SOME PRINCIPLES OF INFANT FEEDING¹

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Infant feeding means either the use of breast milk or modifications of cow's milk. The use of patent foods is a problem to be solved after the first two fail. However, in most cases there will be no failure.

Breast milk is the one natural food for the new born infant. There can be no substitute offered as long as there is any of it to be obtained. A nursing baby has only one chance at infection—that from an unclean nipple—while the bottle fed infant has an infinite number. Breast milk is supplied by Nature for a purpose. Running true to form it accomplishes this only too well.

There are many excuses offered, likewise poor advice given, why a mother should not nurse her baby. Almost all of these will not prove up when tested. Real reasons are much harder to find than many of us will admit. Any prolonged wasting sickness, such as tuberculosis, cancer or any infectious or contagious disease, is the only valid excuse to substitute artificial feeding. Laziness gives many a mother the chance to shirk her duty. Economic demands also must be recognized. With a mother's pension law being adopted in many states, the necessity of a mother earning her living at the cost of not nursing her baby is abolished. With the known high mortality among bottle fed infants, we who represent preventive rather than curative medicine must urge all mothers to think twice before adopting substitute feedings for their babies.

It is better to have a baby nursed for two months than not at all. If the time can be extended to five months the baby's chances of living are increased far beyond our ordinary estimates.

In case a mother can not nurse her baby, the next best thing is to get a wet nurse. The problem is easily solved if a healthy wet nurse of any nationality can be obtained. The expense is often prohibitive. Breast milk from several healthy sources can be utilized if gotten under the best aseptic conditions.

The final test of the use of breast milk is not, as many suppose, the appearance of the stools, but rather a consistent and steady gain in weight. A breast fed baby's stools can be almost any color or condition without cause for worry as long as there is a good gain in weight.

There are times when a mother's milk does not seem to agree with her baby. Artificial feeding should not be substituted at once in such

¹ Read at the recent annual meeting of the Indiana State Nurses Association.

an instance. There should be an analysis made of the supposed faulty milk and the defects, if such exist, corrected by diet and exercise. It is easy to thoughtlessly advise the use of a formula but very difficult to raise a baby on one.

The routine of infant feeding calls for nothing but boiled water for the first twenty-four hours. This gives the mother a chance to rest. Then for the first two months we establish seven feedings of twenty minutes each. From the third month on until the baby is weaned six nursings a day are given. Towards the last, five will be enough. All of this is by the clock. If a mother will make herself a slave by nursing her baby every time it cries, then the blame for the certain resulting upset must be placed where it belongs.

There are cases when the supply of breast milk, even if both breasts are nursed, is not enough. This condition if it can not be corrected calls not for the discarding of what little milk there is, but rather the addition of a supplementary feeding of a cow's milk modification. This additional food is given after the nursing, never before, as it is breast milk we wish to feed, not cow's milk. The best tonic for a failing supply of breast milk is a nursing baby.

During the third month the nursing infant should have a full feeding of a suitable formula once during the twenty-four hours. This is given so that the mother can have recreation and at the same time accustom the baby to take the bottle.

When the real need arises that artificial food must be used for the entire time, one's troubles begin. It is to be remembered the food must be fitted to the individual case and not the case to the food. This is why set formulas fail in so many cases. The proper balance is not established. The problem calls for experience plus common sense plus patience. Here the final test is a consistent gain in weight and a very careful watching of the stools. If there is fat, sugar or proteid indigestion the fault or faults must be corrected early.

Artificial feeding calls for cleanliness. Success depends on this. Every mother should be taught the meaning of surgical cleanliness. The more care taken, the less the chance of infection.

Until it has failed, cow's milk is the only artificial food worthy of use. Our ideal is a clean milk obtained from a healthy herd under the best possible conditions. Certified milk is the best. It represents the highest known standard. It is not the number of bacteria in the milk that worries us but rather the particular kind. Better to feed 500,000 harmless bacteria than ten scarlet fever germs. A milk that runs a high bacteria count will in time contain harmful ones. This is why a low count is demanded. Clean milk costs money. It is our duty to explain the need for this cost.

The best nursing bottle is a wide-mouthed one fitted with a large nipple. These can be readily cleaned with soap and water as well as boiled. The clean nipples should be kept in freshly boiled water—not in a boric acid solution. Water will be changed daily but a boric acid solution is apt to go weeks without being renewed. Boric acid is a weak germicide at the best so it is poor policy to put much faith in it.

Cow's milk is modified by adding either boiled water or a cereal water, extra cream and sugar. The sugar used is either lactose or dextro maltose. The choice rests with the latter as it is more easily digested and absorbed.

Lime water is added to a milk formula to lessen the work of the stomach and to decrease the size of the curds. The amount used is from 20 to 50 per cent of the milk and cream in the formula, and not a few drops.

The entire twenty-four hour amount of a formula is prepared at one time. If certified milk is used there is no need of pasteurizing it. The correct amount for each feeding is poured into the bottles, these plugged with cotton and kept on ice until needed. At a feeding time a bottle with its contents is heated to body temperature. The bottle should be held and removed as soon as empty or else the baby will get a large amount of air which will produce colic.

Unsweetened orange juice is given to all artificially fed babies to prevent scurvy. The amount varies from a teaspoonful to the juice of half an orange. It is also a mild laxative.

Many and many a baby grows to the mature age of one year a total stranger to drinking water. Plenty of water will never do a baby harm. The terrors of a heat rash in the summer time can be avoided if it is used in large amounts.

The publication of the so-called normal tables of development has caused a lot of needless worry. These tables are invariably made from hospital records. I am not yet ready to admit hospital children to be normal. A mother consults a development table, finds to her great astonishment her otherwise healthy baby is a pound under weight. She begins to worry as well as fret. However, if her child is overweight she does not hasten to diet off the surplus. Common sense should be encouraged. Baby books must be read in generalities and not fitted to specific cases.

To sum up: Breast milk is the only real food for infants. It is the ideal. Artificial feeding will do if need be but the reason must exist before it is adopted. Artificial feeding demands care, cleanliness, constant watching and patience with the possibility of failure always in view.