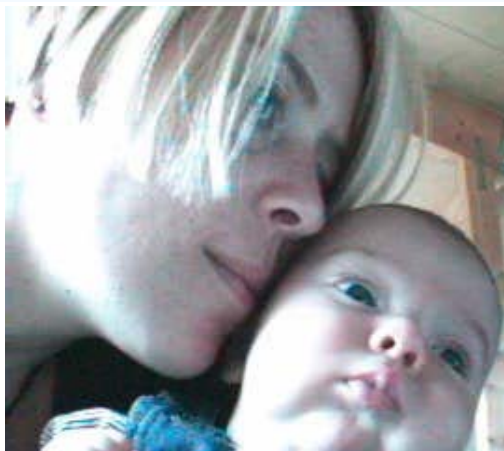


Lactation Notes



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From Uterine Life to an Independent Existence

Nature designs woman, not only to protect and supply nourishment to her growing and developing baby within the uterus, but also to give birth and to launch the child into a new independent existence, breathing air.

A major change takes place in the baby's blood circulation, as the cord from the placenta is cut. Various channels previously open in the heart will now be closed and others opened. To accommodate an air-breathing environment the lung-blood circulatory system is established so that now, waste gas products are eliminated by the lungs instead of the purifying system of the mother's blood. Instead of nutrients being delivered from the mother's bloodstream to the baby's circulation via the placenta and umbilical cord, the baby will take nourishment now by mouth. A new circulation is established around the intestines to convey nutrients taken by mouth to various parts of the body.

The baby can now be wholly independent of the mother, taking food by mouth. But nature has decreed and designed that a woman continues her role of providing nourishment with benefits to herself as well as to her child.

Breast Milk

Breast milk is designed for the baby. Each species produces what is most suitable for its own young.

Besides correct proportions and condition of fats, sugars, vitamins and minerals, breast milk contains enzymes for efficient digestion, antibodies for protection against disease, especially against gastric and respiratory diseases, and is free of harmful proteins which can initiate allergies and result later in conditions such as asthma and eczema.

Colostrum, the watery looking fluid which begins before the fully developed milk, is rich in these essentials and prepares the baby's digestive organs for the incoming milk.

Breast milk is free from contamination. Formulas for instance may become contaminated from storage in utensils or from other contact, for example hands and contaminated water. Vitamins are preserved in breast milk but are destroyed by heating in formulas and therefore must be replaced in all feeding other than breast-feeding.

Breast-feeding is a very convenient delivery system which comes at the correct temperature and supplies the correct amount of fluid as the nutritional needs of the baby are met.

Physiology of Breast-feeding

Because the human baby has tremendous intellectual powers, he is learning quickly and responds to nature's provision of warm, soft nourishing breast and knows how to suck the nipple because he has practiced thumb-sucking from early uterine life. He has strengthened the facial muscles which enable him to suck and draw milk from the breast as soon as he is born.

He hears and delights in his mother's sounds, her talking, laughing, singing, and learns to identify her scents and the security of her arms. In this shelter he learns to accept love and thrives bodily and emotionally. Observing all this, mother also thrives.

Mother's Needs

There are some women who, sometimes for unknown reasons, cannot breast-feed successfully. The ingredient of love is the most important of all and certainly can be supplied and combined without breast-feeding. No mother should be made to feel guilty or ashamed because breast-feeding is difficult or impossible. Feeding should take place in as calm an atmosphere as possible. Sometimes anxiety of the mother results in refusal of the baby to feed and "fighting of the breast" occurs. This is the time for some expert help from an experienced, wise and patient woman. Skilled mothercraft help is available usually amongst the woman's own family. In some organisations and countries there are special groups of people who specialise in mothercraft and in breast-feeding advice.

Role of the Father

Nature has given the baby, not only a mother, but also a father. His role in protecting and advancing the welfare of the baby is expressed in his care of the mother, ensuring her well-being by sufficient food, fluid, rest and by taking his part at night in answering some of the baby's demands.

Establishing Breast-feeding

It is important, especially in the early stages of breast-feeding, that the milk production is not jeopardised by emotional disturbances such as embarrassment, anxiety, upsets and also by chronic fatigue.

The baby is best fed when he is hungry and demands to be fed. Night feeding is normal for some weeks and is helpful in preserving a good supply of breast milk as well as maintaining infertility.

Medications and Smoking

The mother should obtain advice from her doctor about any medication that is prescribed, as breast milk is an efficient route for elimination of all pollutants from the body, sometimes to the detriment of the baby. Smoking should be avoided for this reason.

Sucking

The local effect on the breast of sucking is stimulation of milk production through the action of prolactin. This is the response to the baby's demand. If there is no sucking, the milk will dry up. This can happen when the baby sucks on one side only, maybe for example, if there is a retracted nipple and the baby finds it more difficult to extract milk from this breast. If the baby ceases to suck at this breast then the milk will dry up while at the same time milk is being produced normally from the other breast at which the baby sucks.

Via the nervous system, the pituitary gland produces a hormone called oxytocin which is the "let down" hormone. When the baby sucks, the milk flows. This reflex can be initiated by hearing, seeing or smelling her hungry baby, even by being near somebody else's baby. Thus an adopted infant may be breast-fed successfully.

Benefits to the Mother

Oxytocin has an effect on uterine muscle causing it to contract when the baby sucks. This enables the uterus after birth to return to normal size and form. Clots and afterbirth debris are expelled from the uterus when it contracts in response to sucking.

It is claimed on good evidence that breast-feeding protects a woman from cancer of the breast and osteoporosis in later life.

During pregnancy the placental hormones, oestrogen, progesterone and prolactin, prepare the breasts for milk production by growth and development of the glandular structure. After birth a high level of prolactin exists which has the effect of suppressing the ovulatory mechanism. This results in the mother remaining infertile for a variable time during milk production, allowing the baby to become established until old enough to accept solid foods.

Breast-feeding and Fertility Control

The time of infertility is variable. The effectiveness of breast-feeding is a contributing factor. Efficient sucking is all important. The baby should be put to the breast soon after birth. Great care should be taken to establish breast-feeding as soon as possible.

The Lactational Amenorrhea Method (LAM) is based on the presumption that if a woman is fully breast-feeding her baby, and has not experienced a bleed, then the pregnancy rate is around 2% during the first 6 months. No observations or rules are applied. Because the woman has not been taught the mucus patterns of infertility and fertility she has no way to predict her returning fertility. Unexplained

pregnancies may thus occur.

The Billings Ovulation Method is excellent training for all women, as changes in the mucus pattern signaling returning fertility can be identified accurately. Charting should begin close to 3 weeks after birth. This natural method of fertility control has an effectiveness rate of greater than 99%.

A woman using the Billings Ovulation Method will learn to recognise her infertility and the signs of returning fertility.

Recognising the Signs of Infertility using The Billings Ovulation Method during Breast-feeding

The observations are made simply and naturally as the woman goes about her ordinary daily activities and form the basis of [The Billings Ovulation Method](#).

While ovulation is suppressed there is no mucus at the vulva and the vulva feels dry. This dryness is a reliable indicator of inactivity of the ovaries and therefore of present infertility.

Sometimes instead of complete dryness there may be noticed a discharge which if present, always stays the same whether it is continuous or interrupted by dryness. This also indicates low ovarian activity and therefore infertility.

Any different discharge alerts the woman to the possibility of returning fertility. This indicates that the ovaries are active and are activating the cervix, through the hormone oestrogen, to produce mucus.

By restricting intercourse to the signs of infertility and applying [the rules](#) of the Billings Ovulation Method, pregnancy will not occur.

Recognising the Signs of Returning Fertility using The Billings Ovulation Method during Breast-feeding

The Billings Ovulation Method teaches the woman to recognise the signs of returning fertility. Under the influence of hormones from the ovary which is preparing to ovulate, the neck of the uterus (the cervix) begins to produce mucus. Cervical mucus is the essential ingredient of fertility, because sperm cells depend on it for their survival and ability to reach and fertilise the egg. (Refer to [Teaching the Billings Ovulation Method](#)).

The cervical mucus comes to the exterior at the vulva and is noticed by the sensation that it produces at the vulva. There may also be a visual observation of the mucus.

A woman can continue to breast-feed even though normal cycles have resumed. She can continue breast-feeding for as long as she wishes or the baby demands, without becoming pregnancy until she chooses to do so.

When the woman becomes pregnant breast milk supply may fail, however continue breast-feeding if possible. There is usually no reason to wean the baby because of pregnancy.

Instruction in the use of the Billings Ovulation Method

For correct teaching consult an accredited teacher of the method at a Billings Ovulation Method Centre. [Contact us](#) for assistance in finding a Centre near you. We offer assistance on-line for those unable to contact a Centre.

Circumstances that may Influence the Return to Fertility

There are many circumstances under which a woman will return to fertility before six months after birth.

- An early ovulation may occur even when the baby is fully breast-fed
- The woman may be ill or malnourished
- She may be unable to breast-feed
- She may be able only to breast-feed partially
- She may be a working mother and so be only partially feeding
- The baby may be an inefficient sucker
- The baby may be ill

Under these different circumstances, it is essential to understand the Billings Ovulation Method and to follow its guidelines and rules. In doing this the woman will recognise the onset of fertility. She can obtain the necessary information by observing and charting the mucus signs. The occurrence of [bleeding](#) will also alert the woman to oestrogen activity and approaching fertility. The couple is then able to make informed choices concerning a further pregnancy.