT FEEDING YOUR BABY IS A LEARNED SKILL.
It takes patience and practice. For some women, learning to breastfeed can be frustrating and uncomfortable. It may also seem more difficult, especially if your baby was born early or you have certain health problems. The good news is that it will get easier, and support for breastfeeding mothers is available.

CONTENTS

TOOLS YOU CAN USE

Breastmilk storage guide, **page 42**

Jot it down: questions to ask your doctor (**page 54**) and questions to ask your baby's doctor (**page 53**)

Tear-out feeding chart, **page 55**

WHY BREASTFEEDING IS IMPORTANT

BREASTFEEDING PROTECTS BABIES

YOUR FIRST MILK IS LIQUID GOLD.
Called liquid gold for its deep yellow color, colostrum is the thick first milk that you make during pregnancy and just after birth. This milk is very rich in nutrients and includes antibodies to protect your baby from infections. Colostrum also helps your newborn infant's digestive system to grow and function. Your baby gets only a small amount of colostrum at each feeding because the stomach of a newborn infant is tiny and can hold only a small amount. (Turn to page 20 to see just how small your newborn's tummy is!)

YOUR MILK CHANGES AS YOUR BABY GROWS.
Colostrum changes into mature milk by the third to fifth day after birth. This mature milk has just the right amount of fat, sugar, water, and protein to help your baby continue to grow. It looks thinner than colostrum, but it has the nutrients and antibodies your baby needs for healthy growth.

FORMULA IS HARDER TO DIGEST.
For most babies, especially premature babies, breastmilk substitutes like formula are harder to digest than breastmilk. Formula is made from cow's milk, and it often takes time for babies' stomachs to adjust to digesting it.

BREASTMILK FIGHTS DISEASE.
The cells, hormones, and antibodies in breastmilk protect babies from illness. This protection is unique and changes to meet your baby's needs. Research suggests that breastfed babies have lower risks of[1]:

- Asthma
- Childhood leukemia
- Childhood obesity
- Ear infections
- Eczema (atopic dermatitis)
- Diarrhea and vomiting
- Lower respiratory infections
- Necrotizing enterocolitis, a disease that affects the gastrointestinal tract in preterm infants
- Sudden infant death syndrome (SIDS)
- Type 2 diabetes

DID YOU KNOW?

In some situations, formula-feeding can save lives.

Very rarely, babies are born unable to tolerate animal milk of any kind. These babies must have an infant formula that is hypoallergenic, dairy free, or lactose free. A wide selection of specialty baby formulas now on the market include soy formula, hydrolyzed formula, lactose-free formula, and hypoallergenic formula. Speak with your doctor before you decide to feed your baby anything besides your breastmilk.

Your baby may need formula if you have certain health conditions that won't allow you to breastfeed and you do not have access to donor breastmilk. To learn more about breastfeeding restrictions in the mother, see page 30. To learn more about donor milk banks, see page 37.

[1]Stuebe, A. (2009). The Risks of Not Breastfeeding for Mothers and Infants. *Obstetrics and Gynecology*; 2(4): 222–231.

CAN BREASTFEEDING HELP ME LOSE WEIGHT?

Besides giving your baby nourishment and helping to keep your baby from becoming sick, breastfeeding may help you lose weight. Many women who breastfed their babies said it helped them get back to their pre-pregnancy weight more quickly, but experts are still looking at the effects of breastfeeding on weight loss.

WHY BREASTFEEDING IS RIGHT FOR YOU

Did you know that your baby can smell you and knows the unique scent of your breastmilk? This is why your baby will turn her head to you when she is hungry. Your baby is born with an instinct to suckle at your breasts.

LIFE CAN BE EASIER WHEN YOU BREASTFEED.
Breastfeeding may seem like it takes a little more effort than formula feeding at first. But breastfeeding can make your life easier once you and your baby settle into a good routine. When you breastfeed, there are no bottles and nipples to sterilize. You do not have to buy, measure, and mix formula. You won't need to warm bottles in the middle of the night! When you breastfeed, you can satisfy your baby's hunger right away.

NOT BREASTFEEDING COSTS MONEY.
Formula and feeding supplies can cost more than $1,500 each year. Breastfed babies may also be sick less often, which can help keep your baby's health costs lower.

BREASTFEEDING KEEPS MOTHER AND BABY CLOSE.
Physical contact is important to newborns. It helps them feel more secure, warm, and comforted. Mothers also benefit from this closeness. The skin-to-skin contact boosts your oxytocin levels. Oxytocin is a hormone that helps breastmilk flow and can calm the mother.

BREASTFEEDING IS GOOD FOR THE MOTHER'S HEALTH, TOO.
Breastfeeding is linked to a lower risk of Type 2 diabetes, certain types of breast cancer, and ovarian cancer in mothers.[2]

BREASTFEEDING GLOSSARY

Nutrients are any food substance that provides energy or helps build tissue.

Antibodies are blood proteins made in response to germs or other foreign substances that enter the body. Antibodies help the body fight illness and disease by attaching to germs and marking them for destruction.

The gastrointestinal system is made up of the stomach and the small and large intestines. It breaks down and absorbs food.

The respiratory system includes the nose, throat, voice box, windpipe, and lungs. Air is breathed in, delivering oxygen. Waste gas is removed from the lungs when you breathe out.

[2]U.S. Department of Health and Human Services. (2011). The Surgeon General's Call to Action to Support Breastfeeding.

DURING AN EMERGENCY, SUCH AS A NATURAL DISASTER, BREASTFEEDING CAN SAVE YOUR BABY'S LIFE:

Breastfeeding protects your baby from the risks of an unclean water supply.

Breastfeeding can help protect your baby against respiratory illnesses and diarrhea.

Even if you aren't able to eat regular meals, your baby will still be able to feed.

Your milk is always at the right temperature for your baby. It helps to keep your baby's body temperature from dropping too low. Your milk is readily available without needing other supplies.

BREASTFEEDING IS GOOD FOR SOCIETY

Society benefits overall when mothers breastfeed.

BREASTFEEDING SAVES LIVES.
Recent research shows that if 90 percent of families breastfed exclusively for 6 months, nearly 1,000 deaths among infants could be prevented.

BREASTFEEDING SAVES MONEY.
The United States would also save $2.2 billion per year. This is because medical care costs are lower for fully breastfed infants than never-breastfed infants. Breastfed infants usually need fewer sick care visits, prescriptions, and hospitalizations.

BREASTFEEDING IS BETTER FOR THE ENVIRONMENT.
Formula cans and bottle supplies create more trash and plastic waste. Your milk is a renewable resource that comes packaged and warmed.

FINDING SUPPORT AND INFORMATION

Although breastfeeding is a natural process, many moms need help. Breastfeeding moms can seek help from different types of health professionals, organizations, and members of their own families. Also, under the Affordable Care Act (the health care law), more women have access to free breastfeeding support and supplies.

Don't forget, friends who have successfully breastfed are great sources of information and encouragement!

HEALTH PROFESSIONALS WHO HELP WITH BREASTFEEDING

INTERNATIONAL BOARD CERTIFIED LACTATION CONSULTANT (IBCLC).
IBCLCs are certified breastfeeding professionals with the highest level of knowledge and skill in breastfeeding support. IBCLCs help with a wide range of breastfeeding concerns. To earn the IBCLC certification, candidates must have a medical or health-related educational background, have breastfeeding-specific education and clinical experience, and pass a rigorous exam. Ask your obstetrician, pediatrician, or midwife for the name of a lactation consultant who can help you. You also can go to www.ilca.org to find an IBCLC in your area.

CERTIFIED LACTATION COUNSELOR OR CERTIFIED BREASTFEEDING EDUCATOR.
A breastfeeding counselor or educator teaches about breastfeeding and helps women with basic breastfeeding challenges and questions. These counselors and educators have special breastfeeding training, usually limited to a week-long course.

DOULA.
A doula is professionally trained to give birthing families social support during pregnancy, labor, and birth as well as at home during the first few days or weeks after the baby is born. Doulas that are trained in breastfeeding can help you learn to breastfeed.

Also, look for a hospital that is designated **Baby-Friendly**. Baby-Friendly Hospitals provide support for breastfeeding mothers, including keeping mom and baby together throughout the hospital stay, teaching feeding cues and breastfeeding techniques, and providing support after leaving the hospital.

MOTHER-TO-MOTHER SUPPORT

Other breastfeeding mothers can be a great source of support. Mothers can share tips and offer encouragement. You can connect with other breastfeeding mothers in many ways:

- Ask your doctor or nurse to suggest a support group. Some pediatric practices also have an IBCLC on staff who leads regular support group meetings.
- Ask your doctor or nurse for help finding a breastfeeding peer counselor. "Peer" means that the counselor has breastfed her own baby and can help other mothers breastfeed. Many state Women, Infants, and Children (WIC) programs offer peer counselors.
- Search the Internet for a breastfeeding center near you. These centers may offer support groups. Some resources include:
  - Nursing Mothers Advisory Council
  - Nursing Mothers, Inc.
  - BreastfeedingUSA.org
- Find a local La Leche League support group by visiting the organization's website at www.llli.org.
- Search the Internet for breastfeeding blogs, message boards, and chats. Social media sites are popular "gathering places" for new mothers, but do not rely on these resources for medical advice. Talk to your doctor instead.

WHAT YOUR PARTNER CAN DO

The bond between mother and baby is important, but so is the bond between your partner and baby. In fact, skin-to-skin contact helps your partner bond with your baby much like it does for you and your baby.

WIC PROGRAM

The U.S. Department of Agriculture (USDA) Special Supplemental Nutrition Program for Women, Infants, and Children (commonly called WIC) offers food, nutrition counseling, and access to health services for low-income women, infants, and children.

Breastfeeding mothers supported by WIC may receive peer counselor support, an enhanced food package, breast pumps, and other supplies. Breastfeeding mothers can also participate in WIC longer than non-breastfeeding mothers. Many WIC offices have an IBCLC as well.

To find contact information for your local WIC program, visit http://www.fns.usda.gov/wic/breastfeeding-promotion-and-support-wic or call the national office at 703-305-2060.

BUILDING A SUPPORT NETWORK

Talk to fathers, partners, and other family members about how they can help.

Breastfeeding is more than a way to feed a baby — it becomes a way of life. Fathers, partners, and other support persons can be involved in the breastfeeding experience, too. Partners and family members can:

- Support your breastfeeding by being kind and encouraging
- Help the mother during the night by getting the baby changed and ready to be fed
- Show their love and appreciation for all of the work that goes into breastfeeding
- Be good listeners if you need to talk about any breastfeeding concerns you might have
- Help make sure you have enough to drink and get enough rest
- Help around the house
- Take care of any other children who are at home
- Give the baby love through playing and cuddling

Fathers, partners, and other people in the mother's support system can benefit from breastfeeding, too. Not only are there no bottles to prepare, but many people feel warmth, love, and relaxation just from sitting next to a mother and baby during breastfeeding.

The National Breastfeeding Helpline from the Office on Women's Health has trained breastfeeding counselors to provide support by phone. The counselors can help answer common breastfeeding questions. They can also help you decide whether you need to see a doctor or lactation consultant. The Helpline is available for all breastfeeding mothers, partners, prospective parents, family members, and health professionals seeking to learn more about breastfeeding. The Helpline is open from Monday through Friday, from 9 a.m. to 6 p.m. ET. If you call after hours, you will be able to leave a message, and a breastfeeding counselor will return your call on the next business day. Help is available in English or Spanish.

CALL 800-994-9662 FOR SUPPORT!

Learn more about breastfeeding basics and find other online resources at www.womenshealth.gov/breastfeeding and www.womenshealth.gov/itsonlynatural.

BREASTFEEDING MYTHS

Moms-to-be and new moms get a lot of baby advice. Although people usually mean well, not all of it is based on fact. Myths about breastfeeding are common. The fact is that breastfeeding is a healthy way to feed your baby. The decision to breastfeed is a personal one, and it should also be an informed one.

MYTH: EVERYONE USES FORMULA.
More women breastfeed than you think. According to the Centers for Disease Control and Prevention, 80 percent of women in the United States start out breastfeeding[3]. Research over the past 40 years has proven that mother's milk is an inexpensive and healthy choice for babies.

MYTH: FORMULA HAS MORE VITAMINS THAN BREASTMILK.
In fact, the opposite is true. Formula cannot match the nutrients and vitamins in breastmilk. More importantly, breastmilk has antibodies, which can only be passed from your body to your baby. This is what helps protect your baby from getting sick. Breastmilk is recommended by the American Academy of Pediatrics and the World Health Organization. Breastfeeding is a great choice to ensure your baby's nutrition.

MYTH: BREASTFEEDING MAKES YOUR BREASTS SAG.
Actually, it's pregnancy that stretches the ligaments of your breast tissue, whether you breastfeed or not. Age, genetics, and the number of pregnancies you've had also play a role.

MYTH: IF YOUR BREASTS ARE TOO SMALL, YOU CAN'T BREASTFEED.
Size and shape of breasts do not affect ability to breastfeed and have nothing to do with how much milk a woman actually makes. This includes women with large areolas (the area around the nipple), flat nipples, and even women who've had breast surgery. (Note: If you've had a massive breast reduction, milk ducts and glands might have been removed, which means you may make less milk.)

MYTH: IF YOUR BREASTS ARE TOO LARGE OR YOU'RE PLUS SIZE, YOU CAN'T BREASTFEED.
Women of all sizes can successfully breastfeed. So if you're a larger mom-to-be or new mom, you should not let the size of your breasts automatically rule it out. If you're big breasted, it may take some extra patience or some assistance from an IBCLC. Plus-size women are more likely to have C-sections, which means your milk might come in a few days later. Depending on the size of your breasts, you may need a little more practice to find a hold that works for you and your baby. But with the right help and support, you can do it!

MYTH: YOU WON'T BE ABLE TO MAKE ENOUGH MILK.
Moms almost always make enough milk to feed their babies. A newborn's stomach is only the size of a hazelnut. If you eat healthy, drink water, and nurse often, your milk supply should be plentiful.

MYTH: BREASTFEEDING SPOILS A CHILD.
After spending nine months growing inside you, it's completely natural for a baby to be attached to his or her mother and vice versa. Despite what you've heard, newborns don't need to learn to fend for themselves at such a young age. In reality, breastfeeding provides a unique bond with your child that can last a lifetime. Research shows that breastfed children grow up to be confident and self-sufficient when parents meet their needs.

MYTH: BREASTFEEDING HURTS.
Breastfeeding is not supposed to be a painful experience. In fact, pain is usually a red flag that something is wrong. Although a baby's latch can be strong, it's not actually biting, not even when the baby is cutting teeth. As with any new skill, there is an adjustment period. See page 14 to learn more.

Learn more about the benefits of breastfeeding for both mom and baby on page 4.

[3]Centers for Disease Control and Prevention, Breastfeeding Among U.S. Children Born 2002-2012, CDC National Immunization Survey, 2015.

HOW YOUR MILK IS MADE

Your breasts make milk in response to your baby's suckling. The more your baby nurses, the more milk your breasts will make. Knowing how your breast makes milk can help you understand the breastfeeding process. The breast is an organ that is made up of several parts:

ALVEOLI CELLS: grape-like clusters of tissue that make the milk

AREOLA: the dark area around the nipple

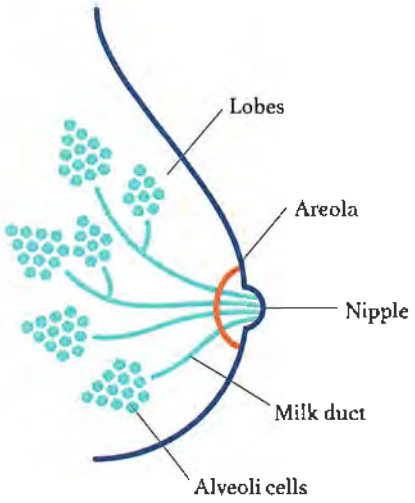
LOBES: the parts of the breast that make milk; each lobe contains alveoli cells and milk ducts

MILK DUCTS: tubes that carry milk through the breast to the nipple/areola area

NIPPLE: the protruding point of the breast

The breasts often become fuller and tender during pregnancy. This is a sign that the alveoli are getting ready to work. Some women do not feel these changes in their breasts. Other women may sense these changes after their baby is born. The alveoli make milk in response to the hormone prolactin. Prolactin rises when the baby suckles. Another hormone, oxytocin, also rises when the baby suckles. This causes small muscles in the breast to contract and move the milk through the milk ducts. This moving of the milk is called the "let-down reflex."

The release of prolactin and oxytocin may make a mother feel a strong sense of needing to be with her baby.



WHAT IS THE LET-DOWN REFLEX?

The let-down reflex (also called just "let-down" or the milk ejection reflex) happens when your baby begins to nurse. The nerves in your breast send signals that release the milk into your milk ducts. This reflex makes it easier for you to breastfeed your baby. Let-down happens a few seconds to several minutes after you start breastfeeding your baby. It also can happen a few times during a feeding. You may feel a tingle in your breast, or you may feel a little uncomfortable. You also may not feel anything.

Let-down can happen at other times, too, such as when you hear your baby cry or when you're just thinking about your baby. If your milk lets down as more of a gush and it bothers your baby, try expressing some milk by hand before you start breastfeeding.

Many factors affect let-down, including anxiety, pain, embarrassment, stress, cold, excessive caffeine use, smoking, alcohol, and some medicines. Mothers who have had breast surgery may have nerve damage that interferes with let-down.

LEARNING TO BREASTFEED

Breastfeeding is a process that takes time and practice. Keep in mind that you make milk in response to your baby sucking at the breast. Luckily, your baby loves being close to you and sucking at your breasts. All that time spent breastfeeding in your baby's first few days prepares your body to make lots of milk, whether you go on to breastfeed for three weeks or three years.

The following steps can help you get off to a great start breastfeeding:

- Cuddle with your baby skin-to-skin right away after giving birth.
- Breastfeed as soon as possible after giving birth.
- Ask for an IBCLC to help you.
- Ask the hospital staff not to give your baby pacifiers, sugar water, or formula, unless it is medically necessary.
- Let your baby stay in your hospital room all day and night so that you can breastfeed often.
- Try to avoid giving your baby any pacifiers or artificial nipples until he or she is skilled at latching onto your breast (usually around 3 to 4 weeks old).

PREPARE FOR BREASTFEEDING BEFORE YOU GIVE BIRTH

To prepare for breastfeeding, the most important thing expectant moms can do is to have confidence in themselves. Committing to breastfeeding starts with the belief that you can do it!

Other steps you can take to prepare for breastfeeding are:

GET GOOD PRENATAL CARE, which can help you avoid early delivery. Babies born too early have more problems with breastfeeding.

TELL YOUR DOCTOR ABOUT YOUR PLANS TO BREASTFEED, and ask whether the place where you plan to deliver your baby has the staff and setup to support successful breastfeeding. Some hospitals and birth centers have taken special steps to create the best possible environment for successful breastfeeding. These places are called Baby-Friendly Hospitals and Birth Centers.

TAKE A BREASTFEEDING CLASS. Pregnant women who learn how to breastfeed are more likely to be successful at breastfeeding than those who do not. Breastfeeding classes offer pregnant women and their partners the chance to prepare and ask questions before the baby's arrival.

ASK YOUR DOCTOR TO RECOMMEND A LACTATION CONSULTANT. You can establish a relationship with a lactation consultant before the baby comes so that you will have support ready after the baby is born.

TALK TO YOUR DOCTOR ABOUT YOUR HEALTH. Discuss any breast surgery or injury you may have had. If you have depression or are taking supplements or medicines, talk with your doctor about treatments that can work with breastfeeding.

TELL YOUR DOCTOR THAT YOU WOULD LIKE TO BREASTFEED AS SOON AS POSSIBLE AFTER DELIVERY. The sucking instinct is very strong within the baby's first hour of life.

TALK TO FRIENDS WHO HAVE BREASTFED, or consider joining a breastfeeding support group.

GET THE ITEMS YOU WILL NEED FOR BREASTFEEDING, such as nursing bras, covers, and nursing pillows. You may want to pack these in your bag to have at the hospital when you deliver your baby.

HOW OFTEN SHOULD I BREASTFEED?

Early and often! Newborns usually need to nurse at least eight to 12 times every 24 hours. This also helps make sure you will make plenty of milk.

Healthy babies develop their own feeding patterns. Follow your baby's cues for when he or she is ready to eat.

FOLLOW YOUR BABY'S LEAD

Getting your baby to "latch" on properly takes some practice and can be a source of frustration for you and your baby. One approach to learning to breastfeed is a more relaxed, baby-led latch. This laid-back, more natural breastfeeding style allows your baby to lead and follow his or her instincts to suck.

The following steps can help your newborn latch onto the breast to start sucking when he or she is ready. Letting your baby begin the process of searching for the breast may take some of the pressure off of you and keeps the baby calm and relaxed.

Keep in mind that there is no one way to start breastfeeding. As long as the baby is latched on well, how you get there is up to you.

CREATE A CALM ENVIRONMENT FIRST. Lie back on pillows or another comfortable area. Make sure you are relaxed and calm.

HOLD YOUR BABY SKIN-TO-SKIN. Hold your baby, wearing only a diaper, against your bare chest. Hold the baby upright between your breasts and just enjoy your baby for a while with no thoughts of breastfeeding.

LET YOUR BABY LEAD. If your baby is not hungry, he will stay curled up against your chest. If your baby is hungry, he will bob his head against you, try to make eye contact, and squirm around.

SUPPORT YOUR BABY, BUT DON'T FORCE THE LATCH. Support his head and shoulders as he searches for your breast. Avoid the temptation to help him latch on.

ALLOW YOUR BREAST TO HANG NATURALLY. When your baby's chin hits your breast, the firm pressure makes her open her mouth wide and reach up and over the nipple. As she presses her chin into the breast and opens her mouth, she should get a deep latch. Keep in mind that your baby can breathe at the breast. The nostrils flare to allow air in.

HOW LONG SHOULD FEEDINGS BE?

There is no set time for feedings. They may be 15 to 20 minutes per breast. They may be shorter or longer. Your baby will let you know when he or she is finished feeding. If you worry that your baby is not getting enough milk, talk to your baby's doctor. See page 55 for a feeding tracker if you would like to write down how often your baby wants to eat.

GETTING YOUR BABY TO LATCH

If your baby is still having problems latching on, try these tips:

Tickle the baby's lips to encourage him or her to open wide.

Pull your baby close so that the chin and lower jaw moves into your breast first.

Watch the lower lip and aim it as far from base of nipple as possible, so the baby takes a large mouthful of breast.

SOME BABIES LATCH ON RIGHT AWAY, AND FOR SOME IT TAKES MORE TIME.

"When my son was born four years ago, we had a very difficult time breastfeeding because he wasn't latching correctly. He seemed almost lazy and disinterested in eating. In the first two weeks, he lost quite a bit of weight and appeared gaunt and fussy. Naturally, I was nearly frantic with worry. Luckily, I connected with an amazing lactation consultant. She put me on a rigorous, week-long regimen, which consisted of nursing, then bottle feeding breastmilk, then pumping every three hours. I was completely dedicated to the regimen, and when I met with her a week later, she was stunned by the results. My son had gained an entire pound, and she said he had developed a perfect latch. She called us the miracle mom and miracle baby! I was so proud of us. My determination paid off, and I enjoyed breastfeeding for seven months. — *Jill, Bridgewater, Massachusetts*

SIGNS OF A GOOD LATCH

- The latch feels comfortable to you and does not hurt or pinch. How it feels is more important than how it looks.
- Your baby's chest rests against your body. She does not have to turn her head while nursing.
- You see little or no areola, depending on the size of your areola and the size of your baby's mouth. If areola is showing, you will see more above your baby's lip and less below.
- When your baby is positioned well, his mouth will be filled with breast.
- Your baby's tongue is cupped under the breast, although you might not see it.
- You hear or see your baby swallow. Some babies swallow so quietly that a pause in their breathing may be the only sign of swallowing.
- You see your baby's ears "wiggle" slightly.
- Your baby's lips turn outward like fish lips, not inward.
- Your baby's chin touches your breast.

HELP WITH LATCH PROBLEMS

ARE YOU IN PAIN?

Many moms say their breasts feel tender when they first start breastfeeding. A mother and her baby need time to find comfortable breastfeeding positions and a good latch. If breastfeeding hurts, your baby may be sucking on only the nipple. Gently break your baby's suction to your breast by placing a clean finger in the corner of your baby's mouth. Then try again to get your baby to latch on. To find out whether your haby is sucking only on your nipple, check what your nipple looks like when it comes out of your baby's mouth. Your nipple should not look flat or compressed. It should look round and long or the same shape it was before the feeding.

ARE YOU OR YOUR BABY FRUSTRATED?

Take a short break and hold your baby in an upright position. Try holding your baby between your breasts with your skin touching his or her skin (called skin-to-skin). Talk or sing to your baby, or give your baby one of your fingers to suck on for comfort. Try to breastfeed again in a little while.

DOES YOUR BABY HAVE A WEAK SUCK OR MAKE ONLY TINY SUCKLING MOVEMENTS?

Your baby may not have a deep enough latch to suck the milk from your breast. Gently hreak your baby's suction and try again. Talk with a lactation consultant or pediatrician if you are not sure whether your baby is getting enough milk. But don't worry. A weak suck is rarely caused by a health problem.

COULD YOUR BABY BE TONGUE-TIED?

Bahies with a tight or short lingual frenulum (the piece of tissue attaching the tongue to the floor of the mouth) are described as "tongue-tied." The medical term is ankyloglossia. Babies who are tongue-tied often find it hard to nurse. They may be unable to extend their tongue past their lower gum line or properly cup the breast during a feed. This can cause slow weight gain in the baby and nipple pain in the mother. If you think your baby may be tongue-tied, talk to your doctor.

A GOOD LATCH

A good latch is important for your baby to breastfeed effectively and for your comfort. During the early days of breastfeeding, it can take time and patience for your baby to latch on well.

BREASTFEEDING HOLDS

Some moms find that the following positions are helpful ways to get comfortable and support their babies while breastfeeding. You also can use pillows under your arms, elbows, neck, or back to give you added comfort and support. Keep trying different positions until you are comfortable. What works for one feeding may not work for the next feeding.

CLUTCH OR "FOOTBALL" HOLD: useful if you have had a C-section, or if you have large breasts, flat or inverted nipples, or a strong let-down reflex. This hold is also helpful for babies who like to be in a more upright position when they feed. Hold your baby at your side with the baby lying on his or her back and with his or her head at the level of your nipple. Support your baby's head by placing the palm of your hand at the base of his or her head.

CROSS-CRADLE OR TRANSITIONAL HOLD: useful for premature babies or babies with a weak suck because this hold gives extra head support and may help the baby stay latched. Hold your baby along the area opposite from the breast you are using. Support your baby's head at the base of his or her neck with the palm of your hand.

CRADLE HOLD: an easy, common hold that is comfortable for most mothers and babies. Hold your baby with his or her head on your forearm and his or her body facing yours.

LAID-BACK HOLD (STRADDLE HOLD): a more relaxed, baby-led approach. Lie back on a pillow. Lay your baby against your body with your baby's head just above and between your breasts. Gravity and an instinct to nurse will guide your baby to your breast. As your baby searches for your breast, support your baby's head and shoulders but don't force the latch.

SIDE-LYING POSITION: useful if you have had a C-section, but also allows you to rest while the baby breastfeeds. Lie on your side with your baby facing you. Pull your baby close so your baby faces your body.

TIPS FOR MAKING IT WORK

LEARN YOUR BABY'S HUNGER SIGNS.
When babies are hungry, they are more alert and active. They may put their hands or fists to their mouths, make sucking motions with their mouth, or turn their heads looking for the breast. If anything touches their cheek, such as a hand, they may turn toward the hand, ready to eat. This sign of hunger is called rooting. Offer your breast when your baby shows rooting signs. Crying can be a late sign of hunger, and it may be harder for the baby to latch if he is upset. Over time, you will be able to learn your baby's cues for when to start feeding.

FOLLOW YOUR BABY'S LEAD.
Make sure you and your baby are comfortable, and follow your baby's lead after she is latched on well to your breast. Some babies will feed from (or "take") both breasts, one after the other, at each feeding. Other babies take only one breast at each feeding. Help your baby finish the first breast as long as she is still sucking and swallowing. Your baby will let go of your breast when she is finished. Offer her the other breast if she seems to want more.

KEEP YOUR BABY CLOSE TO YOU.
Remember that your baby is not used to this new world and needs to be held close and comforted. Skin-to-skin contact between you and baby will soothe his crying and also will help keep your baby's heart and breathing rates stable. A soft carrier, such as a wrap, can help you "wear" your baby.

AVOID NIPPLE CONFUSION.
Avoid using pacifiers and bottles for the first few weeks after birth unless your doctor has told you to use them because of a medical reason. If you need to use supplements, work with an IBCLC. She can show you ways that are supportive of breastfeeding. These include feeding your baby with a syringe, a small, flexible cup, or a tiny tube taped beside your nipple. Try to give your baby expressed milk first. However, unless your baby is unable to feed well, it's best to feed at the breast.

MAKE SURE YOUR BABY SLEEPS SAFELY AND CLOSE BY.
Have your baby sleep in a crib or bassinet in your bedroom so that you can breastfeed more easily at night. Research has found that when a baby shares a bedroom with his parents, the baby has a lower risk of SIDS.

If your baby falls asleep at the breast during most feedings, talk to your baby's doctor about having the baby's weight checked. Also, see a lactation consultant to make sure your baby is latching on well.

VITAMIN D

Babies need 400 International Units (IU) of vitamin D each day. Ask your baby's doctor about supplements in drop form. Learn more about vitamin D and your baby's needs on page 30.

MAKING PLENTY OF MILK

Your breasts will easily make and supply milk for your baby's needs. The more often your baby breastfeeds, the more milk your breasts will make. Babies try to double their weight in a few short months, and their tummies are small, so they need many feedings to grow and be healthy.

Most mothers can make plenty of milk for their baby. If you think you have a low milk supply, talk to a lactation consultant. See page 7 for other types of health professionals who can help you.

HOW LONG SHOULD I BREASTFEED?

Many leading health organizations recommend that most infants breastfeed for at least 12 months, with exclusive breastfeeding for the first six months. This means that babies are not given any foods or liquids other than breastmilk for the first six months.

These recommendations are supported by organizations including the American Academy of Pediatrics, American Academy of Family Physicians, American College of Obstetricians and Gynecologists, American College of Nurse-Midwives, Academy of Nutrition and Dietetics, and American Public Health Association.

WHAT WILL HAPPEN WITH YOUR MILK, YOUR BABY, AND YOU IN THE FIRST FEW WEEKS

TIME	MILK	BABY	YOU (MOM)
BIRTH	Your body makes colostrum (a rich, thick, yellowish milk) in small amounts. It gives your baby early protection against diseases.	Your baby will probably be awake in the first hour after birth. This is a good time to breastfeed your baby.	You will be tired and excited.
FIRST 12–24 HOURS	Your baby will drink about 1 teaspoon of colostrum at each feeding. You may not see the colostrum, but it has what your baby needs and in the right amount.	It is normal for the baby to sleep heavily. Labor and delivery are hard work! Some babies like to nuzzle and may be too sleepy to latch at first. Feedings may be short and disorganized. Take advantage of your baby's strong instinct to suck and feed upon waking every couple of hours.	You will be tired, too. Be sure to rest.
NEXT 3–5 DAYS	Your mature (white) milk takes the place of colostrum. It is normal for mature milk to have a yellow or golden tint at first.	Your baby will feed a lot, most likely 8 to 12 times or more in 24 hours. Very young breastfed babies do not eat on a schedule. It is okay if your baby eats every 2 to 3 hours for several hours, then sleeps for 3 to 4 hours. Feedings may take about 15 to 20 minutes on each breast. The baby's sucking rhythm will be slow and long. The baby might make gulping sounds.	Your breasts may feel full and leak. (You can use disposable or cloth pads in your bra to help with leaking.)
FIRST 4–6 WEEKS	White breastmilk continues.	Your baby will now likely be better at breastfeeding and have a larger stomach to hold more milk. Feedings may take less time and may be further apart.	Your body gets used to breastfeeding. Your breasts may become softer and the leaking may slow down.

HOW TO KNOW YOUR BABY IS GETTING ENOUGH MILK

Many babies, but not all, lose a small amount of weight in the first days after birth. Your baby's doctor will check your baby's weight at your first doctor visit after you leave the hospital. Make sure to visit your baby's doctor for a checkup within three to five days after birth and then again when the baby is 2 to 3 weeks old.

You can tell whether your baby is getting plenty of milk. He will be mostly content and will gain weight steadily after the first week of age. From birth to 3 months old, typical weight gain is two-thirds to 1 ounce each day.

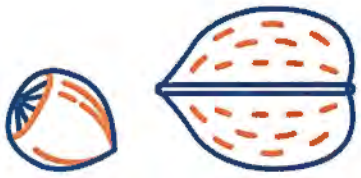
Other signs that your baby is getting plenty of milk:

- Your baby passes enough clear or pale yellow urine. The urine is not deep yellow or orange.
- Your baby has enough bowel movements (see the chart on the next page).
- Your baby switches between short sleeping periods and wakeful, alert periods.
- Your baby is satisfied and content after feedings.
- Your breasts may feel softer after you feed your baby.

Talk to your baby's doctor if you are worried that he or she is not getting enough milk.

THE NEWBORN TUMMY

At birth, your baby's stomach can comfortably digest what would fit in a hazelnut (about 1 to 2 teaspoons). By around 10 days, your baby's stomach grows to hold about 2 ounces, or what would fit in a walnut.



Hazelnut Walnut

HOW MUCH DO BABIES TYPICALLY EAT?

A newborn's tummy is very small, especially in the early days. Once breastfeeding is established, exclusively breastfed babies who are 1 to 6 months old take in between 19 and 30 ounces of breastmilk each day. If you breastfeed your baby eight times a day, your baby will get about 3 ounces per feeding. But every baby is different.

TYPICAL NUMBER OF WET DIAPERS AND BOWEL MOVEMENTS IN A BABY'S FIRST WEEK (IT IS FINE IF YOUR BABY HAS MORE)

1 DAY = 24 HOURS

BABY'S AGE	NUMBER OF WET DIAPERS	NUMBER OF BOWEL MOVEMENTS	COLOR AND TEXTURE OF BOWEL MOVEMENTS
DAY 1 (first 24 hours after birth)	1	The first one usually occurs within 8 hours after birth.	Thick, tarry, and black
DAY 2	2	3	Thick, tarry, and black
DAY 3	5–6 disposable, 6–8 cloth	3	Looser greenish to yellow (color may vary)
DAY 4	6	3	Yellow, soft, and watery
DAY 5	6	3	Loose and seedy, yellow color
DAY 6	6	3	Loose and seedy, yellow color
DAY 7	6	3	Loose and seedy, yellow color

COMMON CHALLENGES

Breastfeeding can be challenging at times, especially in the early days. But remember that you are not alone. Lactation consultants can help you find ways to make breastfeeding work for you and your baby. And while many women are faced with one or more of the challenges listed here, many women do not struggle at all! Also, many women may have certain problems with one baby that they don't have with their other babies. Read on for ways to troubleshoot problems.

Ask a lactation consultant for help to improve your baby's latch. Talk to your doctor if your pain does not go away or if you suddenly get sore nipples after several weeks of pain-free breastfeeding. Sore nipples may lead to a breast infection, which needs to be treated by a doctor.

CHALLENGE: SORE NIPPLES

Many moms say that their nipples feel tender when they first start breastfeeding. Breastfeeding should be comfortable once you and your baby have found a good latch and some positions that work.

WHAT YOU CAN DO

- A good latch is key, so see page 14 for detailed instructions. If your baby sucks only on the nipple, gently break your baby's suction to your breast by placing a clean finger in the corner of your baby's mouth and try again. (Your nipple should not look flat or compressed when it comes out of your baby's mouth. It should look round and long, or the same shape as it was before the feeding.)
- If you find yourself wanting to delay feedings because of pain, get help from a lactation consultant. Delaying feedings can cause more pain and harm your milk supply.
- Try changing positions each time you breastfeed.
- After breastfeeding, express a few drops of milk and gently rub it on your nipples with clean hands. Human milk has natural healing properties and oils that soothe. Also, try letting your nipples air-dry after feeding or wear a soft cotton shirt.
- Get help from your doctor or lactation consultant before using creams, hydrogel pads (a moist covering for the nipple to help ease soreness), or a nipple shield (a plastic device that covers the nipple while breastfeeding). Some women should not use these products. Your doctor will help you make the choice that is best for you and your baby.
- Don't wear bras or clothes that are too tight and put pressure on your nipples.
- Change nursing pads (washable or disposable pads you can place in your bra to absorb leaks) often to avoid trapping in moisture.
- Avoid harsh soaps or ointments that contain astringents (like a toner) on your nipples. Washing with clean water is all that is needed to keep your nipples and breasts clean.
- If you have very sore nipples, you can ask your doctor about using non-aspirin pain relievers.

CHALLENGE: LOW MILK SUPPLY

Most mothers can make plenty of milk for their babies. But many mothers worry about having enough milk. Checking your baby's weight and growth is the best way to make sure he gets enough milk. Let your baby's doctor know if you are concerned.

For more ways to tell if your baby is getting enough milk, see page 20.

THERE MAY BE TIMES WHEN YOU THINK YOUR SUPPLY IS LOW, BUT IT IS ACTUALLY JUST FINE.

- When your baby is around 6 weeks to 2 months old, your breasts may no longer feel full. This is normal. (It's also normal for some women to never experience "full" breasts.) At the same time, your baby may nurse for only a short time, such as five minutes at each feeding. These are not signs of a lower milk supply. The mother's body adjusts to meet the needs of her baby, and the baby gets very good at getting milk from the breast. It's also normal for your baby to continue to nurse for 10 or 15 minutes on each breast at each feeding or to prefer one breast over the other. Each baby is different.
- Growth spurts can cause your baby to want to nurse longer and more often. These growth spurts can happen when your baby is around 2 to 3 weeks, 6 weeks, and 3 months of age. Growth spurts can also happen at any time. Don't be worried that your milk supply is too low to satisfy your baby. Follow your baby's lead. Nursing more often will help build up your milk supply. Once your supply increases, you will likely be back to your usual routine.

WHAT YOU CAN DO

- Make sure your baby is latched on and positioned well.
- Breastfeed often and let your baby decide when to end the feeding. If your baby does not empty the breast, try pumping afterward. The more often you empty your breasts, the more milk your breasts will make.
- Offer both breasts at each feeding. Have your baby stay at the first breast as long as he or she is still sucking and swallowing. Offer the second breast when the baby slows down or stops.
- Try to avoid giving your baby formula or cereal in addition to your breastmilk. Otherwise, your baby may lose interest in your breastmilk, and your milk supply will then decrease. If you need to supplement your baby's feedings, try using a spoon, syringe, cup, or dropper filled with breastmilk.
- Limit or stop your baby's use of a pacifier while, at the same time, trying the above tips.
- Check with your doctor for health issues, such as hormonal issues or primary breast insufficiency, if the above steps don't help.

Talk to your baby's doctor if you think your baby is not getting enough milk.

CHALLENGE: OVERSUPPLY OF MILK

Some mothers worry about an oversupply of milk. An over-full breast can make breastfeeding stressful and uncomfortable for you and your baby.

WHAT YOU CAN DO

- Breastfeed on one side for each feeding. Continue to offer that same breast for at least two hours until the next full feeding, gradually increasing the length of time per feeding.
- If the other breast feels too full before you are ready to breastfeed on it, hand express for a few moments to relieve some of the pressure. You also can use a cold compress or washcloth to reduce discomfort and swelling.
- Feed your baby before he or she becomes overly hungry to prevent aggressive sucking. (Learn more about hunger signs on page 18.)
- Burp your baby often if he or she is gassy.

Ask a lactation consultant for help if you are unable to manage an oversupply of milk on your own.

CHALLENGE: STRONG LET-DOWN REFLEX

Some women have a strong milk ejection reflex or let-down, which can cause a rush of milk. This can happen along with an oversupply of milk.

WHAT YOU CAN DO

- Hold your nipple between your first and middle fingers or with the side of your hand. Lightly compress your milk ducts to reduce the force of the milk ejection.
- If your baby chokes or sputters when breastfeeding, gently break the latch and let the excess milk spray into a towel or cloth.
- Allow your baby to come on and off the breast at will.

CHALLENGE: ENGORGEMENT

It is normal for your breasts to become larger, heavier, and a little tender when they begin making milk. Sometimes, this fullness may turn into engorgement, which is when your breasts feel hard and painful. You also may have breast swelling, tenderness, warmth, redness, throbbing, and flattening of the nipple.

Engorgement sometimes also causes a low-grade fever and can be confused with a breast infection. Engorgement is the result of the milk building up. It usually happens during the third to fifth day after giving birth. But it can happen at any time, especially if you are not feeding your baby or expressing your milk often.

Engorgement can lead to plugged ducts or a breast infection (see page 26), so it is important to try to prevent it before this happens. If treated, engorgement should fix itself.

Ask your lactation consultant or doctor for help if the engorgement lasts for two or more days.

CHALLENGE: ENGORGEMENT (CONT.)

WHAT YOU CAN DO

- Breastfeed often after giving birth. As long as your baby is latched on and sucking well, allow your baby to nurse for as long as she likes.
- Work with a lactation consultant to improve your baby's latch.
- Breastfeed often on the affected side to remove the milk, keep the milk moving freely, and prevent your breast from becoming overly full.
- Avoid using pacifiers or bottles to supplement feedings.
- Hand express or pump a little milk to first soften the breast, areola, and nipple before breastfeeding.
- Massage the breast.
- Use cold compresses on your breast in between feedings to help ease the pain.
- If you plan to return to work, try to pump your milk as often as your baby breastfed at home. Be sure to not let more than four hours pass between pumping sessions.
- Get enough rest, proper nutrition, and fluids.
- Wear a well-fitting, supportive bra that is not too tight.
- Try reverse pressure softening to make the areola soft around the base of the nipple and help your baby latch. Try one of the holds in the illustrations on the left. Press inward toward the chest wall and count slowly to 50. Use steady and firm pressure, but gentle enough to avoid pain. You may need to repeat each time you breastfeed for a few days.

SIX ENGORGEMENT HOLDS*:

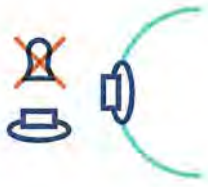
1. One-handed "flower hold." Works best if your fingernails are short. Curve your fingertips in toward your body and place them where baby's tongue will go.

2. Two-handed, one-step method. Works best if your fingernails are short. Curve your fingertips in toward your body and place them on each side of the nipple.

3. Use the two-handed, one-step method. You may ask someone to help press by placing fingers or thumbs on top of yours.

4. Two-handed, two-step method. Using two or three fingers on each side, place your first knuckles on either side of the nipple and move them 1/4 turn. Repeat above and below the nipple.

5. Two-handed, two-step method. Using straight thumbs, place your thumbnails evenly on either side of the nipple. Move 1/4 turn and repeat above and below the nipple.



6. Soft-ring method. Cut off the bottom half of an artificial nipple and place it on the areola. Press with your fingers.

*Illustrations adapted from Reverse Pressure Softening by K. Jean Cotterman© 2008.

CHALLENGE: PLUGGED DUCT

Plugged ducts are common in breastfeeding mothers. A plugged milk duct feels like a tender and sore lump in the breast. You should not have a fever or other symptoms.

A plugged duct happens when a milk duct does not drain properly. Pressure then builds up behind the plug, and surrounding tissue gets inflamed. A plugged duct usually happens in one breast at a time.

WHAT YOU CAN DO

- Breastfeed on the affected side as often as every two hours. This will help loosen the plug and keep your milk moving freely.
- Aim your baby's chin at the plug. This will focus his suck on the duct that is affected.
- Massage the area, starting behind the sore spot. Move your fingers in a circular motion and massage toward the nipple.
- Use a warm compress on the sore area.
- Get extra sleep, or relax with your feet up to help speed healing. Often a plugged duct is a sign that a mother is doing too much.
- Wear a well-fitting supportive bra that is not too tight, since this can constrict milk ducts. Consider trying a bra without underwire.
- If you have plugged ducts that keep coming back, seek help from an IBCLC.

If your plugged duct doeso't loosen up, ask for help from a lactation consultant. Plugged ducts can lead to a breast infection.

CHALLENGE: BREAST INFECTION (MASTITIS)

Mastitis is soreness or a lump in the breast. It can cause the following symptoms:

- Fever or flu-like symptoms, such as feeling run down or very achy
- Nausea
- Vomiting
- Yellowish discharge from the nipple that looks like colostrum
- Breasts feel warm or hot to the touch and appear pink or red

A breast infection can happen when other family members have a cold or the seasonal flu. It usually only happens in one breast. It is not always easy to tell the difference between a breast infection and a plugged duct. They have similar symptoms and can improve within 24 to 48 hours. Some breast infections that do not improve within this time period need to be treated with medicine from your doctor. (Learn more about medicines and breastfeeding on page 30.)

WHAT YOU CAN DO

- Breastfeed on the affected side every two hours or more often. This will keep the milk moving freely and your breast from becoming overly full.
- Massage the area, starting behind the sore spot. Move your fingers in a circular motion and massage toward the nipple.
- Apply heat to the sore area with a warm compress.
- Get extra sleep, or relax with your feet up to help speed healing. Often a breast infection is a sign that a mother is doing too much and becoming overly tired.
- Wear a well-fitting supportive bra that is not too tight, since this can constrict milk ducts.

Ask your doctor for help if you do not feel better within 24 hours of trying these tips, if you have a fever, or if your symptoms worsen. You might need medicine.

SEE YOUR DOCTOR RIGHT AWAY IF:

- You have a breast infection in which both breasts look affected.
- There is pus or blood in your breastmilk.
- You have red streaks near the affected area of the breast.
- Your symptoms came on severely and suddenly.

Also, talk with your doctor about any medicines you take or plan to take.

CHALLENGE: FUNGAL INFECTIONS

A fungal infection, also called a yeast infection or thrush, can form on your nipples or in your breast. This type of infection thrives on milk and forms from an overgrowth of the *Candida* organism. *Candida* lives in our bodies and is kept healthy by the natural bacteria in our bodies. When the natural balance of bacteria is upset, *Candida* can overgrow, causing an infection.

Signs of a fungal infection include:

- Nipple soreness that lasts more than a few days, even after your baby has a good latch
- Pink, flaky, shiny, itchy, or cracked nipples
- Deep pink and blistered nipples
- Achy breasts
- Shooting pains deep in the breast during or after feedings

WHAT YOU CAN DO

Fungal infections may take several weeks to clear up, so it is important to follow these tips to avoid spreading the infection:

- Change disposable nursing pads often.
- Wash any towels or clothing that come in contact with the yeast in very hot water (above 122°F).
- Wear a clean bra every day.
- Wash your hands often.
- Wash your baby's hands often, especially if he sucks on his fingers.
- Boil all pacifiers, bottle nipples, or toys your baby puts in her mouth every day. After one week of treatment, throw away all pacifiers and nipples and buy new ones.
- Boil all breast pump parts that touch your milk every day.
- Make sure other family members are free of thrush or other fungal infections. If they have symptoms, make sure they get treated.

If you or your baby has symptoms of a fungal infection, call both your doctor and your baby's doctor so you can be correctly diagnosed and treated at the same time. This will help prevent passing the infection to each other.

"I had a terrible time learning to nurse my son. My nipples were terribly sore, and it felt like it wasn't getting any better. After visiting my doctor, the lactation consultant, and the pediatrician, it became clear that a horrible case of thrush had been the source of my pain. I honestly did not think I would make it, but I was too stubborn to quit, and I am grateful I stuck with it. I am proud to say that I breastfed my son until he was 16 months old! – *Jessica, Edmonton, Alberta, Canada*

CHALLENGE: NURSING STRIKE

A nursing "strike" is when your baby has breastfed well for months and suddenly begins to refuse the breast. A nursing strike can mean that your baby is trying to let you know that something is wrong. This usually does not mean that the baby is ready to wean.

Not all babies will react the same way to the different things that can cause a nursing strike. Some babies will continue to breastfeed without a problem. Other babies may just become fussy at the breast. And other babies will refuse the breast entirely.

Some of the major causes of a nursing strike include:

- Having mouth pain from teething, a fungal infection like thrush, or a cold sore
- Having an ear infection, which causes pain while sucking or pressure while lying on one side
- Feeling pain from a certain breastfeeding position, perhaps from an injury on the baby's body or from soreness from an immunization
- Being upset about a long separation from the mother or a major change in routine
- Being distracted while breastfeeding, such as becoming interested in other things going on around the baby
- Having a cold or stuffy nose that makes breathing while breastfeeding difficult
- Getting less milk from the mother after supplementing breastmilk with bottles or overuse of a pacifier
- Responding to the mother's strong reaction if the baby has bitten her while breastfeeding
- Being upset by hearing arguing or people talking in a harsh voice while breastfeeding
- Reacting to stress, overstimulation, or having been repeatedly put off when wanting to breastfeed

If your baby is on a nursing strike, it is normal to feel frustrated and upset, especially if your baby is unhappy. Be patient with your baby and keep trying to offer your breasts.

WHAT YOU CAN DO

- Try to express your milk as often as the baby used to breastfeed to avoid engorgement and plugged ducts.
- Try another feeding method temporarily to give your baby your breastmilk, such as using a cup, dropper, or spoon.
- Keep track of your baby's wet and dirty diapers to make sure she gets enough milk.
- Keep offering your breast to your baby. If your baby is frustrated, stop and try again later. You can also offer your breast when your baby is very sleepy or is sleeping.
- Try different breastfeeding positions, with your bare skin next to your baby's bare skin.
- Focus on your baby, and comfort him with extra touching and cuddling.
- Breastfeed while rocking your baby in a quiet room free of distractions.

Be sure to feed your baby during a nursing strike to ensure that your baby gets enough milk. The doctor can check your baby's weight gain.

CHALLENGE: INVERTED, FLAT, OR VERY LARGE NIPPLES

Some women have nipples that turn inward instead of pointing outward, or that are flat and do not protrude. Nipples also can sometimes flatten for a short time because of engorgement or swelling from breastfeeding. Inverted or flat nipples can sometimes make it harder to breastfeed. But remember, for breastfeeding to work, your baby must latch on to both the nipple and the breast, so even inverted nipples can work just fine. Often, flat and inverted nipples will protrude more over time as the baby sucks more.

Very large nipples can make it hard for the baby to get enough of the areola into his or her mouth to compress the milk ducts and get enough milk.

WHAT YOU CAN DO

- Talk to your doctor or a lactation consultant if you are concerned about your nipples.
- You can use your fingers to try and pull your nipples out. You also can use a special device that pulls out inverted or temporarily flattened nipples.
- The latch for babies of mothers with very large nipples will improve with time as the baby grows. It might take several weeks to get the baby to latch well. But if you have a good milk supply, your baby will get enough milk even with a poor latch.

Ask for help if you have questions about your nipple shape or type, especially if your baby is having trouble latching well.

COMMON QUESTIONS

SHOULD I SUPPLEMENT WITH FORMULA?

Giving your baby formula may cause him or her to not want as much breastmilk. This will decrease your milk supply. If you worry about your baby getting enough milk, talk to your baby's doctor.

DOES MY BABY NEED CEREAL OR WATER?

Your baby needs only breastmilk for the first 6 months of life. Breastmilk has all the nutrition your baby needs. Giving the baby cereal may cause your baby to not want as much breastmilk. This will decrease your milk supply. Even in hot climates, breastfed infants do not need water or juice. When your baby is ready for solid foods, the food should be rich in iron. However, cereal is not a good first food for your baby. Talk to your doctor about what is right for your baby.

IS IT OKAY FOR MY BABY TO USE A PACIFIER?

If you want to try it, it is best to wait until your baby is at least 3 or 4 weeks old to introduce a pacifier. This allows your baby time to learn how to latch well on the breast and get enough milk.

DOES MY BABY NEED MORE VITAMIN D?

Maybe. Vitamin D is needed to build strong bones. All infants and children should get at least 400 IU of vitamin D each day. To meet this need, your child's doctor may recommend that you give your baby a vitamin D supplement of 400 IU each day[1]. This should start in the first few days of life. You can buy vitamin D supplements for infants at a drugstore or grocery store.

Even though sunlight is a major source of vitamin D, it is hard to measure how much sunlight your baby gets. Sun exposure also can be harmful. Once your baby is weaned from breastmilk, talk to your baby's doctor about whether your baby still needs vitamin D supplements. Some children do not get enough vitamin D from the food they eat.

IS IT SAFE TO SMOKE, DRINK, OR USE DRUGS?

If you smoke, it is best for you and your baby to quit as soon as possible. If you can't quit, it is still better to breastfeed because it can help protect your baby from respiratory problems and SIDS. Be sure to smoke away from your baby and change your clothes to keep your baby away from the chemicals smoking leaves behind. Ask your doctor or nurse for help quitting smoking.

You should avoid alcohol in large amounts. According to the American Academy of Pediatrics (AAP), an occasional drink is fine. The AAP recommends waiting two or more hours before nursing. You also can pump milk before you drink to feed your baby later.

It is not safe for you to use an illicit drug. Drugs such as cocaine, marijuana, heroin, and PCP can harm your baby. Some reported side effects in babies include seizures, vomiting, poor feeding, and tremors.

CAN I TAKE MEDICINES IF I AM BREASTFEEDING?

You can take certain medicines while breastfeeding, but not all. Almost all medicines pass into your milk in small amounts. Some have no effect on the baby and can be used while breastfeeding. Always talk to your doctor or pharmacist about medicines you are using and ask before you start using new medicines. This includes prescription and over-the-counter drugs, vitamins, and dietary or herbal supplements. For some women with chronic health problems, stopping a medicine can be more dangerous than the effects it will have on the breastfed baby.

The National Library of Medicine offers an online tool to learn about the effects of medicines on breastfed babies. The website address is https://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm. You can print out the information you find here and take it to your doctor or pharmacist to discuss.

CAN I BREASTFEED IF I AM SICK?

Some women think that they should not breastfeed when they are sick. But most common illnesses, such as colds, seasonal flu, or diarrhea, can't be passed through breastmilk. In fact, your breastmilk has antibodies in it. These antibodies will help protect your baby from getting the same sickness. (See page 5 to learn about antibodies.)

If you are sick with the flu, including the H1N1 flu (also called the swine flu), you should avoid being near your baby so that you do not infect him or her. Have someone who is not sick feed your baby your expressed breastmilk.

[1]American Academy of Pediatrics, Vitamin D Supplementation for Infants, 2010.

You also should not breastfeed if you:

- Have HIV or AIDS. If you have HIV and want to give your baby breastmilk, you can contact a human milk bank. (See page 37 for more information.)
- Have untreated, active tuberculosis
- Are infected with human T-cell lymphotropic virus type I or type II
- Take prescribed cancer chemotherapy agents, such as antimetabolites
- Are undergoing radiation therapy; but, such nuclear medicine therapies require only a temporary break from breastfeeding

WILL MY PARTNER BE JEALOUS IF I BREASTFEED?

Maybe. You can help prevent jealousy by preparing your partner before birth. Explain that you need his or her support. Discuss the important and lasting health reasons to breastfeed. Remind your partner that the baby will need to be fed somehow. Any method will take time, but once breastfeeding is going smoothly, it is convenient and comfortable. Be sure to emphasize that not breastfeeding can cost you money. Your partner can help hy changing and bathing the baby, sharing household chores, and simply sitting with you and the baby to enjoy the special mood that breastfeeding creates.

DO I HAVE TO RESTRICT MY SEX LIFE WHILE BREASTFEEDING?

No, but you may need to make some adjustments to make sex more comfortable for you and your partner if you have the following:

- Vaginal dryness. Some women experience vaginal dryness right after childbirth and during breastfeeding. This is hecause estrogen levels are lower during these times. If you have vaginal dryness, you can try more foreplay and water-based lubricants.
- Leaking breasts. You can feed your baby or express some milk before lovemaking so your breasts will be more comfortable and less likely to leak. It is common for a woman's breasts to leak or even spray milk during sex, especially during her orgasm. If this happens, put pressure on your nipples or have a towel handy to catch the milk.

DO I STILL NEED BIRTH CONTROL IF I AM BREASTFEEDING?

Yes. Your doctor will likely discuss birth control with you before you give birth. Breastfeeding is not a sure way to prevent pregnancy, even though it can delay the return of normal ovulation and menstrual cycles. Discuss with your doctor birth control choices that you can use while breastfeeding.

I HEARD THAT BREASTMILK CAN HAVE TOXINS IN IT FROM THE ENVIRONMENT. IS IT STILL SAFE FOR MY BABY?

Although certain chemicals can appear in breastmilk, breastfeeding is still the best way to feed and nurture young infants and children. The known risks of not breastfeeding far outweigh any possible risks from environmental pollutants. Remember that your baby was once inside your body and was exposed to the same things you were exposed to during pregnancy.

The concern over environmental toxins is a reason to breastfeed, not avoid it. Infant formula, the water it is mixed with, or the bottles or nipples used to give it to the baby can be contaminated with bacteria or chemicals.

DOES MY BREASTFED BABY NEED VACCINES? IS IT SAFE FOR ME TO GET A VACCINE WHEN I'M BREASTFEEDING?

Yes. Vaccines are very important to your baby's health. Breastfeeding may also help your baby respond better to certain immunizations that protect your baby. Follow the schedule your doctor gives you and, if you miss any vaccines, check with the doctor about getting your baby back on track as soon as possible. Breastfeeding while the vaccine is given to your baby, or immediately afterward, can help relieve pain and soothe an upset baby.

Nursing mothers may also receive most vaccines. Breastfeeding does not affect the vaccine, and most vaccines are not harmful to your breastmilk. However, vaccines for smallpox and yellow fever can be passed through breastmilk. Avoid these vaccinations if possible while breastfeeding and talk to your doctor.

WHAT SHOULD I DO IF MY BABY BITES ME?

If your baby starts to clamp down, you can put your finger in your baby's mouth and take him off of your breast with a firm "No." Try not to yell as it may scare him. If your baby continues to bite you, you can:

- Gently press your baby to your breast. This will cause your baby to open her mouth more to breathe.
- Stop the feeding right away so your baby is not tempted to get another reaction from you. Don't laugh. This is part of your baby's learning of limits.
- Offer a cold teething toy or frozen wet washcloth before breastfeeding so your baby's gums are soothed already.
- Put your baby down for a moment to show that biting brings a negative consequence. You can then pick your baby up again to give comfort.

WHAT DO I DO IF MY BABY KEEPS CRYING?

If your baby does not seem comforted by breastfeeding or other soothing measures, talk to your baby's doctor. Your baby may be uncomfortable or in pain. You can also check to see if your baby is teething. The doctor and a lactation consultant can help you find ways to help your baby eat well.

BREASTFEEDING A BABY WITH A HEALTH PROBLEM

Some health problems in babies can make it harder for them to breastfeed. But breastmilk provides the healthy start your baby needs — even more so if your baby is premature or sick. Even if your baby cannot breastfeed directly from you, you can express or pump your milk and give it to your baby with a dropper, spoon, or cup.

Some common health problems in babies are listed below.

JAUNDICE

Jaundice is caused by an excess of bilirubin. Bilirubin is found in the blood but usually only in very small amounts. In the newborn period, bilirubin can build up faster than it can be removed from the intestinal tract. Jaundice can appear as a yellowing of the skin and eyes. It affects most newborns to some degree, appearing between the second and third day of life. The jaundice usually clears up by 2 weeks of age and usually is not harmful.

Some breastfed babies develop jaundice when they do not get enough breastmilk, either because of breastfeeding challenges or because the mother's milk hasn't come in. This type of breastfeeding jaundice usually clears up quickly with more frequent breastfeeding or feeding of expressed breastmilk or after the mother's milk comes in.

Your baby's doctor may monitor your baby's bilirubin level with blood tests. Some babies with jaundice may need treatment with a special light (called phototherapy). This light helps break down bilirubin into a form that can be removed from the body easily.

Keep in mind that breastfeeding is best for your baby. Even if your baby gets jaundice, this is not something that you caused. Your doctor can help you make sure that your baby eats well and that the jaundice goes away.

If your baby develops jaundice, let your baby's doctor know. Discuss treatment options and let the doctor know that you do not want to interrupt breastfeeding if at all possible.

REFLUX DISEASE

Some babies have a condition called gastroesophageal reflux disease (GERD). GERD happens when the muscle at the opening of the stomach opens at the wrong times. This allows milk and food to come back up into the esophagus, the tube in the throat. Some symptoms of GERD include:

- Severe spitting up or spitting up after every feeding or hours after eating
- Projectile vomiting (the milk shoots out of the mouth)
- Inconsolable crying as if in discomfort
- Arching of the back as if in severe pain
- Refusal to eat or pulling away from the breast during feeding
- Waking up often at night
- Slow weight gain
- Gagging or choking or having problems swallowing

Many healthy babies might have some of these symptoms and not have GERD. Also, some babies with only a few of these symptoms have a severe case of GERD. Not all babies with GERD spit up or vomit. More severe cases of GERD may need to be treated with medicine if the baby refuses to nurse, gains weight poorly or is losing weight, or has periods of gagging or choking.

See your baby's doctor if your baby spits up after every feeding and has any of the other symptoms listed in this section. If your baby has GERD, it is important to continue breastfeeding. Infant formula is hard to digest.

COLIC

Many infants are fussy in the evenings, but if the crying does not stop and gets worse throughout the day or night, it may be caused by colic. Colic usually starts between 2 and 4 weeks from birth. A baby may cry inconsolably or scream, extend or pull up his or her legs, and pass gas. The baby's stomach may be enlarged. Crying can happen anytime, although it often gets worse in the early evening.

Colic will likely improve or disappear by 3 or 4 months from birth. Doctors don't know why some babies get colic. Some breastfed babies may be sensitive to a food their mother eats, such as caffeine, chocolate, dairy, or nuts. Colic could be a sign of a medical problem, such as a hernia or some type of illness.

If your infant shows signs of colic, talk to your doctor. Sometimes changing what you eat can help. Some infants seem to be soothed by being held, "worn" with a baby wrap or sling, rocked, or swaddled (wrapped snugly in a blanket).

PREMATURE OR LOW BIRTH WEIGHT

Premature birth is when a baby is born before 37 weeks. Prematurity often will mean that the baby is born at a low birth weight, defined as less than 5½ pounds. When a baby is born early or is small at birth, the mother and baby will face added challenges with breastfeeding and may need to adjust, especially if the baby has to stay in the hospital for extra care. But keep in mind that breastmilk has been shown to help premature babies grow and stay healthy.

SOME BABIES CAN BREASTFEED RIGHT AWAY.
This may be true if your baby was born at a low birth weight but after 37 weeks. These babies will need more skin-to-skin contact to help keep warm. These smaller babies may also need feedings more often, and they may get sleepier during those feedings.

EVEN IF YOUR BABY IS BORN PREMATURELY AND YOU ARE NOT ABLE TO BREASTFEED AT FIRST, YOUR BABY CAN STILL BENEFIT FROM YOUR MILK. YOU CAN:

- Express colostrum by hand or pump in the hospital as soon as you are able.
- Talk to the hospital staff about renting an electric pump. Call your insurance company or local WIC office to find out whether you can get refunded for this type of pump. Under the Affordable Care Act, most insurance plans must cover breast pumps, but your plan will tell you if you are able to rent an electric pump or a manual pump.
- Pump milk as often as you would normally breastfeed — about eight times in a 24-hour period.
- Give your baby skin-to-skin contact once your baby is ready to breastfeed directly. This can be very calming and a great start to your first feeding. Be sure to work with a lactation consultant on proper latch and positioning. It may take some time for you and your baby to get into a good routine.

If you leave the hospital before your baby, you can express milk for the hospital staff to give the baby by feeding tube.

BREASTFEEDING AND SPECIAL SITUATIONS

TWINS OR MULTIPLES

The benefits of breastfeeding for mothers of multiples and their babies are the same as for all mothers and babies — possibly greater, since many multiples are born early. The idea of breastfeeding more than one baby may seem overwhelming at first! But many moms of multiples find breastfeeding easier than other feeding methods because there is nothing to prepare. Many mothers successfully breastfeed more than one baby even after going back to work.

SEEKING SUPPORT

Reach out to other moms of multiples and get help and information by:

- Finding Internet and print resources for parents of multiples. Some good resources include:
  - La Leche League International FAQ: www.llli.org/faq/twins.html
  - *Mothering Multiples: Breastfeeding and Caring for Twins or More!*
- Joining a support group for parents of multiples through your doctor, hospital, local breastfeeding center, or La Leche League International.
- Finding a lactation consultant who has experience with multiples. Ask the lactation consultant where you can rent a breast pump if the babies are born early.

DID YOU KNOW?

Even if your babies need to spend time in the neonatal intensive care unit, breastfeeding is still possible with some adjustments.

MAKING ENOUGH MILK

Most mothers can make plenty of milk for twins. Many mothers exclusively breastfeed or express their milk for triplets or quadruplets. Keep these tips in mind:

- Breastfeeding soon and often after birth is helpful for multiples the same way it is for one baby. The more milk that is removed from your breasts, the more milk your body will make.
- If your babies are born early, double pumping often will help you make more milk.
- The doctor's weight checks can tell you whether your babies are getting enough breastmilk. You can also track wet diaper and bowel movements to tell whether your babies are getting enough milk. For other signs that your babies are getting enough milk, see page 20.
- It helps to have each baby feed from both breasts. You can "assign" a breast to each baby for a feeding and switch at the next feeding. Or you can assign a breast to each baby for a day and switch the next day. Switching sides helps keep milk production up if one baby isn't eating as well as the other baby. It also gives babies a different view to stimulate their eyes.

"When they were first born, it was too overwhelming for me to care for them at the same time. I fed them one at a time, which was nice, because I was able to bond with each individually. But then I realized that I was pretty much feeding one of them every one to two hours and in order to get more sleep, I started feeding them at the same time. Once I got the hang of feeding both at once, I was able to free up so much more time! They started to get on the same eating/sleeping schedule, and while both were sleeping, I would find myself having a solid two to three hours to catch up on some sleep, relax, and clean up around the house. It was so liberating and much needed! I'm so glad I figured out something that worked for all of us.
– Jen, Charleston, South Carolina

Many breastfeeding basics are the same for twins or multiples as they are for one baby. Learn more about these important topics:

- How to know your babies are getting enough milk (page 20)
- How to troubleshoot common challenges (page 22)
- Ways to keep milk supply up (page 23)

BREASTFEEDING AFTER BREAST SURGERY

How much milk you can make depends on how your surgery was done, where your incisions are, and the reasons for your surgery. Women who had incisions in the fold under the breast are less likely to have problems making milk than women who had incisions around or across the areola, which can cut into milk ducts and nerves. Women who have had breast implants usually breastfeed successfully.

If you have had surgery on your breasts for any reason, talk with a lactation consultant. If you are planning to have breast surgery, talk with your surgeon about ways he or she can preserve as much of the breast tissue and milk ducts as possible.

ADOPTION AND INDUCING LACTATION

Many mothers who adopt want to breastfeed their babies and can do it successfully with some help. You may need to supplement your breastmilk with donated breastmilk from a milk bank or with infant formula. But some adoptive mothers can breastfeed exclusively, especially if they have been pregnant. Lactation is a hormonal response to a physical action. The stimulation of the baby nursing causes the body to see a need for and make milk. The more your baby nurses, the more milk your body will make.

If you plan to adopt and want to breastfeed, talk with both your doctor and a lactation consultant. They can help you decide the best way to try to establish a milk supply for your new baby. You might be able to prepare by pumping every three hours around the clock for two to three weeks before your baby arrives, or you can wait until the baby arrives and start to breastfeed then. You can also try a supplemental nursing system or a lactation aid to ensure your baby gets enough nutrition and that your breasts are stimulated to make milk at the same time.

USING MILK FROM DONOR BANKS

If you can't breastfeed and still want to give your baby human milk, you may want to consider a human milk bank. A human milk bank can dispense donor human milk to you if you have a prescription from your doctor. Many steps are taken to ensure the milk is safe.

Some reasons you may want or need a human milk bank include:

- You are unable to breastfeed because:
  - Your baby was born premature.
  - Your baby has other health problems.
  - You take certain medicines that are dangerous for babies and can be passed to your baby in your breastmilk.
  - You have a specific illness (like HIV or active tuberculosis).
  - You get radiation therapy, though some therapies may mean only a brief pause in breastfeeding.
- Your baby isn't thriving on formula because of allergies or intolerance.

Some mothers give their milk directly to parents of babies in need. This is called "casual sharing." But this milk has not been tested in a lab such as at a human milk bank. The Food and Drug Administration recommends against feeding your baby breastmilk that you get either directly from other women or through the Internet.

You can find a human milk bank through the Human Milk Banking Association of North America (HMBANA). HMBANA is a group of health care providers that promotes, protects, and supports donor milk banking. You can also contact HMBANA if you would like to donate breastmilk.

To find out if your insurance will cover the cost of the milk, call your insurance company or ask your doctor. If your insurance company does not cover the cost of the milk, talk with the milk bank to find out whether payment can be made later on or how to get help with the payments.

BREASTFEEDING IN PUBLIC

Some mothers feel uncomfortable breastfeeding in public. But remember that you are feeding your baby. You are not doing anything wrong. And even though it may seem taboo in some places, awareness of the support new mothers need is building.

- The federal government and many states have laws that protect nursing women. These laws are based on the recognition of organizations such as the American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, the World Health Organization, and many others that breastfeeding is the best choice for the health of a mother and her baby. You can see the laws in your state at the National Conference of State Legislatures website at www.ncsl.org/research/health/breastfeeding-state-laws.aspx.

It is important to believe in yourself and your choice to breastfeed your baby. Remind yourself that you can succeed, and wear your confidence!

Some tips for breastfeeding in public include:

- Wear clothes that allow easy access to your breasts, such as tops that pull up from the waist or button down.
- Use a special breastfeeding blanket around your shoulders.
- Breastfeed your baby in a sling. Slings or other soft infant carriers are especially helpful for traveling — it makes it easier to keep your baby comforted and close to you. But be aware that infant slings can be a danger. Check with the Consumer Product Safety Commission for warnings before buying a sling.
- Breastfeed in a women's lounge or dressing room in stores.
- Practice breastfeeding at home so that you can make sure you are revealing only as much as you feel comfortable with.
- Face the wall at a restaurant or sit in a booth.

It helps to breastfeed your baby before he becomes fussy so that you have time to get into a comfortable place or position to feed. (Over time, you will learn your baby's early hunger cues.) When you get to your destination, find a place you can breastfeed where you will feel most comfortable.

If someone criticizes you for breastfeeding in public, know the laws where you are and don't be afraid to respond. Most of all, it is important to remember that you are meeting your baby's needs. It isn't possible to stay home all the time, and you should (and can) feel free to feed your baby while you are out and about. You should be proud of your commitment! Plus, no bottles mean fewer supplies to pack and no worries about getting the milk to the right temperature.

PUMPING AND STORING YOUR MILK

PUMPING YOUR BREASTMILK

If you are unable to breastfeed your baby directly, it is important to remove milk during the times your baby normally would feed. This will help you to continue making milk.

Before you express breastmilk, be sure to wash your hands with soap and water. If soap and water are unavailable, use an alcohol-based hand sanitizer that contains at least 60 percent alcohol. Make sure the area where you are expressing and your pump parts and bottles are clean.

If you need help to get your milk to start flowing, you can:

- Think about your baby. Bring a photo or a blanket or item of clothing that has your baby's scent on it.
- Apply a warm, moist compress to your breasts.
- Gently massage your breasts.
- Gently rub your nipples.
- Visualize the milk flowing down.
- Sit quietly and think of a relaxing setting.

WAYS TO EXPRESS YOUR MILK BY HAND OR PUMP

TYPE	HOW IT WORKS	WHAT'S INVOLVED	AVERAGE COST
HAND EXPRESSION	You use your hand to massage and compress your breast to remove milk.	• Requires practice, skill, and coordination • Gets easier with practice, and can be as fast as pumping • Good if you are seldom away from your baby or you need an option that is always with you. But all moms should learn how to hand express. Watch a video at http://med.stanford.edu/newborns/professional-education/breastfeeding/hand-expressing-milk.html	Free
MANUAL PUMP	You use your hand and wrist to operate a hand-held device to pump the milk.	• Requires practice, skill, and coordination • Useful for occasional pumping if you are away from your baby only once in a while • May put you at higher risk of breast infection	$30 to $50
ELECTRIC BREAST PUMP	Runs on battery or plugs into an electrical outlet.	• Can be easier for some moms • Can pump one breast at a time or both breasts at the same time • Double pumping may collect more milk in less time, which is helpful if you are going back to work or school full-time • Need a place to clean and store the equipment between uses	$150 to more than $250

You can rent an electric pump from a lactation consultant at a local hospital or from a breastfeeding organization. This type of pump works well for creating a milk supply when a new baby can't feed at the breast. Mothers who struggled with other expression methods may find that these pumps work well for them.

Under the Affordable Care Act, your health insurance plan must cover the cost of a breast pump. You may be offered a rental or a new one for you to keep. Your plan may provide guidance on whether the covered pump is manual or electric, how long the coverage of a rented pump lasts, and when they'll provide the pump.

Learn more about your breastfeeding benefits at www.HealthCare.gov and talk to your insurance company to learn their specific policies on breast pumps.

You can keep germs from getting into the milk by washing your pumping equipment with soap and water and letting it air dry.

STORING YOUR BREASTMILK

Breastmilk can be stored in clean glass or hard BPA-free plastic bottles with tight-fitting lids. You also can use milk storage bags, which are made for freezing human milk. Do not use disposable bottle liners or other plastic bags to store breastmilk.

Storage bottles or bags to refrigerate or freeze your breastmilk also qualify as tax-deductible breastfeeding gear.

AFTER EACH PUMPING

- Label the date on the storage container. Include your child's name if you are giving the milk to a child care provider.
- Gently swirl the container to mix the cream part of the breastmilk that may rise to the top back into the rest of the milk. Shaking the milk is not recommended — this can cause some of the milk's valuable part to break down.
- Refrigerate or chill milk right after it is expressed. You can put it in the refrigerator, place it in a cooler or insulated cooler pack, or freeze it in small (2 to 4 ounce) batches for later feedings.

TIPS FOR FREEZING MILK

- Wait to tighten bottle caps or lids until the milk is completely frozen.
- Try to leave an inch or so from the milk to the top of the container because it will expand when freezing.
- Store milk in the back of the freezer — not on the shelf in the freezer door.

TIPS FOR THAWING AND WARMING UP MILK

- Clearly label milk containers with the date it was expressed. Use the oldest stored milk first.
- Breastmilk does not necessarily need to be warmed. Some moms prefer to take the chill off and serve at room temperature. Some moms serve it cold.
- Thaw frozen milk in the refrigerator overnight, by holding the bottle or frozen bag of milk under warm running water, or setting it in a container of warm water.
- Never put a bottle or bag of breastmilk in the microwave. Microwaving creates hot spots that could burn your baby and damage the milk.
- Swirl the milk and test the temperature by dropping some on your wrist. It should be comfortably warm.
- Use thawed breastmilk within 24 hours. Do not refreeze thawed breastmilk.

GUIDE TO STORING FRESH BREASTMILK FOR USE WITH HEALTHY FULL-TERM INFANTS

PLACE	TEMPERATURE	HOW LONG	THINGS TO KNOW
COUNTERTOP, TABLE	Room temp (up to 77°F)	Up to 4 hours is best. Up to 6 to 8 hours is okay for very clean expressed milk.	Containers should be covered and kept as cool as possible. Covering the container with a clean cool towel may keep milk cooler. Throw out any leftover milk within 1 to 2 hours after the baby is finished feeding.
REFRIGERATOR	39°F or colder	Up to 3 days is best. Up to 5 days is okay for very clean expressed milk.	Store milk in the back of the main body of the refrigerator. When at work, you can place your expressed milk in the refrigerator. Use a canvas or insulated bag, and place it at the back of the refrigerator.
FREEZER	0°F or colder	Up to 3 to 6 months is best. Up to 9 months is okay for very clean expressed milk.	Store milk toward the back of the freezer where the temperature is most constant. Milk stored at 0°F or colder is safe for longer durations, but the quality of the milk might not be as high.
DEEP FREEZER	-4°F or colder	Up to 6 months. Up to 12 months is okay for very clean expressed milk.	Store milk toward the back of the freezer where the temperature is most constant. Milk stored at 0°F or colder is safe for longer durations, but the quality of the milk might not be as high.

Source: Adapted from 7th Edition American Academy of Pediatrics (AAP) Pediatric Nutrition Handbook (2014); 2nd Edition AAP/American College of Obstetricians and Gynecologists (ACOG) Breastfeeding Handbook for Physicians (2014); Academy of Breastfeeding Medicine (ABM) Clinical Protocol #8 Human Milk Storage Guidelines (2010); CDC Human Milk Storage Guidelines (2015).

GUIDE TO STORING THAWED BREASTMILK

	ROOM TEMPERATURE (60°F TO 85°F)	REFRIGERATOR (39°F OR COLDER)	ANY FREEZERS
THAWED BREASTMILK	Up to 1 to 2 hours is best. Up to 3 to 4 hours is okay.	24 hours	Do not refreeze.

Source: American Academy of Pediatrics

I was committed to breastfeeding, but learning to nurse while learning to take care of a newborn was tough. My baby hated taking the entire nipple, and slipping off as she nursed was painful. And when it's 3 a.m. and your baby is fussing and you are sore, those bottles are incredibly tempting.

At the same time, most of the health professionals I came in contact with — as well as many of my family members and friends — seemed to be undermining my breastfeeding relationship. My day care providers seemed afraid of my breastmilk, my workplace didn't offer me a place to pump, and other mothers would act as though my breastfeeding was condemning their choice not to.

But I remembered that my nurse, Charlene, asked me to give it at least 8 weeks. I remembered that advice and decided to wait a little longer. I went back to Charlene for help, and she showed me how to combat my daughter's slipping latch. She also put me in touch with a local support group and helped me find professionals who really knew how to help. They got me through the most critical period, but it was only my willingness to seek out their guidance that allowed me to keep nursing. Don't be afraid to ask for help whenever you need it!
– Lin, Lock Haven, Pennsylvania

GOING BACK TO WORK

Planning ahead for your return to work can help ease the transition. Learn as much as you can ahead of time and talk with your employer about your options. This can help you continue to enjoy breastfeeding your baby long after your maternity leave is over.

DURING YOUR MATERNITY LEAVE

- Take as many weeks off as you can. At least six weeks of leave can help you recover from childbirth and settle into a good breastfeeding routine. Twelve weeks is even better.
- Practice expressing your milk by hand or with a breast pump. A breast pump may be the best method for efficiently removing milk during the workday. A hands-free breast pump may even allow you to work while pumping if you have a laptop or an office with a door that you can close. See pages 39 to 43 for more information about pumping and storage.
- Help your baby adjust to taking breastmilk from a bottle (or cup for infants 3 to 4 months old). Babies used to nursing might prefer a bottle or cup when it's given by someone else. Wait at least a month before introducing a bottle to your infant.
- Talk with your family and your child care provider about your desire to breastfeed. Let them know you will need their support.

BACK AT WORK

- Keep talking with your supervisor about your schedule and what is or isn't working for you. Keep in mind that returning to work gradually gives you more time to adjust.
- If your child care is close by, find out whether you can visit to breastfeed over lunch.
- When you arrive to pick up your baby from child care, take time to breastfeed first. This will give you both time to reconnect before traveling home and returning to other family responsibilities.

GET A QUALITY BREAST PUMP

A good-quality electric breast pump may be your best strategy for efficiently removing milk during the workday. Electric pumps that allow you to express milk from both breasts at the same time reduce pumping time. See page 40 for more information on types of breast pumps and how to work with your insurance company to get them.

FIND A PRIVATE PLACE TO EXPRESS MILK

Work with your supervisor to find a private place to express your milk. The Affordable Care Act (the health care law) supports work-based efforts to assist nursing mothers. Employers are required to provide reasonable break times in a private place (other than a bathroom) for nursing women to express milk while at work. (Employers with fewer than 50 employees are not required to comply if it would cause the company financial strain.)

If your company does not provide a private lactation room, find another private area you can use. You may be able to use an office with a door, a conference room, or a little-used storage area. The room should be private and secure from intruders when in use. The room should also have an electrical outlet if you are using an electric breast pump. Explain to your supervisor that it is best not to express milk in a restroom. Restrooms are unsanitary, and there are usually no electrical outlets. It can also be difficult to manage a pump in a toilet stall.

WHEN TO EXPRESS MILK

At work, you will need to express and store milk during the times you would normally feed your baby. (In the first few months of life, babies need to breastfeed eight to 12 times in 24 hours.) This turns out to be about two to three times during a typical eight-hour work period. As the baby gets older, the number of feeding times may go down.

Expressing milk can take about 10 to 15 minutes. Sometimes it may take longer. Many women use their regular breaks and lunch break to pump. Some women come to work early or stay late to make up the time needed to express milk.

HOW MUCH MILK SHOULD I SEND WITH MY BABY DURING THE DAY?

You may need to pump two to three times each day to make enough milk for your baby while he or she is with a caregiver. Research shows that breastfed babies between 1 and 6 months old take in an average of two to four ounces per feeding. As your baby gets older, your breastmilk changes to meet your baby's needs. So, your baby will get the nutrition he needs from the same number of ounces at 9 months as he did at 3 months.

Some babies eat less during the day when they are away from their mothers and then nurse more often at night. This is called "reverse-cycling." Or, babies may eat during the day and still nurse more often at night. This may be more for the closeness with you that your baby craves. If your baby reverse-cycles, you may find that you do not need to pump as much milk for your baby during the day. Track your baby's weight and diapers to make sure your baby gets enough milk. (See page 20 for more ways to tell whether your baby is getting enough milk.)

PUMPING TIPS

It may take time to adjust to pumping breastmilk in a work environment. For easier pumping, try these tips for getting your milk to let down from the milk ducts:

- Relax as much as you can.
- Massage your breasts.
- Gently rub your nipples.
- Visualize the milk flowing down.
- Think about your baby. Bring a photo of your baby or a blanket or item of clothing that smells like your baby.

STORING YOUR MILK

Breastmilk is food, so it is safe to keep it in an employee refrigerator or a cooler with ice packs. Talk to your supervisor about the best place to store your milk.

If you work in a medical department, do not store milk in the same refrigerators where medical specimens are kept.

Be sure to label the milk container with your name and the date you expressed the milk.

YOUR BUSINESS CAN TAKE EASY STEPS TO SUPPORT BREASTFEEDING!

SUPPORTING NURSING MOMS AT WORK: EMPLOYER SOLUTIONS

The Office on Women's Health helps businesses support nursing mothers at work at this website: www.womenshealth.gov/breastfeeding/employer-solutions/index.php. This site offers cost-effective tips and time and space solutions listed by industry.

THE BUSINESS CASE FOR BREASTFEEDING

The Office on Women's Health partnered with the Health Resources and Services Administration to create a toolkit that encourages business owners to support breastfeeding. The program points out the benefits of breastfeeding to businesses and gives them easy steps to make a breastfeeding-friendly work environment. Share this site with your employer: http://www.womenshealth.gov/breastfeeding/business-case-for-breastfeeding.html.

NUTRITION AND FITNESS

HEALTHY EATING

Many new mothers wonder whether they should be on a special diet while breastfeeding, but the answer is no. You can take in the same number of calories that you did before becoming pregnant, which helps with weight loss after birth. There are no foods you need to avoid. In fact, you can continue to enjoy the foods that are important to your family, including the special meals you know and love.

As for how your eating habits affect your baby, there are no special foods that will help you make more milk. You may find that some foods cause stomach upset in your baby. You can try avoiding those foods to see if your baby feels better and ask your baby's doctor for help.

Keep these important nutrition tips in mind:

- Drink plenty of fluids to stay hydrated (but fluid intake does not affect the amount of breastmilk you make). Drink when you are thirsty, and drink more fluids if your urine is dark yellow. A common suggestion is to drink a glass of water or other beverage every time you breastfeed.
- Limit drinks with added sugars, such as sodas and fruit drinks.
- Limit the amount of caffeine you get each day. Drinking a moderate amount (one or two cups a day) of coffee or other caffeinated beverages does not cause a problem for most breastfeeding babies. Too much caffeine can cause the baby to be fussy or not sleep well.
- Talk to your doctor about taking a supplement. Vitamin and mineral supplements should not replace healthy eating, but in addition to healthy food choices, some breastfeeding women may need a multivitamin and mineral supplement.
- See page 30 for information on drinking alcohol and breastfeeding.

TIPS FOR HEALTHY EATING

ChooseMyPlate.gov has tip sheets that you can keep on your refrigerator to remind you to eat healthy. Download and print the "10 Tips Nutrition Education Series" at www.choosemyplate.gov.

CHOOSEMYPLATE FOR MOMS

GET A DAILY PLAN FOR MOMS DESIGNED JUST FOR YOU.

The USDA's online, interactive tool can help you choose foods based on your baby's nursing habits and your energy needs. Visit https://www.choosemyplate.gov/pregnancy-breastfeeding to figure out how much you need to eat, choose healthy foods, and get the vitamins and minerals you need.

The SuperTracker tool at https://www.choosemyplate.gov/tools-supertracker can help you plan, analyze, and track your eating habits and physical activity. You can also set a personal calorie goal!

CAN A BABY BE ALLERGIC TO BREASTMILK?

Research shows that what you eat affects your milk only slightly. Babies love the flavors of foods that come through the milk. Sometimes a baby may be sensitive to something the mother eats such as eggs or dairy products like milk and cheese. Watch your baby for the symptoms listed below, which could indicate that your baby has an allergy or sensitivity to something you eat:

- Diarrhea, vomiting, green stools with mucus or blood
- Rash, eczema, dermatitis, hives, dry skin
- Fussiness during or after feedings
- Inconsolable crying for long periods
- Sudden waking with discomfort
- Wheezing or coughing

These signs do not mean your baby is allergic to your milk, only to something that you ate. You may need to stop eating whatever is bothering your baby or eat less of it. You may find that after a few months you can eat the food again with better results.

Talk with your baby's doctor if you notice your baby having any of the symptoms listed above. If your baby ever has problems breathing, call 911 or go to your nearest emergency room.

VEGAN DIETS

If you follow a vegan diet or one that does not include any forms of animal protein, you or your baby might not get enough vitamin B-12. In a baby, B-12 deficiency can cause symptoms such as loss of appetite, slow motor development, being very tired, weak muscles, vomiting, and blood problems. You can protect your and your baby's health by taking vitamin B-12 supplements while breastfeeding. Talk to your doctor about your vitamin B-12 needs.

FITNESS

Being active helps you stay healthy, feel better, and have more energy. It does not affect the quality or quantity of your breastmilk or your baby's growth. It may help to wear a comfortable support bra or sports bra and pads in case you leak during physical activity. It is also important to drink plenty of fluids. Be sure to talk to your doctor about how and when to slowly begin exercising following your baby's birth.

HANDLING STRESS

Both short- and long-term stress can affect your body. In fact, stress can make you more likely to get sick. It can also make problems you already have worse. It can play a part in a range of issues, including trouble sleeping, stomach problems, headaches, and mental health conditions.

Having a new baby and learning to breastfeed can be stressful. But it is important for new mothers to take care of themselves. Try to listen to your body so that you can tell when stress is affecting your health.

Take these steps to help ease stress while breastfeeding:

RELAX.
Try and find a quiet, comfortable, relaxing place to nurse. This will help make breastfeeding more enjoyable for you and your baby. Use this time to bond with your baby, listen to soothing music, meditate, or read a book.

SLEEP.
Your stress could get worse if you don't get enough sleep. With enough sleep, it is easier to cope with challenges and stay healthy. Try to sleep whenever possible.

SURROUND YOURSELF WITH SUPPORTIVE PEOPLE.
It really does take a village to raise a child. Let family and friends help you with housework or hold your baby while you rest or take a bath.

GET MOVING.
Physical activity improves your mood. Your body makes certain chemicals, called endorphins, before and after you exercise. These relieve stress and improve your mood. If you are a new mother, ask your doctor when it is okay to start exercising.

DON'T DEAL WITH STRESS IN UNHEALTHY WAYS.
This includes drinking too much alcohol, using drugs, or smoking, all of which can harm you and your baby. It is also unhealthy to overeat in response to stress.

GET HELP FROM A PROFESSIONAL IF YOU NEED IT.
A therapist can help you work through stress and find better ways to deal with problems. Medicines can help ease symptoms of depression and anxiety and help promote sleep. But not all medicines are safe to take while breastfeeding. Talk to your doctor or pharmacist before taking any medicine.

DID YOU KNOW?

Breastfeeding can help mothers relax and handle stress better. Skin-to-skin contact with your baby has a soothing effect.

WEANING YOUR BABY

Are you ready to wean? Do you think your child is ready to wean?

From the first time you feed your baby something other than your milk, the process of weaning begins. Weaning is the journey between when your child is fully breastfed (or breastmilk-fed, if you feed expressed milk) and when your child stops nursing for comfort and nutrition.

In the normal course of breastfeeding, weaning happens gradually and without any conscious effort or action. However, you may have a desire or reason to wean before your child would have naturally stopped nursing or receiving your milk.

If you need or want to actively wean before it happens on its own, it is best for you and your child to go slowly. Weaning suddenly can be physically painful for you and emotionally hard on you and your baby.

WHEN TO WEAN YOUR BABY

In cultures where there is no social pressure to wean, children usually stop breastfeeding or receiving their mother's milk between 2½ and 7 years old[1].

In families that let it happen on its own, weaning happens very gradually, often without any fuss, process, or effort.

The American Academy of Pediatrics recommends:

- Breastfeed exclusively (no other foods or drinks) for the first 6 months of your baby's life.
- After 6 months of age, continue to breastfeed and begin to add solid foods (this is when weaning begins).
- After your baby's first birthday, continue to breastfeed for as long as both you and your baby are comfortable. Some mothers and babies continue to nurse into the toddler years and beyond. Breastfeeding is good for mother and child at any age, and no evidence has been found of developmental harm from breastfeeding an older child.

You may also want to consider delaying weaning if:

- Your child is teething or sick. Your baby will need extra comfort during these times. Also, the antibodies in your breastmilk help your baby fight off illness and germs.
- Your family is going through a major change, like moving or if you recently went back to work and your baby is now in child care.
- Your baby is struggling. If your baby is resisting all your attempts to wean, it may just not be the right time. If you can, wait and try again in another month or two.

If you have been advised to stop breastfeeding because you need surgery or you take a certain medicine, be sure to get to a second opinion. There are very few reasons that complete weaning is absolutely necessary. In most cases, you can still breastfeed after surgery, and many medicines are safe for both baby and mother.

Talk to an IBCLC who can help you decide whether you truly need to wean or just need some help getting you and your baby through a difficult time. You also can call the Office on Women's Health Helpline at 800-994-9662, Monday through Friday, 9 a.m. to 6 p.m. ET.

Also, try not to make the decision to wean on a day when breastfeeding is difficult.

[1]Dettwyler, K. A., Stuart-Macadam, P. (Eds.). (1995). Breastfeeding: Biocultural Perspectives. Piscataway, NJ: Aldine Transaction. Accessed on August 4, 2014, from Rogoff, B. (2003). The Cultural Nature of Human Development. Oxford University Press, pp. 64–65.

HOW TO TELL WHEN YOUR CHILD IS READY TO WEAN

Children who wean themselves rarely do so suddenly and without warning. The process is generally slow and gradual, even for babies who wean from the breast earlier than is normal due to separation from their mothers, pacifier use, or bottle-feeding.

If your baby suddenly rejects your breast, it is more likely a nursing strike, not a readiness to wean. Read more about nursing strikes on page 28.

You can watch for these signs, but they may be so gradual you may not notice:

NURSING SESSIONS HAPPEN LESS OFTEN. As children age, they naturally become more occupied with playing, exploring, and using their new skills like walking, talking, and eating interesting foods. Nursing sessions get further apart, even to the point of happening once a day, or, as time goes on, once every few days or a few times a month.

HE OR SHE LOSES INTEREST IN NURSING. Young children (younger than a year) who seem to lose interest in breastfeeding may do so because they get the comfort they need from sucking on pacifiers or their thumbs. These comforting behaviors may be more familiar to them than nursing. For these babies, weaning from the breast may not be difficult, but their nutritional and emotional needs will remain.

DOES MY CHILD NEED FORMULA WHEN I WEAN?

It depends on the age of your child.

IF YOUR BABY IS YOUNGER THAN 1 YEAR, your baby will need formula to replace the nutrition that is received at your breast. Because your breastmilk changes to meet your baby's needs as he gets older, he gets the nutrition he needs from the same number of ounces at 9 months as at 3 months old.

This is not true of formula. A breastmilk-fed baby who is weaned to formula may need more ounces of formula than breastmilk. Talk to your child's doctor to find out how much formula your baby needs and how to recognize signs that your baby is tolerating the formula well.

IF YOUR BABY IS OLDER THAN 1 YEAR, you can offer a meal or snack or a drink of water or cow's milk (if tolerated) at the time you would normally feed your child.

HOW TO WEAN YOUR BABY

Weaning works best when it happens slowly, in its own time. However, there are some reasons you may have to stop breastfeeding before your baby is ready and even perhaps before you planned to stop breastfeeding.

Weaning your child suddenly — going "cold turkey" — may cause your breasts to become painfully engorged.

- If your baby is still very young, you may need to express some milk from your breasts or pump a tiny amount if your breasts become uncomfortable. Do not express or pump the amount you normally would for a feeding. When you pump or nurse, your breasts make more milk in response. By removing less milk than normal, your breasts will make less milk. Contact an IBCLC if you have overly full breasts while weaning.
- You will need to substitute your milk with formula if your baby is younger than 1 year. If your baby is older than 1 year, you can stop offering the breast and drop one feeding a time, over several weeks.
- Start by taking away his or her least favorite feeding first. Nursing sessions that come before falling asleep or after waking are often the ones to go last. Wait a few days to drop another feeding.
- Avoid sitting in your special nursing chair, but do offer extra cuddles or babywearing during this transition so your child can still enjoy being close to you.
- Distract your child with an activity or outing during the times when you would normally nurse.
- If your baby likes to nurse to sleep, try a car ride or let your partner do the bedtime routine.
- Remember, even if you and your child are ready to wean, it can be hard emotionally on both of you. Give your baby lots of extra love and attention during this time.
- Talk to your child about weaning. Even young children can understand what you are saying and offer their opinions and ideas for how best to stop breastfeeding.

Even when you wean slowly and gradually, it may still be uncomfortable for you. Try these tips to ease discomfort.

- Hand-express or pump just enough milk to take the pressure off.
- Do not bind your breasts. This can cause plugged ducts or a breast infection.
- Talk to your doctor about whether a pain reliever, such as ibuprofen, might be helpful for you.

Some women also report relief from pain with cabbage leaves, herbs, or medicines. Always talk to your doctor before trying any herbal remedies or alternative therapies to make sure they are safe for you and your baby.

- Cold cabbage leaves feel good on engorged breasts. (Talk to your doctor before using cabbage leaves if you are allergic to cabbage or sulfa.) Chill the cabbage leaves and wash before using. Crunch each leaf in your hand to break the veins. Then place the leaves in your bra over your breasts and under the arms if needed. Leave the cabbage leaves on until they wilt. Apply new leaves as often as needed for comfort.
- Sage tea has natural estrogen (a female hormone) that can decrease your milk supply. Other herbs that may help with weaning include peppermint, parsley, yarrow, and jasmine. Antihistamines or hormonal birth control may also help reduce milk supply.

QUESTIONS TO ASK YOUR BABY'S DOCTOR

Use this tear-out form to write down questions you have for your baby's doctor and bring it to your next visit.

If your baby is not eating well or if you are concerned about your baby's health, call your pediatrician right away.

QUESTIONS TO ASK YOUR DOCTOR

Use this tear-out form to write down questions you have for your doctor and bring it to your next visit.

If you have symptoms of an infection (see **page 26**) or urgent health concerns, call your doctor right away.

FEEDING CHART

Mark your baby's feedings in the chart below. The times should be when the feeding begins. You can note how long the baby fed at each breast. But keep in mind that feeding times will vary. Your baby will let you know when he or she is finished eating. If you are feeding pumped breastmilk, include the amount your baby eats.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
6 a.m.							
7 a.m.							
8 a.m.							
9 a.m.							
10 a.m.							
11 a.m.							
NOON							
1 p.m.							
2 p.m.							
3 p.m.							
4 p.m.							
5 p.m.							
6 p.m.							
7 p.m.							
8 p.m.							
9 p.m.							
10 p.m.							
11 p.m.							
MIDNIGHT							
1 a.m.							
2 a.m.							
3 a.m.							
4 a.m.							
5 a.m.							

HEALTH INFORMATION FROM THE OFFICE ON WOMEN'S HEALTH

The Office on Women's Health (OWH) offers a wide range of women's health information through our toll-free Helpline and website, **womenshealth.gov**. Contact the OWH Helpline at **800-994-9662** to talk to an information and referral specialist or breastfeeding peer counselor.

Follow us on Facebook (**www.facebook.com/HHSOWH**) and Twitter (**www.twitter.com/womenshealth**) to get the latest on breastfeeding and other women's health topics.

www.womenshealth.gov
Empowering women to live healthier lives

www.womenshealth.gov/itsonlynatural
Sharing benefits of breastfeeding with African-American women

www.girlshealth.gov
Helping girls learn about health and growing up

www.womenshealth.gov
800-994-9662

OWH
OFFICE ON WOMEN'S HEALTH

Breastfeeding and Birth Control

Birth Control Method and Effectiveness at Preventing Pregnancy	How is it obtained?	How long does it last or how often should it be taken?	Does it contain hormones?	Is it okay for breastfeeding patients? How soon can it be used?	Does it prevent HIV/STDs?	Other considerations?
Methods that require a health care provider for insertion or prescription						
 **Implant** Small plastic rod that contains a progestin-only hormone that is inserted under the skin of the arm 99% effective	Inserted by a health care provider	Lasts up to three years	Yes	Yes; can be used the same day as delivery	No	• A health care provider must remove the implant. • The patient may not get a period. • Milk supply may decrease and the patient may need additional lactation support.
 **IUD, Copper** A small plastic and copper device that is inserted inside the uterus 99% effective	Inserted by a health care provider	Lasts up to 10 years	No	Yes; can be used immediately after or at least one month after delivery	No	• A health care provider must remove the IUD. • For this method to be inserted at delivery, the patient will need to be counseled as a part of her prenatal care.
 **IUD, Hormonal** A small plastic device containing a progestin-only hormone that is inserted inside the uterus 99% effective	Inserted by a health care provider	Lasts between three and five years	Yes	Yes; can be used immediately after or at least one month after delivery	No	• A health care provider must remove the IUD. • For this method to be inserted at delivery, the patient will need to be counseled as a part of her prenatal care. • The patient may not get a period. • Milk supply may decrease and the patient may need additional lactation support.
 **Shot** An injection containing a progestin-only hormone 97-99% effective	Administered by a health care provider	Once every three months	Yes	Yes; can be used the same day as delivery *but* preferably one month after delivery	No	• In the first few months, the patient may experience irregular bleeding and then may not get a period. • This method cannot be reversed during the three-month period. • Milk supply may decrease and the patient may need additional lactation support.
Patch A thin, plastic square adhesive patch containing two hormones that is placed on the skin 92-99% effective	Prescribed by a health care provider and obtained at a pharmacy	Each month a new patch is applied every week for three weeks; during week four no patch is used	Yes	Yes; can be used as early as one month after delivery (six weeks if there is an increased risk of VTE)	No	• Milk supply may decrease and the patient may need additional lactation support.
 **Pills** Progestin only: a small pill containing one hormone that is swallowed 92-99% effective	Prescribed by a health care provider and obtained at a pharmacy	One pill a day at the same time every day	Yes	Progestin-only: Yes; can be used the same day as delivery	No	• Milk supply may decrease and the patient may need additional lactation support.
Combined, estrogen and progestin: a small pill containing two hormones that is swallowed 92-99% effective	Prescribed by a health care provider and obtained at a pharmacy	One pill a day at the same time every day	Yes	Combined: Yes; can be used as early as one month after delivery (6 weeks if there is an increased risk of VTE)	No	• Milk supply may decrease and the patient may need additional lactation support.
Ring A soft, flexible plastic ring containing two hormones that is inserted into the vagina 92-99% effective	Prescribed by a health care provider and obtained at a pharmacy	The ring remains in place for three weeks each month and is removed during week four	Yes	Yes; can be used as early as one month after delivery (six weeks if there is an increased risk of VTE)	No	• The patient must be comfortable inserting the ring into her vagina. • Milk supply may decrease and the patient may need additional lactation support.
 **Diaphragm** A fitted, shallow dome-shaped silicone cup that is inserted into the vagina to cover the cervix 84-94% effective	Prescribed by a health care provider and obtained at a pharmacy	Every time the patient has sex	No	Yes; once the cervix returns to normal	No	• The patient must be comfortable inserting the diaphragm into her vagina. • The patient must use spermicide with the diaphragm.
Cervical Cap A fitted silicone cup that is inserted into the vagina to cover the cervix 60-91% effective	Prescribed by a health care provider and obtained at a pharmacy	Every time the patient has sex	No	Yes; once the cervix returns to normal	No	• The patient must be comfortable inserting the cervical cap into her vagina.
Methods that are available at the drugstore (no prescription needed)						
 **Condom, Male** A thin covering placed over the penis to keep sperm out of the vagina 82-98% effective	Obtained at a drugstore	Every time the patient has sex	No	Yes; can be used when it is safe and comfortable to resume sex	Yes	• Latex and non-latex options are available. • The patient should use water-based lubricant.
Condom, Female A pouch (with a ring at either end) inserted into the vagina 79-95% effective	Obtained at a drugstore	Every time the patient has sex	No	Yes; can be used when it is safe and comfortable to resume sex	Yes	• All are non-latex. • The patient should use water-based lubricant.
 **Spermicide** A chemical that stops sperm from moving and reaching the uterus 71-82% effective	Obtained at a drugstore	Every time the patient has sex	No	Yes; can be used when it is safe and comfortable to resume sex	No	
Sponge A round piece of foam with a nylon loop across the top and spermicide that is inserted into the vagina 68-91% effective	Obtained at a drugstore	Every time the patient has sex	No	Yes; can be used when it is safe and comfortable to resume sex	No	• The patient must be comfortable inserting the sponge into her vagina.

Breastfeeding

The experience of breastfeeding is special for so many reasons: the joyful closeness and bonding with your baby, the cost savings, and the health benefits for both mother and baby. Every woman's journey to motherhood is different, but one of the first decisions a new mom makes is how to feed her child. Here, you'll find facts about breastfeeding and get practical tips on how to make breastfeeding work for you while getting the support you need.

Q: Why should I breastfeed?

A: Breastfeeding is normal and healthy for infants and moms. Breastmilk has hormones and disease-fighting cells called antibodies that help protect infants from germs and illness. This protection is unique and changes to meet your baby's needs. Some reasons to breastfeed are:

- Breastfeeding offers essential nutrients and a nutritionally balanced meal
- Breastmilk is easy to digest.
- Breastmilk fights disease

Q: How long should I breastfeed?

A: The American Academy of Pediatrics recommends breastfeeding for at least 12 months, and for as long as both the mother and baby would like. Most infants should drink only breastmilk for the first six months.

Q: Does my baby need cereal or water?

A: Until your baby is 6 months old, the American Academy of Pediatrics recommends feeding your baby breastmilk only. Giving your baby cereal may cause your baby to not want as much breastmilk. This will decrease your milk supply. You can slowly introduce other foods starting around 6 months of age.

Q: Does my baby need more vitamin D?

A: Most likely, yes. Vitamin D is needed to build strong bones. All infants and children should get at least 400 International Units (IU) of vitamin D each day. To meet this need, your child's doctor may recommend that you give your baby a vitamin D supplement of 400 IU each day.

Q: Is it okay for my baby to use a pacifier?

A: If you want to try it, it is best to wait until your baby is at least 3 or 4 weeks old to introduce a pacifier. This allows your baby time to learn how to latch well on the breast and get enough milk.

Once your baby is breastfeeding well, you should use the pacifier when putting your infant to bed to reduce the risk of sudden infant death syndrome (SIDS).

Q: Is it safe to smoke, drink, or use drugs?

A: If you smoke, the best thing you can do for yourself and your baby is to quit as soon as possible. If you can't quit, it is still better to breastfeed because it may protect your baby from respiratory problems and SIDS. Be sure to smoke away from your baby, and change your clothes to keep your baby away from the chemicals smoking leaves behind. Ask a doctor or nurse for help quitting smoking!

You should avoid alcohol in large amounts. An occasional drink is fine, but the American Academy of Pediatrics recommends waiting two hours or more before nursing. You also can pump milk before you drink to feed your baby later.

It is not safe for you to use an illegal drug. Drugs such as cocaine, heroin, and PCP can harm your baby. Some reported side effects in babies include seizures, vomiting, poor feeding, and tremors.

Q: Can I take medicines if I am breastfeeding?

A: Most likely. Almost all medicines pass into your milk in small amounts. Some have no effect on the baby and can be used while breastfeeding. Always talk to your doctor or pharmacist about medicines you are using and ask before you start using new medicines. This includes prescription and over-the-counter drugs, vitamins, and dietary or herbal supplements.

For some women, stopping a medicine can be more dangerous than the effects it will have on the breastfed baby.

Q: Do I still need birth control if I am breastfeeding?

A: Yes. Breastfeeding is not a sure way to prevent pregnancy, even though it can delay the return of normal ovulation and menstrual cycles. Talk to your doctor or nurse about birth control choices that are okay to use while breastfeeding.

Q: Does my breastfed baby need vaccines?

A: Yes. Vaccines are very important to your baby's health. Breastfeeding may also help your baby respond better to certain immunizations, giving him or her more protection. Follow the schedule your doctor gives you. If you miss any vaccines, check with the doctor about getting your baby back on track as soon as possible.

Content last updated: July 25, 2014

A project of the U.S. Department of Health and Human Services Office on Women's Health

Breastfeeding

Why breastfeeding is important

Breastfeeding protects babies

1. **Early breast milk is liquid gold** – Known as liquid gold, colostrum (coh-LOSS-trum) is the thick yellow first breast milk that you make during pregnancy and just after birth. This milk is very rich in nutrients and antibodies to protect your baby. Although your baby only gets a small amount of colostrum at each feeding, it matches the amount his or her tiny stomach can hold. (Visit How to know your baby is getting enough milk to see just how small your newborn's tummy is!)
2. **Your breast milk changes as your baby grows** – Colostrum changes into what is called mature milk. By the third to fifth day after birth, this mature breast milk has just the right amount of fat, sugar, water, and protein to help your baby continue to grow. It is a thinner type of milk than colostrum, but it provides all of the nutrients and antibodies your baby needs.
3. **Breast milk is easier to digest** – For most babies – especially premature babies – breast milk is easier to digest than formula. The proteins in formula are made from cow's milk and it takes time for babies' stomachs to adjust to digesting them.
4. **Breast milk fights disease** – The cells, hormones, and antibodies in breast milk protect babies from illness. This protection is unique; formula cannot match the chemical makeup of human breast milk. In fact, among formula-fed babies, ear

Related information

Pregnancy

The National Breastfeeding Campaign

Did you know?

While formula-feeding raises health risks in babies, it can also save lives. Very rarely, babies are born unable to tolerate milk of any kind. These babies must have soy formula. Formula may also be needed if the mother has certain health conditions and she does not have access to donor breast milk. To learn more about rare breastfeeding restrictions in the mother, visit the Breastfeeding a baby with health problems section. To learn more about donor milk banks, visit the Breastfeeding and special situations section.

infections and diarrhea are more common. Formula-fed babies also have a higher risk of:

- Necrotizing (nek-roh-TEYE-zing) enterocolitis (en-TUR-oh-coh-lyt-iss) a disease that affects the gastrointestinal tract in preterm infants.
- Lower respiratory infections
- Asthma
- Obesity
- Type 2 diabetes

Some research shows that breastfeeding can also reduce the risk of Type 1 diabetes, childhood leukemia, and atopic dermatitis (a type of skin rash) in babies.
Breastfeeding has also been shown to lower the risk of SIDS (sudden infant death syndrome).

For health professionals

Breastfeeding and the Risk of Postneonatal Death in the United States (American Academy of Pediatrics)

Breastfeeding and Health Outcomes (Agency for Healthcare Research and Quality)

A Summary of the Agency for Healthcare Research and Quality's Evidence Report on Breastfeeding in Developed Countries

Find more journal articles on breastfeeding.

Mothers benefit from breastfeeding

1. **Life can be easier when you breastfeed** – Breastfeeding may take a little more effort than formula feeding at first. But it can make life easier once you and your baby settle into a good routine. Plus, when you breastfeed, there are no bottles and nipples to sterilize. You do not have to buy, measure, and mix formula. And there are no bottles to warm in the middle of the night! You can satisfy your baby's hunger right away when breastfeeding.
2. **Breastfeeding can save money** – Formula and feeding supplies can cost well over $1,500 each year, depending on how much your baby eats. Breastfed babies are also sick less often, which can lower health costs.
3. **Breastfeeding can feel great** – Physical contact is important to newborns. It can help them feel more secure, warm, and comforted. Mothers can benefit from this closeness, as well. Breastfeeding requires a mother to take some quiet relaxed time to bond. The skin-to-skin contact can boost the mother's oxytocin (OKS-ee-TOH-suhn) levels. Oxytocin is a hormone that helps milk flow and can calm the mother.
4. **Breastfeeding can be good for the mother's health, too** – Breastfeeding is linked to a lower risk of these health problems in women:
    1. Type 2 diabetes

2. Breast cancer
3. Ovarian cancer
4. Postpartum depression

Experts are still looking at the effects of breastfeeding on osteoporosis and weight loss after birth. Many studies have reported greater weight loss for breastfeeding mothers than for those who don't. But more research is needed to understand if a strong link exists.

5. **Mothers miss less work** – Breastfeeding mothers miss fewer days from work because their infants are sick less often.

Breastfeeding benefits society

The nations benefits overall when mothers breastfeed. Recent research shows that if 90 percent of families breastfed exclusively for 6 months, nearly 1,000 deaths among infants could be prevented. The United States would also save $1.3 billion per year – medical care costs are lower for fully breastfed infants than never-breastfed infants. Breastfed infants typically need fewer sick care visits, prescriptions, and hospitalizations.

Breastfeeding also contributes to a more productive workforce since mothers miss less work to care for sick infants. Employer medical costs are also lower.

Breastfeeding is also better for the environment. There is less trash and plastic waste compared to that produced by formula cans and bottle supplies.

Breastfeeding during an emergency

When an emergency occurs, breastfeeding can save lives:

- Breastfeeding protects babies from the risks of a contaminated water supply.
- Breastfeeding can help protect against respiratory illnesses and diarrhea. These diseases can be fatal in populations displaced by disaster.
- Breast milk is readily available without needing other supplies.

More information on Why breastfeeding is important

Read more from womenshealth.gov

- Your Guide to Breastfeeding – This easy-to-read publication provides women the how-to information and support needed to breastfeed successfully. It explains why breastfeeding is best for baby, mom, and society and how loved ones can supporta

mother's decision to breastfeed. Expert tips and illustrations help new moms learn how to breastfeed comfortably and how to overcome common challenges.

Explore other publications and websites

- A Well-Kept Secret – Breastfeeding's Benefits to Mothers (Copyright © La Leche League International) – This publication provides information on the benefits of breastfeeding for the baby and the mother. It includes information on physiologic effects and long-term benefits.
- Benefits of Breastfeeding (Copyright © Linkages Project) – This fact sheet briefly describes the different health benefits that breastfeeding has for mothers and babies.
- Breast Milk Associated With Greater Mental Development in Preterm Infants, Fewer Re-hospitalizations – This news release describes a study which found that premature infants who were not fed breastmilk. Also, infants fed breast milk were less likely to have been re-hospitalized after their initial discharge than were the infants not fed breast milk.
- Breastfeeding – This website briefly describes the benefits of breastfeeding and what to do if you have trouble breastfeeding, and it links to information from the National Institute of Child Health and Human Development about breastfeeding.
- Breastfeeding and Maternal and Infant Health Outcomes in Developed Countries – This report explains the effects of breastfeeding on short- and long-term health outcomes in developed countries.
- Breastfeeding vs. Formula Feeding (Copyright © Nemours Foundation) – This publication discusses the benefits of breastfeeding and the pros and cons of bottle-feeding, as well as answering common breastfeeding questions.
- Can Breastfeeding Prevent Illnesses? (Copyright © La Leche International) – This publication explains how breastfeeding can prevent some illnesses in your baby.
- Does Breastfeeding Reduce the Risk of Pediatric Overweight? – Did you know that breastfeeding your child can reduce the chances that he or she will be overweight? This booklet explains the research behind this discovery and answers some of the questions you may have about the benefits of breastfeeding.
- Feeding Low Birthweight Babies (Copyright © Linkages Project) – Low birth weight babies are at risk for developing diabetes and heart disease later in life, but good feeding practices can lower the risk. This fact sheet describes how you can reduce the risks of disease with good breastfeeding practices.
- Feeding Your Newborn (Copyright © Nemours Foundation) – This publication offers information on breastfeeding and bottle-feeding. It covers the advantages of

breastfeeding, limitations of both breastfeeding and bottle-feeding, and possible challenges you may encounter.

- Got Mom (Copyright © American College of Nurse Midwives) – GotMom.org was created by the American College of Nurse-Midwives to provide breastfeeding information and resources for mothers and families. It has information on why breast milk is best, dispels common misunderstandings about breastfeeding, and provides a list of resources that can help women and families with breastfeeding.
- MedlinePlus – MedlinePlus provides access to extensive information about specific diseases and conditions. It also offers links to dictionaries, lists of hospitals and physicians, health information in Spanish and other languages, clinical trials, and other consumer health information from the National Institutes of Health.
- The Comprehensive Benefits of Breastfeeding (Copyright © American College of Nurse Midwives) - This publication lists the beneficial effects that breastfeeding has on mothers, babies, and society.
- What Are the Benefits of Breastfeeding my Baby? (Copyright © La Leche League International) – This publication discusses the benefits of breastfeeding, including the benefits for the baby, the mother, employers, and the environment.
- What are the Benefits of Breastfeeding my Toddler? (Copyright © La Leche League International) – This publication describes how breastfeeding your toddler can help his or her ability to mature and understand discipline, as well as provide protection from illness and allergies.
- What's in Breast Milk? (Copyright © American Pregnancy Association) – Proteins, fats, and vitamins are some of the substances that make up breastmilk. This publication describes this composition of breast milk and what makes it the best source of nutrition for your baby.

Connect with other organizations

- American Academy of Pediatrics
- American College of Nurse Midwives
- Breastfeeding Basics
- Bright Future Lactation Resource Centre
- Centers for Disease Control and Prevention, HHS
- International Lactation Consultant Association (ILCA)
- KellyMom
- Kids Health
- La Leche League International
- Maternal and Child Health Bureau, HRSA, HHS

- National Center for Education in Maternal and Child Health
- National Healthy Mothers, Healthy Babies Coalition
- Special Supplemental Nutrition Program for Women, Infants and Children, (WIC)
- United States Breastfeeding Committee (USBC)
- Womenshealth.gov, OWH, HHS
- World Alliance For Breastfeeding Action

Content last updated August 04, 2011

Resources last updated September 24, 2013

Information for breastfeeding families

Breastfeeding in the Hospital

Getting the best start, right in the hospital in the first few days of your baby's life, is key to long-term breastfeeding.

Talk to your obstetrician during your pregnancy so he/she is aware of your wishes. Talk to your labor nurse when you arrive at the hospital to assure that she knows your wishes and can help you when the time arrives. Talk to your pediatrician in a prenatal consultation so he/she can follow-up with your ideal plan.

First, ask that your baby be put on your tummy right after delivery

➢ Hold your baby skin to skin and watch him crawl up to the breast for his first feeding. This may happen from 10 to 40 minutes after birth.

➢ Keep your baby skin-to-skin until he has fed for the first time.

➢ Delay the eye treatment, first weight, newborn injections and other procedures that are common right after delivery until the first feeding is finished.

➢ If you give birth by cesarean-section, your partner can hold your baby skin-to-skin until you are able to hold him and breastfeed.

Second, keep your baby right with you at all times (rooming-in)

➢ If you are moved from the delivery area to the maternity area after the birth is over, hold your baby skin-to-skin during this transfer. Cover you both with blankets.

➢ Your baby can't breastfeed in the hospital nursery. Keep your baby with you so you can respond easily and quickly every time he shows feeding cues.

➢ Feed your baby 8-14 times each 24 hour day. It seems like a lot, allow your baby to tell you how hungry he is.

➢ Look for feeding cues:
Waking up, becoming agitated
Rooting (turning his head and opening his mouth)
Licking, smacking, mouthing movements
Sucking on fingers or fist
Crying is the last cue, don't wait for that!

➢ Continue holding your baby skin-to-skin, before feedings, after feedings, whenever your baby is upset.

Avoid unnecessary supplementation

➢ Feeding right after birth assures that your baby gets a nice big feeding right away. Then offer the breast often.

➢ If you are unsure your baby is breastfeeding properly, ask for help! Your nurse can give you pointers and if you need more assistance, ask to see the Lactation Consultant.

Information for breastfeeding families

Are Pacifiers a Problem for the Breastfed Baby?

Mothers often ask about whether it is OK to use a pacifier. Some want to use them to calm their baby, others are afraid to. What are the issues to consider?

Shorter Duration of Breastfeeding

Long thought to be a help for crying babies and frazzled parents, there are some new insights into the use of pacifiers for breastfeeding babies. The innocuous pacifier, or "soother" as it is called in some countries, may affect initiation of breastfeeding as well as duration of breastfeeding.

In a study by Righard and Alade it was found that the use of a pacifier before 2 weeks of age resulted in superficial and ineffective suckling technique in many infants. These infants were more likely to have breastfeeding problems. Their "findings suggest that the prerequisite of an uncomplicated and uninterrupted breastfeeding period is a correct sucking technique from the outset, and that excessive use of pacifiers and the early introduction of occasional bottles should be avoided." They also found a shorter duration of breastfeeding in the group who used pacifiers.

Victora et al found in surveying 354 mothers that there was a threefold risk of early weaning from the breast in breastfeeding infants who used a pacifier. They speculate that either less breast stimulation may result in lowered breastmilk production or that pacifier use may be a marker for breastfeeding difficulties, or that mothers use it to initiate early weaning.

The Cholecystokinin Link

The hormone, cholecystokinin, is released in the infant's gut in response to suckling. This release comes in two waves: the first, about 10 minutes into the feeding, is thought to be initiated by suckling stimulation to the vagal nerve and the second, about 30 minutes into the feeding, is stimulated by the presence of milk (fat) in the gut.

Cholecystokinin causes satiety, sedation and sleepiness. This response happens when the infant is feeding at the breast and can happen while sucking on a pacifier. Parents should be cautioned about the over-use of pacifiers resulting in missed feedings and failure to gain weight.

Pacifier use and Sudden Infant Death Syndrome

The use of a pacifier has been associated with reduction in the incidence of SIDs and the American Academy of Pediatrics has recommended the use of pacifier while going to sleep. In order to minimize the negative effect on breastfeeding, it is recommended not to use a pacifier until breastfeeding is well establish (the first few weeks). The risk of SIDs is highest in the 2nd and 3rd months of life.

The use of a pacifier while going to sleep is recommended then. When the infant is asleep and the pacifier falls from his mouth, it does not need to be replaced.

REFERENCES:

American Academy of Pediatrics Task Force on Sudden Infant Death Syndrome. The changing concept of sudden infant death syndrome: diagnostic coding shifts, controversies regarding the sleeping environment, and new variables to consider in reducing risk. Pediatrics. 2005 Nov;116(5):1245-55.

Feldens CA, Ardenghi TM, Cruz LN, Cunha Scalco GP, Vítolo MR. Advising mothers about breastfeeding and weaning reduced pacifier use in the first year of life: a randomized trial. Community Dent Oral Epidemiol. 2012 Dec 13. doi: 10.1111/cdoe.12030.

Jaafar SH, Jahanfar S, Angolkar M, Ho JJ. Effect of restricted pacifier use in breastfeeding term infants for increasing duration of breastfeeding. Cochrane Database Syst Rev. 2012 Jul 11;7:CD007202

Kronborg H, Vaeth M. How are effective breastfeeding technique and pacifier use related to breastfeeding problems and breastfeeding duration? Birth. 2009 Mar;36(1):34-42.

Marchini G, Lindén A. Cholecystokinin, a satiety signal in newborn infants? J Dev Physiol. 1992 May;17(5):215-9.

Moon RY, Fu L. Sudden infant death syndrome: an update. Pediatr Rev. 2012 Jul;33(7):314-20. doi: 10.1542/pir.33-7-314.

Nickel NC, Labbok MH, Hudgens MG, Daniels JL The extent that noncompliance with the ten steps to successful breastfeeding influences breastfeeding duration. J Hum Lact. 2013 Feb;29(1):59-70.

Righard, L., & Alade, M. (1992). Sucking Technique and Its Effect on Success of Breastfeeding. Birth 19:4, 185-189.

Victoria, C., et al. (1993). Use of Pacifiers and Breastfeeding Duration. The Lancet 341, 404-406.

Uvnaas-Moberg, K., Marchini, G., Winberg, J. Plasma cholecystokinin concentrations after breastfeeding in healthy 4 day old infants. Archives of Disease in Childhood. 1993 68: 46-48.

Information for breastfeeding families

Helps From Friends and Family

New mothers need help and support in the early days of breastfeeding. Partners, husbands, grandparents, siblings and friends all can play a critical role in meeting the needs of a new mother. Everyone needs to be on the same "wave length" when offering help and suggestions. Be aware of differences in culture and changes in parenting philosophy from generation to generation.

How to Help

Bring the baby to mom for feedings

Change diapers

Watch for feeding cues

Burp the baby

Hold the baby skin to skin

Walk, rock, swing and cuddle the baby

Take care of household duties

Make sure mom has some help for the first 6 weeks or so

Bathe the baby

Take care of the other children

Offer encouragement

Be there!

What Has Changed

More breastfeeding, limited infant formula

Feed 8-12 times or more times each day when the baby shows feeding cues. No feeding schedules.

Respond to the baby quickly. No "crying it out"

Minimal pacifier use

Less babysitting, bring baby along

Continue breastfeeding while employed by using a breast pump at work

Notes from Dad to Mom

- ✓ Treat me like I know what I a doing, teach me when I don't
- ✓ Look at me like you used to
- ✓ Let me help when you are tired
- ✓ Arrange to spend some alone time with me
- ✓ Do something special for me
- ✓ Do care activities together until I feel comfortable
- ✓ Take my advice
- ✓ Be agreeable with my family
- ✓ Encourage me to be part of the special relationship you have with the baby
- ✓ Call me "Dad"
- ✓ Ask me what my concerns are and listen
- ✓ Ask for help if you need it

Advice for grandparents: http://www.parentingstartshere.com/index.php/2011/09/07/8-ways-grandparents-can-offer-support-to-a-new-family/

Notes from Mom to Dad

- ✓ Take the baby for awhile and give me a break
- ✓ Tell me I am doing a good job
- ✓ Be my "breastfeeding coach"
- ✓ Plan something special for the two of us
- ✓ Give me a massage
- ✓ Send me flowers
- ✓ Limit my visitors
- ✓ Make dinner or breakfast in bed
- ✓ Be agreeable with my family
- ✓ Don't question purchases to make breastfeeding easier/more comfortable
- ✓ Wash the pump kit
- ✓ Do some of the housework
- ✓ Plan time so I can sleep
- ✓ Call me "Mother"
- ✓ Just listen and offer support
- ✓ Be our advocate for nursing
- ✓ Bring the baby to me for nighttime feedings
- ✓ Feed my pumped breastmilk at some feedings
- ✓ Get involved in our baby's care
- ✓ Ask for help if you need it
- ✓ Talk proudly to your friends about breastfeeding

Information for breastfeeding families

Breastfeeding Moms Survival Guide for the First Two Weeks

Breastfeed every 1 -3 hours

It sounds like a lot, but your baby needs your milk and your breasts need the stimulation to bring an abundant milk supply. Newborns need to be fed around the clock so they get 8-12 feedings each 24 hour period

Wake your baby up well before feedings

A drowsy baby will not feed for long. Undress him to his diaper, rub his tummy and back, talk to him and rock him back and forth if necessary until his eyes open. A good strategy is to put the baby naked (except for a diaper) on your chest skin to skin for 1/2 hour prior to feeds.

Keep your baby sucking through the feeding

If she drifts off to sleep, "bug her" to keep her awake. Massage, cool wash cloths, blowing on her face, and talking to her will keep her going. Look for about 15-20 minutes of vigorous sucking on each breast.

Try baby led latching

Get in a reclining position and place the baby on top of you in any position that is comfortable for you. Allow the baby to locate the breast and latch-on. His head will bob around until he locates the breast. When his chin feels the breast first, he will open wide and latch-on. Try again if you feel any nipple pain.

Read this for more details.
http://www.biologicalnurturing.com/index.html

If your breasts get full, have your baby empty them for you by frequent feeding

If that is not enough, you may use a breast pump prior to feedings to get the milk flowing and shape the nipple, then feed the baby. After feedings, if you are still over-filled, use the breast pump again. Ice is also a good way to slow down breastmilk production at this time. And it will feel good!

Look for one wet diaper for each day the baby is old until day 6

Continue with 6 wet diapers and 2-3 stools daily. For example, 3 wet diapers on day three, four on day four and so on. More is fine, but if you are not getting these minimums, call me or your pediatrician for evaluation of your situation and advice.

If you nipples get sore

Try the sandwich hold. Gently squeeze the breast into a "sandwich". Create an oval with your thumb lined up with your baby's nose, your fingers under the breast.

When do I get to sleep?

Sleep when your baby sleeps. Newborns tend to feed a lot at night and sleep more during the day. Around the clock feeds are grueling and you can maximize your sleep by napping when your baby does. Accustom yourself to these quick "cat-naps" to help you feel refreshed. You can also encourage the baby to spend more time awake during the day by feeding and playing with him.

Do as little as possible at night

Feed your baby when he tells you he is hungry. Don't turn on any lights, don't change the diaper (unless it is running out or he has a diaper rash). If your baby "really wakes" up you will be ready to go back to sleep and he will be ready to play.

Find your groove

It will take several weeks for you and your baby to get into a pattern of feedings and nap times. Go with the flow and allow your baby to show you what his natural rhythms are. He will develop a pattern that works for him. Schedules don't tend to work until the baby is a bit older and bigger. You can encourage a more predictable pattern, later.

Bottle Feeding Your Infant

If you decide to bottle feed, you will give your baby infant formula until he or she is a year old. Infant formula is the best alternative to breast milk. Patterned after human milk, formula gives babies an excellent balance of nutrients they need for growth and development during the all-important first year of life. An advantage of bottle feeding is that these times can also be shared by the baby's father and other members of the family.

While the term "bottle feeding" usually refers to the use of infant formula, many nursing mothers bottle feed too. Typically, they'll have someone else give the baby a bottle of infant formula or pumped breast milk for feedings they have to miss.

At first, feeding a newborn will take time and patience, and it must be done frequently because of the small size of your infant's stomach. New babies do not operate on a regular schedule. At first, your baby will probably want to be fed every two to four hours, usually taking about 20 to 30 minutes. Babies who finish faster may be getting the formula too fast, which is hard on the digestive system. If this happens, the nipple should be replaced with a smaller hole, which will help facilitate normal consumption.

A new baby may drink as little as 1 ounce or as much as 3 to 4 ounces during a single feeding. In the past, mothers were told to wait four hours between feedings. However, this left many hungry babies unsatisfied until their next feedings. Today, we understand that it's better to feed "on demand."

The amount of formula can vary from feeding to feeding. Large, active babies may need more formula than smaller, less active ones, especially those who sleep a lot. Fussy babies may want food more often than quiet babies. If you're using infant formula, it's hard to know how much to offer the baby. It's best to include one more ounce than you think the baby will drink. Let your baby be your guide; he or she will usually make it clear when interest in a feeding is lost, or when he or she would like more. Babies should not be pushed to take more than they want, but they should not be given less than they need either.

Types of Bottle-Feeding Systems

- Bottle with regular nipple
- Disposable system with bags and nipple
- Disposable system with container and nipple

Types of Formula

- Dry—this is the least expensive. It requires mixing and can be prepared for one or more feedings.
- Concentrated—this is more expensive. It's easy to mix, can be used for one day's bottle, and can be kept in the refrigerator for 24 hours.
- Ready to feed—this is the most expensive. No mixing is required. It can be used for one or more feedings and can be kept in the refrigerator for 24 hours.

Stools

If your baby is bottle fed, the stools are more likely to look yellowish-tan but may also be green, brown, or grayish. Stools may be loose or liquidy, especially in nursing babies. This type of stool is not the same as diarrhea. With diarrhea, stools are more frequent, completely liquid, and leave watery rings in the baby's diaper. If your baby's stools are small and pebble like, regardless of frequency, the baby may be constipated. Don't give your baby an enema, suppository, or laxative until you have talked to your provider.

As long as your baby seems happy and content, is eating normally, and has no signs of illness, don't worry about minor changes in stools. Normal babies may have several bowel movements a day or none for one or two days. It's also normal for your baby to grunt or turn red in the face while having a bowel movement.

Burping

While nursing, a baby may swallow air along with the milk. This is especially true if the baby is a "gulper." Holding your baby in an upright position, while supporting the head, will bring up the most air bubbles. Patting and rubbing the baby's back will also help. When bottle feeding, burp the baby after half of the bottle is gone or when the baby stops feeding. Some babies burp a lot and others not at all. If your baby gets fussy soon after feeding, try burping.

If you have any questions, please call our office.

CONTACTING US AFTER HOURS

We have an answering service that will pick up your calls after hours and on the weekend. They will contact the provider from our group and we will call you back. If you ever do call our office, (607-734-6544) and no one returns your call you can use the hospital number 607-737-4100 as a back up. Tell the operator that you are a patient of Arnot Health OB/gyn and Midwifery and your call will be directed appropriately. Our doctors and midwives are on call for URGENT problems. If you are calling for a prescription refill or a non-emergent matter please call the office during regular business hours.

Locations

We have three offices located in two counties for ease of scheduling. Some visits may require an ultrasound which can limit your options of location depending on where our sonographers are that day. As always, we strive to make appointments as convenient and accessible as possible for you.

Health Center for Women	**Horseheads Medical Office Buidling**	**Corning Medical Office Building**
600 Fitch Street Suite 101	100 John Roeemelt Drive	123 Conhocton Street
Elmira, New York 14905	Horseheads, NY 14845	Corning, NY 14830
Phone: (607) 734-6544	Phone : (607) 796-2162	Phone: (607) 481-2222