# BREASTFEEDING Fact Sheet

An information update for WIC staff

## NORMAL BREAST FULLNESS, ENGORGEMENT, PLUGGED DUCTS AND BREAST INFECTIONS

*Normal breast fullness, engorgement, plugged ducts and breast infections all can cause breast tenderness and share many of the same symptoms. It is important that anyone who counsels breastfeeding mothers knows how to tell the difference between these and when to make appropriate referrals. A breastfeeding mother should contact her doctor for treatment if she has:*

- *a temperature of 101 F or higher.*
- *a cracked nipple with obvious signs of infection (i.e. nipple is hot to the touch, thick, yellow pus, extreme redness).*
- *pus or blood in her milk.*
- *red streaks from the site of infection back into her breast.*
- *sudden and severe symptoms with no identifiable cause.*

### A WORD ABOUT MASTITIS

The word **mastitis** is used to define an array of problems such as engorgement, plugged ducts and breast infections. Because of inconsistent definitions of mastitis in references and general breastfeeding literature, and to avoid confusion, the terms **breast fullness, engorgement, plugged ducts** and **breast infections** will be used in this fact sheet instead of **mastitis.**

### NORMAL FULLNESS OR ENGORGEMENT?

It is normal for a mother to feel a change in her breasts about the second to fifth day after her baby's birth. Her breasts will become larger, heavier and possibly tender or more sensitive to touch. These changes occur not only because the breasts are producing more milk but because there is extra blood and lymph fluid traveling to the breasts that is causing swelling of the tissue. Normal fullness usually decreases within the first two or three weeks if the baby is effectively and frequently emptying the mother's breasts.

Normal breast fullness can develop into engorgement between the third and tenth day after birth. Engorgement can affect the body of the breast, the areola, or both, and can occur in one or both breasts. The breast (and/or areolar tissue) becomes painfully tight, hard, and possibly lumpy if the engorgement is severe. The affected area may extend up into the armpit. The mother may have a single lump in one breast or both breasts may become hard and lumpy all over. The mother may complain that her breasts are warm and throbbing. Her nipples can become flat and rigid, making it very difficult or impossible for her baby to latch on.

A case of severe engorgement should be a warning that breastfeeding may not be going well. The mother and baby should be assessed. Some women, however, become painfully engorged no matter how well and how frequently their babies are nursing. Although not

as common, engorgement can also occur after breastfeeding is well established, such as when a feeding is missed or when weaning is attempted too abruptly.

**ENGORGEMENT OR BREAST INFECTION?**

Untreated engorgement can lead to a breast infection, and some mothers are inappropriately prescribed antibiotics because the symptoms are so similar. Antibiotics prescribed to kill harmful bacteria can also kill beneficial bacteria. The loss of good bacteria can allow the yeast normally present in the body to overgrow and put a mother and baby at increased risk of developing thrush.

It is important to remember that engorgement affects the entire breast (or both breasts), whereas a breast infection usually affects only one area of a breast. A mother with engorgement may also have a single lump in one breast, but the rest of her breast will be overly full, tight and hard. The "lumpiness" that occurs

| Normal Breast Fullness | Engorgement | Plugged Duct | Breast Infection |
|---|---|---|---|
| most often occurs on second to fifth day after birth | most often occurs on third to tenth day after birth | rarely occurs in first five days after birth | rarely occurs in first five days after birth |
| occurs in both breasts | can occur in one or both breasts; can affect just the areolar tissue, just the body of the breast, or both | usually occurs in one breast | usually occurs in one breast |
| comes on gradually | comes on gradually | comes on gradually | comes on suddenly |
| breasts feel fuller, but skin stays soft and elastic | if affecting the body of the breast, breast will be hard, painful, warm, tight, or possibly lumpy; mom may complain of throbbing or aching pain; if affecting the areolar tissue, nipple will become flat and rigid | breast has tender spot, redness, or sore hard lump; little or no warmth in the affected area | breast has tender spot, redness, or sore hard lump; affected area will be hot to the touch |
| affected area does not shift in location | affected area does not shift in location | tender spot may shift in location | tender spot stays in one area of breast |
| may or may not include mild tenderness | intense pain in entire breast; may or may not include areolar tissue | mild pain in area of lump | intense pain in area of lump |
| no fever | may have low-grade fever (<101 F) | may have low-grade fever (<101 F) | mom has fever; ( ≥ 101 F) |
| mother feels well | mother feels generally well with breast tightness and discomfort | mother feels generally well with tenderness in area of plug | mother feels tired, achy, run down (feverish) with possible nausea and vomiting |

with engorgement is caused by swelling of the tissue and there is no evidence of infection. A mother with a breast infection will have softer breast tissue surrounding a hard lump, with redness and pain in the area of the lump. Having a temperature at or above 101 F and flu-like symptoms (*e.g.,* general body aches, tiredness, and nausea and/or vomiting) are indications that an infection is present.

## PLUGGED DUCT OR BREAST INFECTION?

Both plugged ducts and breast infections can occur when the breasts are not being adequately emptied, such as when there has been a change in feeding pattern or the mother has been wearing an overly constrictive bra. Plugged ducts and breast infections also have similar symptoms.

If a breastfeeding mother without a fever notices either a tender spot, redness, lump in her breast or a white spot on the end of her nipple, the most likely cause is a plugged duct. If the mother's breast soreness or lump is accompanied by a fever and flu-like symptoms, she most likely has a breast infection. If she has a breast infection, the affected area will also be hot to the touch.

## HELPING MOTHERS WITH NORMAL BREAST FULLNESS, ENGORGEMENT, PLUGGED DUCTS AND BREAST INFECTIONS

### Normal Breast Fullness

A mother who is experiencing normal breast fullness should be encouraged to nurse frequently, at least eight to 12 times in 24 hours, waking the baby if necessary. Nursing frequently with good positioning and latch-on will help the majority of mothers avoid engorgement or other complications.

### Helping Mothers With Engorgement, Plugged Ducts or Breast Infections

Breastfeeding issues such as engorgement, plugged ducts or a breast infection often arise if the baby is breastfeeding ineffectively. Observing and assessing a mother and baby for proper positioning, latch, signs of milk transfer (audible swallowing) and satiety cues ("falls off" breast) is essential.

Check to see if mom's bra, other clothing, diaper-bag strap or purse strap may be impeding milk flow. Ask mom if there have been any changes in the baby's feeding pattern. Assess the mom and baby for symptoms of oversupply. Women with large milk supplies often have recurrent plugged ducts and/or breast infections because their breasts fill very quickly after feedings. (See Breastfeeding Fact Sheet No. 21, Oversupply Syndrome and Overactive Let-Down Reflex.)

If the mother needs a mild pain reliever, ibuprofen is the best choice, but she should always check with her doctor before taking any medication. Ibuprofen passes into breastmilk in very low levels. The American Academy of Pediatrics considers ibuprofen compatible with breastfeeding.

### When a Mother has Engorgement

A mother with engorgement should be encouraged to:

- Nurse more frequently, at least eight to 12 times in 24 hours.
- Use moist heat before feeds. Take a warm shower or place warm, wet wash cloths on breasts and nipples for a few minutes before each feeding.
- Hand express or gently pump breasts to get the milk flowing and to soften nipples.
- Gently massage breasts toward nipples before

and during feeds. If using the C-hold (four fingers supporting the breast with the thumb on top), she can use her thumb to massage.

■ Try ice packs, cabbage leaves or both between feeds to keep the swelling down and help relieve pain. Clean cabbage leaves can be worn inside the bra with or in place of ice packs. Cabbage leaves should be replaced when wilted or every two hours. The mother should discontinue use of cabbage leaves when breasts begin to soften, feel "tingly," or when milk begins to drip from nipples. Overuse of cabbage leaves can lead to a decrease in milk supply.

**When a Mother has a Plugged Duct**

A mother with a plugged duct should be encouraged to:

■ Nurse more frequently, especially on the affected breast, at least 8-12 times in 24 hours.

■ Feed from the affected breast first, when baby is sucking vigorously.

■ Start nursing with the baby's chin pointing toward the plug, then vary positions during feeding to help empty all milk ducts.

■ Gently but firmly massage the lump toward the nipple during and after feeds. If available, hold an electric vibrating massager, turned on low, to the affected area. This may help loosen the plug.

■ Use dry or moist heat on affected area as much as possible. Between feedings, combine warm compresses or showers with massage to the affected area.

■ Try using warm cabbage. Cut cabbage to cover only the affected area. Briefly warm it in the microwave (8-10 seconds) or boiling water and place over plug. Replace with a new piece of cabbage every two hours. Discontinue when plug loosens.

Cabbage therapy has been used to treat pathological conditions of the human body, including lactation problems,for many years. While it is not known how it works, this therapy seems to be effective for most moms.

**When a Mother has a Breast Infection**

A mother may need reassurance that the infection is in her breast, not in her milk. Her milk is still perfect for her baby. A mother who has been diagnosed by a medical doctor with a breast infection should be encouraged to:

■ Take her full course of antibiotics (until all medicine is gone) if prescribed by her doctor or health-care provider.

■ Rest as much as possible. Encourage the mother to take the baby to bed with her and accept the help of family and friends with household tasks and errands.

■ Nurse frequently, especially on the affected breast, because an empty breast will heal faster.

■ Apply warmth and gently massage the affected area before and during feedings.

■ Take frequent warm showers between feedings.

■ Try ice packs, cabbage leaves (warm or cold) or both between feeds to keep the swelling down and help relieve pain. Cut the cabbage so that it covers only the affected area and follow the guidelines for using cold or warm cabbage in the sections on treating engorgement or treating a plugged duct.

Sodium levels rise in breastmilk during a breast infection and can make breastmilk taste salty. The baby may be fussy or refuse the affected

breast. In this case, the mother should hand express or pump as often as the baby would nurse in order to remain comfortable and to heal. A mother with a breast infection may need a hospital-grade pump on a temporary basis to help her through this challenging period. Hospital-grade pumps, such as a Hollister Elite or Medela Lactina, are very gentle and comfortable for the mother.

If a mother is prescribed antibiotics, she and her baby are at increased risk for developing thrush.

### When Should a Mother Consult a Health-care Professional?

A mother who is on antibiotics and recovering from a breast infection should consult her health-care provider if she notices any of the following symptoms of thrush:

- Sudden onset of nipple pain
- Itchy or burning nipples that appear pink, red, shiny, or flaky
- Shooting pains, deep in the breast, during or after feedings
- Unexplained vaginal discharge or itching
- White patches inside baby's mouth, cheeks, or tongue
- Baby repeatedly pulling off the breast, making a clicking sound during feedings, or refusing the breast.
- Increased fussiness of baby

### References

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Stock # 13-06-11018