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See Me, Feel Me
is an education project of



Star Legacy Foundation

Dedicated to Stillbirth Research and Education

*The information in this
booklet is not intended to
replace medical advice.
Please contact your health
care provider with any
questions or concerns.*

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 **See Me, Feel Me**
dedicated to stillbirth research & education





Pregnancy is an exciting and beautiful time when parents prepare to welcome a new life into their family. The development of this life is nothing short of a miracle; but, unfortunately (like most things in life) there are no guarantees and sometimes things can go wrong. Nearly 30,000 babies are stillborn* in the United States every year.⁽¹⁾ The good news is there are measures you can take to enhance your chances of having a healthy baby.

Your parenting duties begin now!

WHY SEE ME, FEEL ME?

First – it's fun! Getting to know your baby is one of the most magical parts of being pregnant! ONLY YOU get to have this amazing experience to know your child before he/she is born! *This is a great privilege, but also a great responsibility.*



Secondly, some conditions mentioned in this brochure may increase the risk of adverse pregnancy outcomes including premature labor and delivery, birth injury, and stillbirth.^(7, 8) Having as much information about you, your baby, and your baby's environment as possible allows you and your healthcare team to make the best decisions to improve chances of your baby's healthy arrival. Finally, we believe the mother knows her baby best! Mom's intuition and concerns about unusual symptoms should play a significant role in the care of any pregnancy.

*Stillbirth is defined as the death of an unborn baby at 20 or more weeks gestation.

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OTHER CONSIDERATIONS

New research is being conducted every day to learn more about reducing the risk of poor pregnancy outcomes. The following topics are emerging as possible benefits. Discuss these with your obstetric care provider.

- High blood pressure is known to cause problems, but a recent study indicates low blood pressure may be of concern as well. If you have low or borderline low blood pressure, discuss this risk with your healthcare team.⁽⁹⁾
- If you snore or have trouble breathing at night, discuss this with your healthcare provider as sleep apnea has been linked to high blood pressure and pre-eclampsia, and it can be treated, even during pregnancy.⁽¹³⁾
- Do your best to maintain a healthy sleep schedule. Poor sleep is associated with a greater risk of longer labors and c-sections. Tell your provider if sleep is a concern.⁽¹⁴⁾
- Sleeping on your left side may help reduce the risk of stillbirth. Doctors, nurses, and midwives often use lying on the left side to enhance blood flow to the baby during labor. A new study shows this may also be true throughout the pregnancy.⁽¹⁰⁾
- Invasive exams such as internal (*vaginal*) exams and membrane stripping are being shown to increase the risk of infection spreading to the uterus and baby. Discuss the risks and benefits of any invasive procedure with your provider before it is conducted.⁽⁴⁾
- Extremes in maternal age (*less than 20 years old or older than 35 years old*) may increase the risk of poor outcomes. Also, African-American women experience higher rates of stillbirth than women of other ethnicities in the United States. African-American women, women less than 20 years of age, and women over 35 years of age should discuss this risk with their providers to determine if additional testing or surveillance is needed.⁽⁸⁾
- Women having their first baby or those who have had a previous stillbirth, premature birth, or birth injury have a higher risk of stillbirth. If this is your first pregnancy or you have experienced these issues with a previous pregnancy, ask your provider about this increased risk and what to watch for.⁽⁸⁾



BEFORE PREGNANCY

1. Visit your healthcare provider before you get pregnant.

The first step to having a healthy baby is to start with a healthy mother. Schedule an appointment with your healthcare provider to determine if you have any health concerns that should be addressed before or during pregnancy. Be sure to mention your intentions to become pregnant. Your provider may evaluate your immune status, screen for common infections, or test for other health indicators before you become pregnant. Certain vitamins or supplements, like folic acid, may be recommended to ensure you and your baby's health. Many common medications (whether prescribed, natural, or over the counter) and diseases like diabetes, auto immune disorders, heart disease, thyroid disorders, alterations in sleep, hypertension, infections, renal disease, and others can predispose you to complications during the pregnancy.⁽¹¹⁾ The risk of miscarriage, stillbirth, premature birth, and birth injury can be reduced with good attention to the health of you and your baby. Your health care provider will help you develop a plan that is best for you at this time.



2. If you smoke or use recreational drugs, it is time to quit. Elimination of alcohol is recommended.

Smoking, alcohol use, and drug use have been proven to be harmful to you and your baby.⁽¹¹⁾ Your health care provider may be able to recommend specific programs to assist your efforts to quit if needed.

3. Adopt a healthy lifestyle.

If you are overweight, now is the time to begin a weight-loss program to include a healthy diet and active lifestyle. Overweight and obese women have a higher risk of complications during pregnancy including high blood pressure, diabetes, and stillbirth.⁽²⁾ Weight loss during pregnancy generally is not recommended. Discuss a healthy weight and nutrition plan with your health care provider. If you are often stressed, talk to your provider about reducing or eliminating stress in your life before and during pregnancy.

4. Know your family history.

Ask your family and your partner's family about their pregnancies and health histories. Some genetic issues should be evaluated before or early in a pregnancy. If female relatives have had difficult pregnancies or poor pregnancy outcomes, please discuss these issues with your OB or midwife and how they may impact you and your pregnancy. Consider genetic counseling and testing when indicated. If family history is not known or available, be sure to tell your health care team.

SEE ME

Technology today allows us to have a better "picture" of an unborn baby than ever before. Testing and monitoring during pregnancy provide information about the health and development of the mother and baby. For example, blood tests like PAPP-A and AFP are indicators of how well the placenta is functioning.⁽³⁾ Periodic urine cultures (more than the quick urine test) will monitor for signs of infection. Technology may help avoid invasive exams that can increase the spread of infection.⁽⁴⁾

Ultrasound examinations visualize the baby and his/her environment. Early in your pregnancy, your provider may do an ultrasound to confirm your pregnancy and to establish the gestational age of your baby.



Around 20 weeks, another ultrasound exam reviews the baby's anatomy to look for major organ malformations or concerns. Your provider should be able to discuss with you the size, position, and characteristics of the umbilical cord and placenta. Knowledge of these factors will help you and your provider determine if additional surveillance may be necessary throughout your pregnancy. Many obstetrical providers are now doing an additional ultrasound

during the third trimester (usually 28-30 weeks) to monitor the baby's growth, amount of amniotic fluid, and again evaluate the size, position, and characteristics of the umbilical cord and placenta.⁽⁵⁾

WHAT HAPPENS NEXT?



When you report any changes or concerns to your health care provider, you should be evaluated further. This may include a non-stress test for 30-60 minutes or more, ultrasound, biophysical profile, daily monitoring, additional visits, or other testing and interventions as determined to be appropriate by your health care provider. Other factors will also be taken into consideration such as your age, blood pressure problems, your family history, and what has happened with your previous pregnancies.^(7, 9, 10, 11)

If your prenatal testing and kick counting show a healthy mom, baby, cord, and placenta, that is wonderful! Continue with the kick counting and follow the advice of your health care team. Be aware of how you are feeling and continue to report any changes right away. Ask your healthcare providers to keep you up-to-date about local outbreaks of infection and how to prevent many types of infections. If at any time you experience abdominal or back pain, fever, vaginal bleeding or leaking, contact your health care team immediately.⁽⁷⁾

You are your baby's voice. Be his/her advocate! If you ever have concerns about your pregnancy or the response to your concerns, ask more questions or obtain a second opinion if necessary.

Please see other side for instruction and sample chart.

WEEK	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
35							
36							
37							
38							
39							
40							
41							

Please see other side for instruction and sample chart.

WEEK	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
28							
29							
30							
31							
32							
33							
34							

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KNOW YOUR RISK FACTORS

While we do not fully understand or know why some babies are stillborn, we are learning about characteristics of mothers, babies, and pregnancies that place an individual pregnancy at risk. Below is a list of some of these risk factors. The American College of Obstetrics and Gynecology (ACOG) recommends pregnancies at high-risk of stillbirth be monitored weekly or twice weekly with antenatal testing beginning at 32-34 weeks gestation. If the risk factors are especially concerning or there are multiple risk factors present, this testing should begin at 28 weeks. Antenatal testing includes non-stress tests, biophysical profiles, ultrasound evaluation for growth and amniotic fluid volume, vigilant kick counting, and other tests as determined to be appropriate by your health care provider.⁽¹⁶⁾

If you have any of these risk factors, talk to your health care provider about the risk and possible monitoring.⁽⁸⁾

- Maternal obesity
- Maternal use of alcohol, tobacco, or other recreational drugs
- Maternal infection (such as Group B Strep, syphilis, HIV, influenza, and more)
- Advanced maternal age (over 35 years)
- Nulliparity (mom's first pregnancy)
- Gestational Diabetes
- Hypertension/Pre-eclampsia/Eclampsia
- Maternal health conditions (systemic lupus, kidney disorders, cardiovascular disease, thyroid disease, and others)
- African American race
- History of previous poor pregnancy outcome (preterm birth, small for gestational age baby, stillbirth, neonatal death)
- Poor prenatal care or poor access to care
- Low socioeconomic status
- Multiple gestation pregnancy (twins, triplets, or more)
- Genetic or anatomic abnormalities in baby
- Placenta or umbilical cord abnormalities
- Post-term pregnancy (beyond 40 weeks gestation)
- Fetal growth restriction
- Decreased fetal movements/change in fetal kick counting



For additional information on kick counting and other important ways to monitor your pregnancy, please visit our website at: www.starlegacyfoundation.org

This information is not intended to replace medical advice. Be sure to consult your doctor, midwife or health care team with any issues or concerns.

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FEEL ME

A baby's movement can tell you a lot about his/her health and personality. Most women start feeling flutters around 20 weeks. By 28 weeks, movements will be easy to detect on a regular basis and you will likely notice patterns. Keeping track of your baby's movements (kick counting) can help alert you and your health care team if a problem develops. Every baby is different! It is important to identify the usual amount of movement and patterns for your baby. Use this information as a baseline to determine if a change up or down has occurred. **Babies DO NOT slow down at the end of the pregnancy and they DO NOT usually sleep for longer than 90 minutes at a time. If you notice either of these changes, see your health care provider to be evaluated immediately.**⁽⁷⁾

If you notice ANY change in your baby's movement or behavior or have a sense that something is different or wrong, please contact your health care provider or be evaluated at the hospital immediately. It is important to address your instincts. Reduced/changed movement of the unborn baby has been shown to be a symptom of babies who are in distress and has led to stillbirth in some cases. The purpose of this information is not to frighten you, but rather to empower you to be your baby's advocate if you have concerns. **Trust your instincts!**

HOW TO DO KICK COUNTING

There are many methods and tools available for monitoring your baby's movements. You can utilize the chart provided here, create your own, or use a smartphone app like Sprout to document your baby's activity.

Choose a time each day when your baby is often very active. Lie down or sit quietly and tune into your baby's movements. Note the time it takes for him/her to make 10 movements (kicks, rolls, swooshes, jabs, or flutters). Record this time on your kick counting chart. If it is different from usual or changes suddenly, you and your baby should be evaluated immediately. **Again,**

trust your instincts! Do not wait until the next day or your next appointment to report these changes. If your baby is in trouble, time may be critical. Take your charts to your obstetrics visits to share with your healthcare provider.⁽⁷⁾



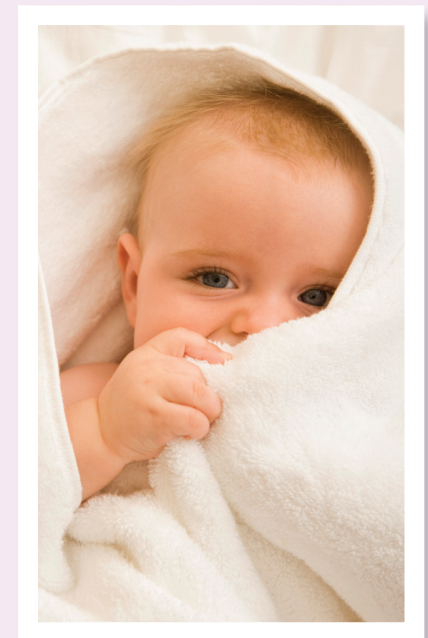
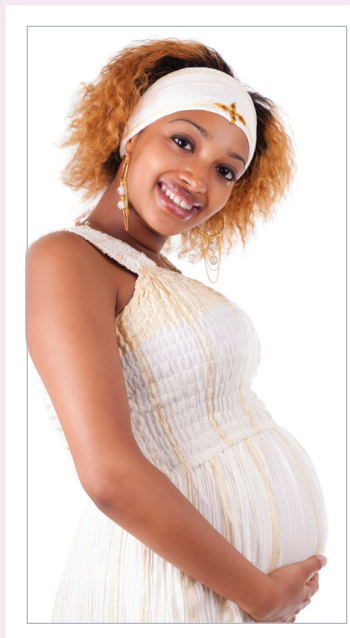
KICK CHART

Use this chart to document your baby's movements every day. Write in the box how long it takes your baby to make 10 movements. You will soon see a pattern develop that is 'normal' for your baby. Take your charts to your prenatal visits to

share with your provider. **If you see any significant changes, feel uncomfortable with your baby's movements or behavior, or have any other concerns, CONTACT YOUR HEALTH CARE PROVIDER IMMEDIATELY.**

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
WEEK 28	12 min	15 min	18 min	13 min	12 min	10 min	10 min
WEEK 29	10 min	15 min	9 min	20 min	17 min	9 min	8 min
WEEK 30	8 min	10 min					
WEEK 31							
WEEK 32							
WEEK 33							

Please note: this small chart is only an example. Compare your results to your baby's usual pattern.



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