Low Milk Production

The amount of milk making cells, called Lactocytes, in the breast/chest varies between people. Some may produce 1 ounce (30ml) of milk droplets per hour, while others may produce 2 ounces (60ml) of milk droplets per hour.

The Rate of Milk Droplets

Prolactin- is the main hormone that tells the lactocytes to keep making milk. If there is no breast/chest feeding or pumping, the prolactin level drops. Then the Lactocytes don't get the message to keep making milk, leading to less milk.

Prolactin only rises with direct nipple stimulation. If the nipples don't feel the baby or stimulation from a pump, prolactin will drop. Prolactin is a short acting hormone, so it needs to be stimulated often, such as every 3 hours, to keep it elevated.

If the milk is not removed, the milk droplets build up, sending messages to the lactocytes slow down production.

The number of lactocytes in the glandular tissue will also decide the rate of milk production. The more lactocytes there are, the greater the milk volume. Some people have low volumes of lactocytes. This can be due to a birth defect or a history of breast reduction. It can also be due to some medical conditions.

Amount of Milk Being Made

Breastmilk volumes change quickly in the first several weeks to months after delivery.

During the first few days, lactating parents produce small volumes of milk called colostrum- a thick yellow substance. This is often called "liquid gold" because it is full of important substances that works to immediately protect the newborn from infection and mature the intestines and other organs. Although colostrum volumes seem low, babies who feed frequently will get enough nourishment by just breast/chest feeding.

Sometime between days 2 to 5 postpartum, the breastmilk feels like it is 'coming in'. The breasts feel warmer, heavier, and sometimes they feel tender. You will start to hear frequent swallows while the baby is nursing, and the breasts may start leaking. The milk appears yellowish until approximately 3 weeks postpartum.

By about 3-4 weeks postpartum, mature milk is being made, which looks white, and many parents are up to full milk production, 24-30 oz (720-900ml) per baby per day.

By 4-8 weeks, many parents notice their breasts no longer feel as full and leaking often slows down. This is normal as milk production regulates to meet the baby's needs.

Amount of Milk a Baby Needs

Newborn babies typically breastfeed 8-12 times a day during their early weeks. It is best to feed your baby when they are showing signs of hunger. This helps ensure they get enough milk and that your milk production increases.

During the first 4-6 weeks, the volume of milk that your baby needs rises rapidly. While a newborn may only need ½ oz (15ml) on day 2, a full-term healthy infant often requires 1.5-2 oz (45-60ml) by day 5. By the time they are one month old, babies will take about 3-4 oz (90-120ml) per feed.

Typically, infants who feed at the breast do not ingest much more than this for each feeding, even as they get older.

Is My Baby Getting Enough Milk

Your baby's weight is the best way to know if they are getting enough milk. An adequate number of wet and dirty diapers indicates that the baby is not dehydrated but does not prove sufficient weight gain.

Typically, babies will lose weight during the first 3 days of life and then will start gaining weight, with a return to birth weight by about 10-14 days of life. After that, most babies will gain an average of 5 to 7 oz per week during the first 4 months. The rate of weight gain slows from there.

Your doctor will check on infant growth at well-child exams, but whenever you are concerned about your baby's intake or weight gain, it is important to contact the baby's doctor for a weight check. Proper growth can never be fully assessed on the phone. Weighing the baby on an infant scale is critical to ensure proper growth.

Ways to Help Make Milk

The best way to make sure you are making enough milk is to remove milk effectively and frequently by nursing, and pumping if you are not nursing.

Ensure that you and baby are positioned well during feeds, and that your baby is held close to the breast with a wide-open latch.

Spend time skin-to-skin with your baby.

Feed your baby when they ask to be fed, which is often 8-10 times or more times per 24 hours.

- Until your baby is back at birth weight, try to feed your baby at least every 3 hours throughout the day and night.
- Avoid putting your baby on a feeding schedule, as babies will eat at different rates at different times of day. For example, your baby may want to nurse every 2.5-3 hours in the morning, and every 1-1.5 hours in the evening.
- Do not try to stretch out times between feedings. Always feed the baby when they show feeding cues. It may seem like your baby wants to eat all the time.

Be sure your baby is getting milk out during feeds. If you are concerned your baby is not removing milk well, have a lactation specialist evaluate your baby.

- You can gently compress your breast while your baby is feeding to help get more milk out.
- Nurse your baby on both sides for each feeding.
- If your baby falls asleep easily during breastfeeding, nurse on both sides twice for each feeding. As soon as the baby falls asleep on one side, switch to the other side. Do this twice on each side (L side, R side, then L side again, then R side again).

Take a break from other activities if you feel that your milk production has gone down. Spend a few days focusing on nourishing yourself and baby. Spend lots of time skin-to-skin. Make sure you are eating and resting during this time. Let others take care of household chores and other activities.

Avoid nipple shields.

Avoid giving formula supplements unless your physician advised this for the baby, or

if you know that your production is low enough that the baby needs extra calories.

There are herbs and prescription medicines that can help increase milk production. Use these under the guidance of a physician or other provider who specializes in Breastfeeding and Lactation Medicine.

When to Seek Help from a Lactation Specialist

If you are feeding on demand but your baby is not gaining weight, is not removing milk well, or you have any concerns about your milk production. Sometimes a major change in milk production can be due to a medicine side effect or a change in your health status. A small number of people have low milk production due to low glandular tissue.

Foods That May Increase Milk Production

Here are common foods believed to increase milk production:

- Many grains, such as oatmeal, barley, cornmeal, buckwheat, brown and white rice, millet, quinoa
- Legumes such as chickpeas, lentils, mung beans, black beans, kidney beans, peas, peanuts, and nut butters such as tahini, almond butter
- Nonalcoholic beer, especially those with a very hoppy quality, such as non-alcoholic IPAs
- Dried fruits- apricots, dates, figs
- Caraway
- Garlic, onions, ginger, basil
- Many vegetables can increase milk production, such as dark leafy veggies (lettuce, watercress, spinach, dandelion greens, beet greens, kale), fennel, carrots, cauliflower, broccoli, sweet potato/yam, asparagus, artichoke.

Spices that can **decrease** your milk production include sage, peppermint, spearmint, parsley, thyme, and rosemary.

To learn more about food and milk production, see the book:
Motherfood by Hilary Jacobson.