

How Does Jaundice Affect Breastfeeding?

In the first few days of life, more than half of all full-term babies and approximately 80 percent of premature infants develop jaundice, a yellowish discoloration of the eyes and skin. Jaundice usually isn't a reason for alarm and doesn't cause discomfort for your baby. Often it disappears without any special treatment within seven to ten days. If treatment is needed, it is easy and painless and your baby's symptoms will subside quickly.

What is Jaundice?

The word jaundice comes from the French word *jaune*, which means "yellow". Jaundice is not a disease, it is a condition. The yellow color in the baby's skin is caused by an excess amount of bilirubin, a natural substance produced by the body during the breakdown of red blood cells. Babies are born with a generous supply of red blood cells to help transport oxygen within the body.

These red blood cells live for a short period of time and are then processed by the liver into several components. Hemoglobin, a part of the red blood cell that carries oxygen, is turned into bilirubin by the liver. The bilirubin is typically excreted from the body, but because the liver is not fully mature in a newborn baby, it may not be removed from the body as fast as it is produced.

Symptoms may include:

- Yellow appearance of the whites of the eyes
- Yellowing of the skin progressing from head to foot
- Sluggishness and sleepiness

Jaundice is most common in infants who are born prematurely, babies who have lower birth weights, babies that live at high altitudes or babies whose ancestry is of Chinese, Japanese, Korean, Native American, Greek or South American/Latino descent.

Health care professionals will observe your baby for jaundice while you and your baby are in the hospital. If symptoms are noted, a blood test (using a drop of blood from your baby's heel) will be done to determine her bilirubin levels.

Jaundice may appear after you have left the hospital, but you can easily check your baby for symptoms. For example, look at the whites of your baby's eyes. . . do they have a yellow tint? If so, your baby may have jaundice. Another way to check for jaundice is to gently press your finger on your baby's forehead or nose. . . If the skin looks yellow where you pressed, your baby may have jaundice.

It's best to check your baby for jaundice in natural daylight or in a room with fluorescent lights. This works for newborns of every race. If you note any yellowness, report it to your baby's health care provider. The health care provider may want to run a blood test to determine accurate bilirubin levels.

Types of Jaundice

Physiologic (normal) Jaundice: Physiologic jaundice, sometimes called "early onset" jaundice, is common and occurs within two to three days after birth. It is not a serious condition. It results from the break down of red blood cells. It is usually very mild and requires no treatment. However, physiologic jaundice can be prolonged by ineffective feeding patterns. Jaundice tends to take a little longer to resolve in babies who breastfeed. This is why it is very important to establish frequent and effective feeding patterns with your baby soon after your delivery.

If your baby is not breastfeeding vigorously, he may lose weight and have infrequent stools that lead to increased bilirubin levels. Nearly 96% of bilirubin is excreted through the baby's stools. Frequent stools help rid your baby's body of bilirubin. If your baby needs to be temporarily supplemented for medical reasons, provide pumped breast milk or infant formula because they contain the protein, water and calories to promote digestion and create more frequent stools. Breast milk should be your first choice because it's laxative effects will promote more frequent stooling. Water or glucose (sugar) water are not sufficient in helping to produce stool and should not be a substitute for breast milk or formula feedings.

Occasionally jaundice will not occur until five to seven days after birth. This is called "late onset" jaundice and may sometimes be referred to as "breast milk jaundice". Less than four percent of breastfeeding mothers have a substance in their breast milk that will slow the breakdown and excretion of bilirubin. Your physician may recommend an interruption of breastfeeding for 12-48 hours to allow for your baby to "catch up" with elimination of the



bilirubin. This is usually enough time to allow symptoms to subside and breastfeeding can resume again. During the time that you are not breastfeeding, it is important to use a hospital grade breast pump such as the Ameda Elite or Ameda Lact-e, every two to three hours to maintain your breast milk supply.

Pathologic (abnormal) Jaundice: Occasionally there are other factors that cause jaundice. Incompatible blood types between you and your baby can result in very fast break down of red blood cells. If your baby was bruised during delivery, her bilirubin might be high as a result of red blood cells being released into the tissue. Other factors that may cause jaundice include severe infection, enzyme deficiency or abnormality of baby's red blood cells.

Tips for Managing Jaundice

- Feed your baby within the first hour after birth and then again every two to three hours. Frequent suckling stimulates digestion increasing the frequency of bowel movements and elimination of bilirubin from your baby's system.
- While in the hospital, keep your baby in your room with you. This allows you to have quick, easy access to your baby as soon as your baby shows signs of hunger.
- Check for good latch-on and effective feeding. Refer to the Ameda Answer Sheet "Is My Baby Getting Enough Breastmilk" and "How Do I Hold My Baby While Breastfeeding" for details.
- Avoid offering supplements. Water, juice, infant formula and pacifiers can interfere with learning to breastfeeding.
- Massage your breasts while your baby is breastfeeding. Start at the outer edges of your breasts and gently massage in a circular motion. Then stroke down towards your nipple. A bit of unscented lotion or oil may help your fingers slide more easily. This will help release milk from the glands and can help stimulate your let-down reflex. Remember, the more colostrum and breast milk your baby eats, the less likely that she will become jaundiced.

Treatments for Jaundice

Help assure effective feedings. Breast milk can be especially helpful in resolving jaundice because of its laxative effect. Check your baby's latch-on to make sure she is feeding as effectively as possible. Continue to breastfeed every two to three hours. Wake your baby to ensure she is feeding on a regular schedule. This will help pass the bilirubin in her stools.

In cases where ineffective feeding contributes to higher bilirubin levels, short-term supplementation may be recommended. Your expressed breast milk can be given by cup, syringe, spoon, feeding tube device or bottle. Ask a Board Certified Lactation Consultant or other experienced health care provider for advice about how to supplement your baby without compromising breastfeeding. If your baby is not feeding effectively, you will need to use a hospital grade breast pump, such as the Ameda Elite or the Ameda Lact-e breast pump to establish and maintain your breast milk supply. Feed your baby at your breast, provide a supplemental feeding if recommended, and then use your breast pump for about 10 minutes after breastfeeding.

Indirect Sunlight

Certain spectrums of light have been shown to make it easier for a baby's liver to process bilirubin. This process is called "phototherapy". Natural sunlight can provide these light spectrums and can be enjoyed right in your home. Place your baby near a sunny window making sure that the sun doesn't shine directly on your baby causing sunburn. Also if it is winter or if you live in a cooler climate, make sure there is not an air draft coming from the window. Next, undress your baby down to his diaper and let him enjoy some natural phototherapy.

Phototherapy

Your physician may recommend phototherapy lights which may require your baby to remain in the hospital. During phototherapy. baby is undressed and placed under a bank of lights. These lights alter the bilirubin, making it easier for your baby's liver to process it. Sometimes a "Bili-Blanket" is also used. This is a pliable material that contains flexible fiber optics that is wrapped around a baby. If this type of phototherapy is required, talk with your baby's health care provider to determine where and for how long the therapy will take place.

When phototherapy treatment is discontinued, there is usually a slight rebound in bilirubin levels but the levels will decline after this temporary increase.

Exchange Blood Transfusions

If the bilirubin level gets too high and the previously described treatments are not effective, then an exchange blood transfusion may be done. The danger of high bilirubin levels is permanent brain damage called "Kernicterus". Transfusion is an extreme measure used only in **very** rare situations that do not respond to any other treatments.

Please remember that this is general breastfeeding information only and does not replace the advice of your health care provider. If you have a problem that you are unable to resolve quickly, seek help immediately.

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