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Hospital**

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Lactation Station™



**Texas Children's
Hospital**



Texas Children's Hospital Lactation Support Program

Winter 2003

Lactation program 'graduate' thriving

When my son, Clark, was born at 27 weeks, he weighed only 2 pounds, 4 ounces. The first time I was able to hold him he was 2 weeks old, and it was a feat to arrange all the tubes and wires. Still, holding his tiny warm body against my full breasts gave me indescribable joy.

I had looked forward to breastfeeding Clark, but because he was so tiny he did not have the strength or development to suck. But with the help of Texas Children's Lactation Support Program and the milk bank, I was able to pump and give him breast milk until he was

11 months old.

The day after Clark's birth, I consulted with a lactation nurse from Texas Children's Milk Bank. With the information I received from her and a rented hospital-grade breast pump, I began a breast-feeding experience different than any I had ever imagined – one that perhaps fulfilled me even more than

See Graduate on Page 2.



Clark and Angela Hudson

The color of milk: variances in breast milk color bewilder lactating moms

Mothers who express their milk for their hospitalized babies often ask, "Is this the color my milk is supposed to be?"

For the mother of a full-term healthy infant, this question rarely occurs because she doesn't actually see her milk unless a little milk drips down the baby's chin after a feeding.

However for mothers who

pump, the varying color of their milk often raises questions about the quality of the breast milk. The only comparison they can make is to the color of pasteurized whole cow's milk or commercial infant formula.

Since these milks are white in color, milk of another color may seem out of the ordinary. But mother's milk is anything but ordinary.

The first secretion of the breast is colostrum, a fluid high in protein and rich in antibodies and other protective cells. Colostrum is usually a thick, sticky fluid that is light to bright yellow in color. It is speculated that the color and consistency of this fluid is likely due to the abundance of these larger cells (proteins and antibodies) in the milk.

See Color of milk on Page 3.



Internet offers a wealth of lactation information

American Association for Premature Infants (A.A.P.I.), founded in 1992, is an organization dedicated to improving the quality of health, developmental and educational services for premature infants, children and their families. www.aapi-online.org

The Premie Place is an on-line resource providing answers to questions, or information for a specific topic regarding prematurity. www.thepremieplace.org

Parents of Premature Babies Inc. (Premie-L) is a website offering support to families of premature infants while the babies are hospitalized and following discharge. www.premie-l.org

Congenital Heart Information Network (C.H.I.N.) is an international

organization that provides reliable information, support services and resources to families of children with congenital heart defects and acquired heart disease. www.tchin.org

The Premature Baby-Premature Child is a volunteer website that provides parents with information they need to care for their premature infants. www.prematurity.org

National Organization of Mothers of Twins Clubs, Inc. (NOMOTC), founded in 1960, provides support, education and information for mothers of twins. www.nomotc.org

The La Leche League International, founded in the mid-1950's, provides information and



encouragement, mainly through mother-to-mother support, to all mothers who want to breastfeed their babies. www.la lecheleague.org

On the Parents Place Web site exists a unique discussion board for mothers who are exclusively pumping their breast milk for their infants. You can get there by typing in www.parentsplace.com/messageboards and scrolling down to exclusively pumping under the breastfeeding subtitle.

Graduate cont'd. from page 1

traditional breastfeeding.

My gratification for breast pumping came every time I topped off a bottle... every time Clark surpassed another milestone without infection.

In the midst of all the advanced, state-of-the-art medical care Clark received, producing breast milk specifically formulated for his needs was something only I could do. I took my job very seriously – and the milk bank did too.

When Clark was moved to the Level II nursery in his seventh week, he

really soared. He became an aggressive “feeder and grower” and was finally able to make eye contact with us. Finally, at eight weeks old, Clark came home, and the NICU gradually became a distant memory.

When Clark was discharged, we took more than 400 bottles of my breast milk from the milk bank's freezer to add to our freezer full at home. I was not ever able to feed Clark directly from my breasts, but I continued to pump until he was nearly 9 months old.

Because we had dutifully frozen all extra breast milk I produced during those nine months, there was enough for Clark to remain on breast milk until he was 11 months old.

Clark was incredibly healthy his first year. During this time, he had only one cold and a minor ear infection. He now is on track developmentally, and at 31.5 inches and 23 pounds, he loves to mimic the ABC song, do the bunny hop and be chased around the house!

About the Lactation Support Program

Texas Children's Lactation Support Program and Milk Bank provide a variety of services for breastfeeding mothers and their infants. The program's registered nurses, who specialize in lactation counseling and clinical breastfeeding management, are available for clinic, home or

hospital visits.

Through the milk bank, mothers rent breast pumps, purchase breastfeeding supplies and receive lactation information. The milk bank is surrounded by private rooms in which mothers can come – 24 hours a day – to use hospital-provided breast pumps

and collection bottles.

The *Lactation Station* newsletter is produced quarterly by Texas Children's Lactation Support Program. For more information about Texas Children's Lactation Support Program or the *Lactation Station* newsletter, call (832) 824-6120.

Texas Children's Hospital mothers' donated milk contributions in the last six months:

3,770 ounces or
111,492 milliliters
471.25 cups
235.62 pints
117.81 quarts
111.49 liters
29.45 gallons

Thanks to all our generous moms for their donations. Many babies are healthier for their efforts.

Moms' milk donations to milk bank benefit babies' health

Texas Children's Hospital Lactation Support Program is pleased to be a liaison for our mothers with the Mother's Milk Bank at Austin (MMBA).

In the last six months, 3,770 ounces of milk have been donated to Austin from Texas Children's Hospital mothers.

Some of the donating moms have oversupply issues or babies who are not yet eating. Others are bereaved mothers who

would like their milk (and hard work!) to help other sick babies.

Texas Children's Hospital lactation consultants and milk bank technicians identify possible donors based on mothers' milk volume and infants' medical conditions. Once identified, mothers are approached with relevant information. See *Donations* on Page 4.



Color of milk cont'd. from page 1

However, just as breast size varies from woman to woman, there can be a variety of colors of colostrum. Some mothers have expressed colostrum or early milk that is brown or rusty in color. Also known as "the rusty pipe syndrome," it is thought that this is due to slight oozing of blood from the swelling of the breast tissue as the breasts become heavier and engorged. This is more commonly seen in first-time mothers and is not harmful to the baby.

As milk production increases during the first days after delivery the change from colostrum to transitional milk occurs – and with this change so does the color and consistency of the milk. The reason for this change is a closing of the gaps between the milk cells deep within the breast. When this happens, the larger cells have a more difficult time moving from the mother's blood to her milk.

As a result the protein and antibody content decreases and the fat content in the milk increases. This results in a

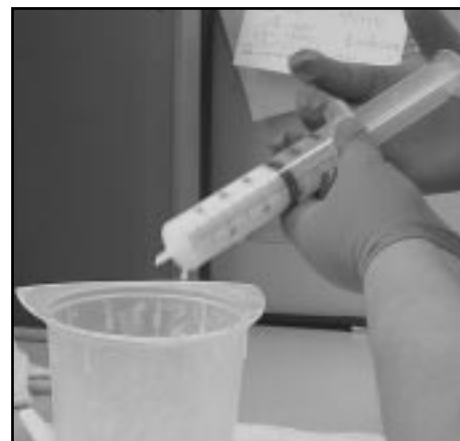
change in the color of the milk to a more watery, white color. Some mothers notice a slightly blue tint to their milk at this time. This is due to the high percent of whey protein in breastmilk. Whey is a high quality protein that includes many of the cells responsible for protecting the breastfed infant from infection. On the other hand, commercial infant formula has much lower levels of whey protein – owing to the whiter color.

As breastfeeding continues, milk may change colors periodically depending on many circumstances. Milk that has a pink tint may be due to cracked and/or bleeding nipples. However sometimes there are no visible cracks or soreness and a small amount of blood appears in the milk. This may be caused from the breast pump's suction gauge being set too high.

If bleeding continues once the nipples have healed and/or the pump is adjusted, notify your lactation consultant or doctor for further

evaluation. Milk that is green, orange, or even violet usually is related to medicine or foods taken by the breastfeeding mother. Iron supplements (green); carrots, squash, sweet potatoes (orange); and beets (violet) are often associated with colored milks.

Finally, although some colors may alert you to a particular problem or condition, one thing is certain – the quality of your milk is pure gold!





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Donations cont'd from page 3

mation from the MMBA. An initial screening is done by telephone interview and then a small blood sample is drawn and stored, along with the expressed milk, in the milk bank freezers. About once a month volunteers from the MMBA come

to Texas Children's Hospital and Woman's Hospital of Texas, to pick up milk for transport to Austin.

To qualify as a donor, a mother must have at least 100 ounces of medication-free milk available to donate. Pamphlets are

available in the Texas Children's Hospital Milk Bank with additional information on the milk-donation process. The milk bank lactation consultants also are happy to answer questions.

Shared experiences help moms cope

The Texas Children's Hospital lactation consultants are invaluable for breastfeeding information, instruction and support. But being able to talk to another mom who has had a similar experience can provide that little something extra lactating moms need.

The Lactation Support Program staff is compiling a list of the names and phone numbers of former lactating moms along with special information (for example, mothers of multiples, infants with heart defects, mothers with infants born prior to 30 weeks gestation, etc.).

The staff will offer new mothers this valuable resource for helpful tips and words of encouragement.

If you would be willing to offer your support to these mothers, contact the Texas Children's Lactation Support Program Staff at, (832) 824-6120.

