Maternal Nutrition during Breastfeeding
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When you're pregnant or breastfeeding, you're on the receiving end of a lot of nutritional advice. Some say that you need to eat certain kinds of food in order to produce enough milk, others warn that some foods will make the baby refuse your milk, and others tell you that certain types of foods in your diet can be harmful for your baby or reduce your milk production. How can a mother find her way in the midst of all this information?

Over the years of experience with breastfeeding mothers all over the world, LLL Leaders have seen that the best diet for a breastfeeding mother is neither complicated nor expensive. It doesn't require lengthy preparation, the sacrifice of favorite foods, or any need to eat unusual or strange foods in large quantities. It can also vary with an individual's own preferences.

A healthy diet offers many advantages that go beyond those that directly affect the breastfeeding baby and mother. The whole family, including the baby who will soon be eating with the others, reap the benefits as healthy eating habits are established.

In recent years, research has confirmed that even if some nutrients are missing in a woman's daily diet, she will still produce milk that will help her child grow. There is very little difference in the milk of healthy mothers and mothers who are severely malnourished. For example, if a mother's diet is lacking in calories, her body makes up the deficit, drawing on the reserves laid down during pregnancy or before. Unless there is a physical reason for low milk production, a woman who breastfeeds on cue will be able to produce enough milk for her baby, regardless of what she eats.

A great deal of attention has been paid to the diet of the breastfeeding mother all over the world. It isn't really surprising that many cultures make a direct connection between a woman's diet and the milk she produces for her child, so it is easy to understand why there are so many recommendations and taboos regarding what a breastfeeding mother eats. Some of these ideas do indeed have a basis, while others are the result of cultural attitudes, notions, and superstitions.

Some breastfeeding mothers feel so weighed down with taboos and obligations regarding her diet that breastfeeding can seem too complicated to put up with for very long. Unfortunately, most of the time there is no real reason for these rules to exist. Breastfeeding is a normal stage in the reproductive life of a woman, where just as in all the other stages in her life, her diet needs to be healthy, balanced, and adequate, taking into consideration any specific medical conditions.

What is the ideal diet for a breastfeeding woman?

The ideal diet for a breastfeeding woman is simply the healthiest one for all human beings. In our day-to-day lives, most of us have food habits that are not "ideal," but are still good enough to ensure that we have a sufficient quantity of the right kinds of food. A woman who is not strict

with her diet can still breastfeed successfully. It’s important to keep in mind, however, that good nutrition helps a mother maintain her health.

The overwhelming majority of women in the world who breastfeed follow imperfect diets at least part of the time. The concept of an "ideal" diet can vary from different families, cultures, economic situations, religions, and in different seasons. Yet, almost always, all over the world, in different epochs, even in situations of deprivation, mothers produce milk that helps their babies grow well.

In a few words, a healthy diet, both for a breastfeeding mother as well as for most other people, is defined by the terms varied, balanced, and natural. A varied diet is one that includes an assortment of different groups of foods, without excluding any particular one. But even in the case of specific allergies or food intolerance, a diet that includes different types of food and varies from meal to meal, from day to day and from season to season, will help to reduce reactions that might arise with repeated consumption of large amounts of a particular food.

The following are the main groups of foods that should be included in the daily diet.

- Fresh vegetables and fruits (preferably those in season) of all types, eaten raw or cooked;
- Different grains (wheat, rice, corn, barley, millet) preferably whole, in various forms, in the form of whole or broken kernels, as well as semolina and flour (and products made from them including bread and pasta);
- Protein foods from animal sources (dairy products, eggs, meat and fish) and/or plant sources (lentils, beans, soybeans);
- Small quantities of fats, preferably uncooked, cold-pressed vegetable oils.

A balanced diet can be achieved by eating a variety of foods from each of these food groups as well as by consuming individual foods in different forms—such as eating different varieties of fruits and vegetables or cooking foods in different ways. Some vitamins and proteins are better absorbed if other vitamins and minerals are present at the same time. For example, iron is utilized better if vitamin C is present in the diet. On the other hand, an excess of some kinds of foods can be detrimental. Large amounts of protein, for example, can cause the body to eliminate greater quantities of vitamins and minerals.

The word "natural" can have many meanings, for example:

Freshness. Fresh foods taste better, contain more vitamins, and are less likely to have undergone oxidation (rancidity) or damage due to storage in less than ideal circumstances. The shorter the time interval between harvesting and consumption of food, milling the grain and the use of flour, and pressing or extraction of oil and its use, the healthier the food is.

No Additives. Additives should be minimized. The use of preservatives extends the shelf life of a food, often by simply masking natural deterioration processes. The preservative itself is usually not beneficial to our health, and the food that results is in any case less nutritious than if it were fresh. Flavorings and colorings keep food looking and smelling good in the interval that lapses while it is processed, packaged, transported, displayed, sold, taken home, and eaten. Some

colorings are of vegetable origin and usually do not cause problems. Other colors, however, are derived from animal or are synthetic and can be the cause of hypersensitivity and related problems. Other types of additives are used to make foods softer, crisper, or to enhance flavor.

Whole Foods. Whole foods have been processed to a minimum degree. They retain all the nutrients originally present in the food. It has not been "refined." We are used to eating bread and pasta made from white flour, obtained by eliminating bran and germ from wheat, polished white rice, refined white sugar and salt, and oils refined using heat and chemical processes. Many fatty acids contained in refined oils are present in a form that our bodies cannot use. White sugar and flour do provide us with calories, but most other nutrients are lost. Many foods produced with these flours are enriched with small amounts of the nutrients (usually vitamins) that were lost in the first place when the food was refined. We have also begun to understand how important dietary fiber, which is usually removed during refining, is for the health of our digestive system.

No or few contaminants. When food is grown in situations that eliminate or limit pesticides, insecticides, and chemical fertilizers, it is more natural. Respect for seasons and knowledge of natural techniques and phenomena can be very helpful in efforts to minimize the use of chemicals as well as damage caused by natural elements and their consequences (such as microbial or parasitic infestations). Since pesticides and other chemicals concentrate in the body fat of animals who consume these foods, their food is important, too. Both for vegetable and animal products, organic certification helps us to ensure that contaminants are kept at a minimum level. Reducing the consumption of animal fat and red meat will help to further reduce the consumption of such substances.

How many extra calories do I need when I’m breastfeeding?

The number of calories a woman needs depends upon how much body fat she has and how active she is. While women are often advised to consume about 500 extra calories daily while they are breastfeeding (compared to before pregnancy), research now indicates that this could be too much for some women, while for others it could be insufficient.

Most breastfeeding women need to increase not only the calories they consume, but all the nutrients that make up their diet in order to satisfy the additional requirements of milk synthesis, though for some women the increase will be minimal. If the diet is balanced and varied, the increase in calories will automatically be accompanied by an increase in all the other nutrients.

Most women have some extra weight at the end of pregnancy. These pounds will gradually be used up during the months of breastfeeding, so nutrients will not need to be provided entirely by a mother’s daily food intake. Although the process of how human milk is synthesized is still not completely understood, we do know that it doesn’t take a lot energy. It has been shown that, during lactation, the metabolism of the mother’s body becomes more efficient, not just in regard to calories, but also to minerals.

How can I vary my diet?

Many cookbooks are available containing ideas for using new kinds of food as well as cooking the foods we are familiar with in different ways. LLLI publishes and distributes many cookbooks and nutrition books with the purpose of sharing ideas and improving the whole family's diet. You can experiment with different grains, vegetables, fruits, and sources of protein, trying new cooking techniques and new combinations. The limit is only dictated by your imagination!

Are there particular foods that mothers should or should not eat when they are breastfeeding?

A breastfeeding mother doesn't require special foods to produce or increase her milk supply. A baby's sucking determines the quantity of milk that is produced. A breastfeeding mother's body uses a combination of all the foods that she eats, completing them with nutrients stored in her body to produce the milk that she gives her child. What this means is that mother's milk is made every time, following the same process and resulting in milk that has a fairly constant composition. If the mother's diet is not adequate, it is her body that makes up the difference. If she is malnourished, this means that her body has to make up for the lack of nutrients in her diet when it produces the milk for her child. It has been seen that even in cases bordering on malnutrition in poor countries, the milk produced by these mothers satisfies the needs of the child, who will grow adequately if he is breastfed on cue.

In practice, there is no particular food that must necessarily be eaten, especially if this is something that the mother is not used to or doesn't like. All the nutrients that are found in one food can be found in others. If a mother prefers not to eat a food that contains an important nutrient, she can obtain it by eating one or more other foods.

Does milk change according to the mother's diet?

Some of the ingredients in human milk are present in constant proportions for all breastfeeding mothers and at every feed. Others may vary as a result of the maternal diet. We know, for example, that the type of fat in the maternal diet is closely related to the type of fat in the milk the mother produces, although the caloric content of human milk is fairly consistent. Breastfeeding on cue ensures that the baby will receive all he needs within the day in order to grow well and remain healthy.

Children acquire their family's food habits and preferences gradually. A baby first tastes this food via the amniotic fluid before birth, and later, through his mother's milk. Many of our ideas about what foods we prefer or avoid are culturally determined and foods that are considered unsuitable or even harmful for breastfeeding mothers in some cultures are considered a normal and healthy part of their diet in others.

Do I need to drink milk to produce milk?

Human beings are the only animals that consume the milk of other animals. In no other species do the young consume milk after infancy. No other mammalian mothers drink milk, yet they all produce milk adapted to the needs of their young. They obtain all the necessary ingredients to produce milk from their diet. It's useful to remember that there are whole cultures where the

people traditionally do not drink milk or eat dairy products. In some languages, the traditional word for milk means only human milk, and the idea of milk from another mammalian species is totally new to the culture.

Milk and cheese are an important part of the diet of many people. Others thrive without milk or cheese. In any case, there is no need to introduce these foods into the diet or to increase their consumption, especially if the mother does not like or does not tolerate them.

How can I be sure to get enough calcium if I can't include milk and dairy products in my diet?

All adult mammals , including humans, obtain sufficient calcium for their needs from the foods they eat, although they do not consume milk after the first few years of their lives.

Naturally, calcium is an important ingredient of a balanced diet. Cow's milk and dairy products are sources of this mineral for many people. There are many other good sources of calcium, including:

- Sheep or goat's milk and cheese.
- Canned fish, such as salmon or mackerel, which contains bones that become soft during processing and are easier to eat. Anchovy paste (made from whole anchovies) also has a high calcium content.
- Whole grains and whole grain flours.
- Green, leafy vegetables.
- Almonds or other types of nuts and dry fruit, such as walnuts and dry figs. (It's important to consume these in moderation because of the high caloric content of these foods.)

Some foods traditionally recommended to breastfeeding mothers in different countries around the world are also rich in calcium. Chicken broth, where the chicken is cooked for long time to soften the bones, is an example. In different parts of the world where people do not traditionally consume milk products, or make very sparing use of them, other vegetable and mineral sources exist that will enrich the diet with calcium. Some examples include:

- Sesame seeds, which can be eaten whole, in the form of tahini (sesame butter) and gomasio (a salt substitute that contains sesame seeds and salt), or can be added to many foods. They should be chewed well in order to increase the ability of the body to utilize the calcium they contain.
- Tofu or soy cheese, which is often coagulated using a calcium-rich substance and is an important part of the traditional diet in Japan, China, and other countries.
- Tortillas that are made using lime-processed corn are a good source of calcium in Mexican diets.
- Some types of algae (sea vegetables, such as wakame) fermented foods (miso), and seasonings including tamari and soy sauce can also contribute to enriching our diets with calcium, as well as many other minerals that are especially important to a breastfeeding mother.

How much do I need to drink while I am breastfeeding?

In general, drinking to thirst is a good rule. You are usually drinking enough if your urine is light colored. Many mothers feel thirsty when they breastfeed, especially when the baby is a newborn. It's a good idea to have a glass of water available while breastfeeding. Drinking beyond one's needs is unnecessary, as it doesn't help to increase the milk and may be unpleasant.

Herb teas and infusions are a pleasant way for many women to increase their liquid intake. Although many believe that some herbs can increase milk production, we do know that unless the baby empties the breast regularly and on cue that milk production will not reach its top potential. Excessive amounts of herb teas and infusions can be harmful to both mother and baby, so they should be used moderately and with caution.

In the case of all beverages, the quantity and type of substances present (such as carbonation, sugar, stimulants, sweeteners, and colors) should be evaluated for the effects on both mother and child.

What about iron?

Human milk contains a small amount of iron in a form that is easy for babies to absorb. As with calcium, the levels of this mineral in human milk are constant, despite variations in the maternal diet or the mother's body stores. Iron is present in meat, beans, green vegetables, whole grains, and some dried fruits.

An important advantage of breastfeeding -- especially breastfeeding on cue -- is that a mother usually does not resume her menstrual cycle for at least a few months, conserving the iron that would otherwise be lost every month.

Can I eat a vegetarian diet while I am breastfeeding?

A vegetarian diet that contains some animal derived food, such as milk, milk derivatives, or eggs is usually complete. Women who don't eat meat, but consume dairy or eggs usually do not have problems breastfeeding. When a diet does not contain any of these foods (such as in the case of vegan and some macrobiotic diets), a mother needs to sure to include vitamin B12 into her diet in some way. Many vegetarians use a supplement for their vitamin B12 intake.

Research has shown that milk produced by vegetarian women has lower levels of environmental contaminants (such as PCBs) than that of other women. These substances are stored principally in the fatty tissues of the body, and vegetarian diets tend to contain less fats than diets with more animal products.

How can I lose weight and stay healthy while breastfeeding?

Many women would like to return to their pre-pregnancy weight as soon as possible after birth. It can take several months or even a year to achieve this. Part of the weight that a pregnant women

gains is an "energy deposit" to meet the extra caloric demands of breastfeeding. It is consumed gradually while the mother nourishes her child.

It is wise to wait until the baby is at least two months old before making a specific effort to lose weight. A women's body needs about this much time to recover from the birth and establish a good milk supply. Often, a woman loses weight without specific effort during this time.

A woman who is breastfeeding should lose weight slowly. Every mother needs enough energy and nutrients to be healthy, active, and able to care for her child or children. Ideally, she should not lose more than about one to two pounds per week (two kg a month).

In conclusion...

An "ideal" diet for a breastfeeding woman is simply a varied, balanced, natural diet. Every woman will choose the diet that is best adapted to her, depending on culture, lifestyle, personal preferences, as well as the information available to her.

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