Cincinnati Children's Hospital Medical Center recruiting mothers for low milk supply study

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CINCINNATI - It was a happy day for Laura and Chris Fossett of Florence, Kentucky. Last spring, Laura gave birth to a baby girl, Victoria. So sweet and so tiny at just 5 pounds and 1 ounce.

Like many mothers, Fossett was eager to breastfeed her little bundle of joy, nourish her and help her gain weight. She’d always heard that breastfeeding was best, but when she tried, she discovered that she had no milk to give baby Victoria.

“It was really devastating,” Fossett said. “I just kind of assumed that it would all happen naturally. Mother Nature would take care of all that.”

The Fossetts also have an older daughter, Avery, but this was Laura’s first attempt at breastfeeding.

Fossett is one of many women in the United States who, despite their best efforts, have difficulty breastfeeding their newborn babies because their bodies don’t produce enough milk.

Low milk supply is a concern because the American Academy of Pediatrics (http://www2.aap.org/breastfeeding/PolicyOnBreastfeeding.html) recommends that babies are exclusively breastfed for the first six months of life due to the health benefits for baby and mother.
“For some moms and babies, this is just a temporary bump on the road before doing well with breast-feeding,” said Laurie Nommsen-Rivers (http://www.cincinnatichildrens.org/bio/n/laurie-nommsen-rivers/), Ph.D., a researcher at Cincinnati Children’s Hospital Medical Center (http://www.cincinnatichildrens.org/default/). “But unfortunately, for other mothers and babies, their problems persist. They will have trouble making enough milk.”

After working with lactation consultants, Fossett’s milk finally came in about five days after Victoria was born.

“We gave her (baby Victoria) formula for those first few days before my milk finally did come in,” remembered Fossett. “I knew she needed calories.”

For most women, frequent, thorough breastfeeding will signal the body to produce more milk. However, despite her best efforts, Fossett continued to have difficulty and needed to supplement her breastfeeding with formula even after her milk came in.

“It’s out of your control,” said Fossett. “You’re supposed to be able to provide for your baby. There’s a lot of tears, and you’re emotional anyway because you’ve just delivered.”

To learn more about why certain women struggle to produce enough breast milk, Nommsen-Rivers and her colleagues at Cincinnati Children’s are conducting a study (http://www.cincinnatichildrens.org/patients/resources/newsletters/yh/archives/2015/fall/join-study/) that is funded by the National Institutes of Health (http://www.nih.gov/).

They want to find out how mom’s physiology contributes to low milk supply, and they’re issuing a new call for mothers who might like to participate in the research.

“We are looking for moms with babies less than 2 months old who are currently struggling to exclusively breastfeed – that is, breastfeed without using formula,” said Nommsen-Rivers.
In hopes of helping others and her own baby, Fossett signed up for the low milk supply study.

“I know other women are struggling with it, and you might as well participate in research and help move the field forward so we can find other ways to deal with it,” she said.

Study participants are loaned a baby scale to weigh their newborns before and after breastfeeding and formula feedings. Researchers also show mothers how to use a hospital-grade breast pump to thoroughly empty the breast, which in turn signals the body to make more milk.

As a second part of the study, Nommsen-Rivers and her colleagues are looking at whether a diabetes medication, called metformin (http://www.mayoclinic.org/drugs-supplements/metformin-oral-route/description/drg-20067074), will improve the action of insulin in the mother’s mammary glands, boosting her milk production so that she can feed her baby. Metformin is a drug used to control blood sugar in people diagnosed with Type 2 diabetes.

According to Nommsen-Rivers’ research so far, the hormone insulin might play a role in helping mothers make milk.

“The good news is that if it is true that insulin plays an important role in helping others make milk, this opens up an entirely new avenue for us in the advice we can give women in helping to prepare their bodies for being successful with breastfeeding,” said Nommsen-
Rivers.

She said there are ways to modify how insulin works in the body, including starting pregnancy at a healthy weight, which is good for a healthy mother and baby and may help make milk. Exercise is also key; even a brisk walk for just 30 minutes a day can help. Exercise is a powerful modifier of how insulin works in the body and may improve how mothers make milk.

As for Fossett, she’s finished with her part in the study. She still supplements with formula, and she has returned to her job as a cancer oncology researcher at Cincinnati Children’s, but she plans to breastfeed as much as she can until Victoria reaches her first birthday.

She credits the emotional support she gets from friends and the practical advice from lactation consultants for helping her to nurse her baby.

“Even today it means the world to me. My favorite part of my day is being able to nurse my baby,” Fossett said. “You’re giving them all the nutrients that they need, immunities and such.”

BREASTFEEDING STUDY
WHAT: Research study to help learn about the causes of low milk supply
WHO: Mothers whose babies are between 1 week and 2 months old and are supplementing with formula. Participants will be loaned a baby scale and breast pump during the study
PAY: Participants will receive up to $220 for time and effort.
PARTICIPATE: Contact Erin Wagner at erinwagner@cchmc.org (mailto:erinwagner@cchmc.org) or 513-636-4659.