

Expressing Colostrum – during pregnancy and after the Birth

Already in the middle of pregnancy (from about the 16th week of pregnancy), the first mother's milk (colostrum) is synthesized in the mother's breast. In many cases, particularly in women with gestational diabetes as well as diabetes mellitus types I and II, it can be advisable to express small amounts of this valuable substance towards the end of the pregnancy (from the 37th week) in order to store it as a contingency reserve for the initial period after the birth. For other women, it is interesting to become familiar with breast massage and hand expression during the pregnancy, so that they can quickly make available the valuable colostrum if necessary after the birth.

In any case, personal instruction by a trained professional is needed for expressing colostrum. This hand-out should serve only as reminder for you.



Photo: © Christiane Braumann

For catching and storing Colostrum syringes with matching caps prove themselves.

Countless studies have shown how important exclusive breastfeeding is. Colostrum contains important immune factors, which protect the newborn against infection. It helps to build up a healthy microbiome for the maturation of the intestinal tract. Colostrum has the optimal composition of macro- and micronutrients, has a laxative effect and so helps to excrete the first stringy stool (meconium) and bilirubin (the yellow bile pigment). Above all, colostrum stabilizes the baby's blood sugar level. Fresh colostrum works best. Should this not be available in a timely manner, the stored and deep-frozen supply can be used, thereby avoiding feeding with a breast-milk substitute.

When does it make sense to lay in a small stock of colostrum?

- › For women with gestational diabetes or diabetes mellitus type 1 or 2. The newborns of diabetic mothers have an increased risk of developing hypoglycemia after the birth. Therefore, it is recommended that the baby be given the first feeding within 30 minutes after birth. However, many babies are not yet ready to breastfeed at this point. So, it should be standard to give these newborns expressed fresh or thawed colostrum.
- › When cleft lip and palate, heart disease, neurological disease or reduced growth has been diagnosed during the pregnancy.

Apart from these indications, cautionary colostrum expression is more likely counterproductive and is NOT recommended by us.

When does it make sense to learn about colostrum expression during pregnancy?

- › When there is well-founded concern during the pregnancy about the mother producing sufficient milk, i.e. with hormonal or anatomical problems, which could reduce the milk production.
- › With multiple births
- › When difficulties with milk production have occurred in a previous breastfeeding period.

When can you begin with expressing colostrum?

- › With an **uncomplicated** pregnancy from the 37th week of pregnancy
- › With a threatening premature birth, multiple birth or planned Cesarean, first with the start of labor or, at the earliest, two days before the Cesarean
- › If you have not expressed colostrum during the pregnancy, you can do this directly in the delivery room

And off you go!

1 Discuss your wish to express colostrum with your midwife, breastfeeding counselor and the maternity hospital and let them show you the technique. Many hospitals have precise instructions or offer their own material on expressing and storing colostrum.



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2 Prepare the necessary materials:

Have syringes (1 ml, 2 ml or 5 ml) with matching closing caps or special colostrum holders. Many hospitals make the syringes available. Otherwise you can get them from the pharmacy

- › Lay out labels with which you can mark each syringe and each container. In the deep freezer, the syringes should be stored in an appropriate closable container or a zip-lock plastic bag, which is also labelled with name and contents
- a. For transport to the hospital, this container or the bag should be placed between two deep freeze packs and, ideally, stored in a small cooler bag for transport. On arrival at the hospital, it should immediately be placed in an appropriate freezer.

SYRINGES AND CLOSABLE CAPS

(polypropylene or phthalate-free polyethylene are suitable for freezing), i.e.

- › Exadoral® Oral Syringe 1 ml Company B.Braun Melsungen AG, PNZ 10193218
- › Exadoral® Oral Syringe 2 ml Company B.Braun Melsungen AG, PNZ 00148777
- › Freka Oral Cap Steril Company Fresenius Kabi Deutschland GmbH, PZN 4653696

3 Expressing and collecting the colostrum:

- a. One to three times a day, take 10 to 20 minutes time and wash your hands before you express the colostrum.
- b. Begin with a relaxing breast massage
- c. Place your thumb and index/middle finger across from each other, each one about 2-3 cm from the mamilla (nipple). Slightly lift the breast and move it horizontally in the direction of the rib cage. Thereby, stretch tissue lightly apart with your fingers. Now roll your fingers forward in a kind of "milking process. It's important not to "skid" over the skin. Now, relax your finger and begin the process again.
- d. After some repetitions, you can change the position of the fingers (i.e. instead of 12:00 o'clock and 6:00 o'clock, now 9:00 o'clock and 3:00 o'clock).
- e. At the beginning you will probably need some practice before the first drops appear. **Should you be unable to express any colostrum, this does not indicate anything about later breastfeeding success.**
- f. You can collect the drops of colostrum with a syringe, directly after their appearance on the mamilla (nipple). Afterwards, please close the syringe with the closure cap.
- g. Label each syringe or each container with name and date of expression and freeze the expressed colostrum immediately.

Should you feel a painful hardening of the abdominal wall at the same time you are collecting the colostrum or you feel unwell, stop the procedure. unless you are already in the delivery room and birth is imminent..

Ask for support and let a professional guide you in learning how to hand-express. International Board Certified Lactation Consultants (IBCLC*) and your midwife will certainly be happy to assist you.

Recommended Instructional Video

Video des Global Health Media Project: "How to express breastmilk" at <https://globalhealthmedia.org/portfolio-items/how-to-express-breast-milk/?portfolioID=5623>



SOURCES:

- › AWMF-Leitlinie 024/006 zur **Betreuung Neugeborener diabetischer Mütter**. 2017. www.awmf.org/leitlinien/detail/ll/024-006.html
- › Europäisches Institut für Stillen und Laktation, Statement: **Präpartale Kolostrumgewinnung bei Schwangeren mit Diabetes mellitus**. Team und Dozenten des Europäischen Instituts für Stillen und Laktation, Januar 2017. www.stillen-institut.com/media/Praepartale-Kolostrum-Gewinnung-2017.pdf.
- › Forster DA, Moorhead AM, Jacobs SE, et al: **Advising women with diabetes in late pregnancy to express breastmilk in late pregnancy (Diabetes and Antenatal Milk Expressing [DAME]): a multicentre, unblinded, randomized controlled trial**. Lancet 2017; 389:2204–13.
- › Antenatal expression of colostrum www.breastfeeding.asn.au/bfinfo/antenatal-expression-colostrum



IBCLC

International Board Certified Lactation Consultants are the only internationally approved breastfeeding and lactation specialists having a medical background.

The decision to breastfeed or not to breastfeed has short- and long-term impact on the health of child and mother. However, breastfeeding sometimes turns out to be difficult and perhaps professional, competent assistance is needed.

Contact your IBCLC