

### FEEDING BABY THE ARTIFICIAL WAY

THE HEALTH AND LIFE of a baby depends upon proper nutrition and without doubt its own mother's milk is far better for it in every way than cow's milk, however cleverly and scientifically it may be modified. The very fact that it has to be modified to make it suitable is proof that it is not an ideal food.

However, for various reasons, it may be necessary to adopt artificial ways of feeding. The two principal ones being that the mother's supply of milk is insufficient or that the child is approaching the weaning age—about five months.

Either of these conditions means that some kind of artificial or bottle feeding will have to be adopted to supplement the shortage of the natural milk, or to take its place entirely.

Bottle-fed babies often look very well nourished when compared with breast-fed babies, but over many years it has been proved that those fed on artificials by the bottle do not resist disease so well as the breast-fed, and the fat chubbiness is only an illusion.

Bewilderment is often expressed, particularly by young mothers with their first baby, as to how they are to know when to introduce artificial feeding. There is one sure guide and that is the weight of the baby itself.

If the weight is steadily increasing, there is no need to worry, but on the other hand, if the weight indicates that more nourishment is required, resort to the bottle is necessary.

This should be a gradual process. A sudden change from breast feeding to wholly artificial feeding will prove distressing to both mother and child. The process should be gently graduated, a feed with the bottle following the usual breast-feed, and the quantity must be small.

It must be remembered that breast feeding is normal and the child's stomach is designed to assimilate this natural food. Also it is rich and concentrated, therefore it is obvious that cow's or goat's milk by itself is usually unsuitable.

The only way to dilute cow's milk is by adding plain water. No sugar should be added as commercial sugar as we know it to-day causes fermentation, and excess wind is generated with consequent distress and sometimes vomiting. The latter results in loss of food values and loss of condition.

Cow's milk should always be given in a sterilised bottle with a sterilised nipple fitted securely. This ensures a mixing with the saliva and makes the milk more digestible.

If it is deemed advisable to introduce bottle feeding at a very early age, orange juice, diluted preferably, can be introduced after the second week. The amount should be very small at the start, but it can be rapidly increased until the child is taking up to four and even six ounces per 24 hours.

In order to get the sugar, the best way is to use grape juice which is rich in this element in a natural, easily assimilable form. To obtain this, place some ripe, well-cleaned grapes in a sterilised vessel, crush them and strain the juice into another sterilised vessel. This juice, whilst giving all the sugar the child needs, also ensures an easy regular bowel action.

If grapes are unobtainable, the unsweetened syrup from stewed figs will be found quite suitable, but again no commercial sugar should be added, and it must be strained.

A child should never be fed more than four or five times a day, and never during the night. This includes the fruit juices. If a child is once fed during the night it will, by the natural association of ideas, expect this to be continued, and in consequence the health of the mother and the child will be adversely affected.

Again never feed a child if it is feverish or out of sorts. Under these conditions it is wise to miss a meal when usually any slight disturbance will clear up, making the child readier for the following meal. Feeding when the baby is ill only adds to the illness and does no good to the child.

Benevolent Nature always accommodates the milk of the mother to the needs of its offspring. Thus cow's milk is designed primarily to meet the requirements of the young calf, goat's milk to the kid, mare's to the foal and, incidentally, human milk to the human baby.

It will be found that a naturally breast-fed child is less liable to develop colds, throat troubles, adenoids, measles, scarlet fever, etc., etc., and very definitely is less subject to rickets, the latter being purely a food deficiency disease.

Human casein, which is the protein element in mother's milk, when acted upon by the gastric juices of the child's digestive organs becomes like soft delicate flakes, which the little baby can assimilate easily. On the contrary, cow's milk is reduced by the same digestive processes into large curd-like masses, which are difficult to digest.

If cow's milk has to be used, it should be clean and fresh. Milk from an accredited dairy supplying a guaranteed tuberculin-tested product is the best and safest. By using this grade of milk there is no possibility of the child developing bovine tuberculosis, which is a dreaded complaint.

Cow's milk should never be boiled before use. Heat it to blood temperature only. Boiling coagulates the casein and the vital mineral elements are spoiled for easy digestion.

Condensed milk from tins, whilst good in itself, contains too much sugar, which is detrimental and causes fermentation and digestive distress.

National Dried Milk is quite good, but its composition varies considerably and has to be tested by the trial and error method each time it is required for use. This is undesirable for both Mother, who has to prepare the food, and for the baby who has got to stomach it.

There are many good foods obtainable, but before any are used, a word of advice as to their suitability for a particular child, from the doctor, will prove helpful.

A word about pasteurised milk.

Pasteurisation is a method whereby tubercle bacilli or other pathogenic or poisonous matter is killed by the application of heat.

If the milk is suspected, it should be pasteurised, for it is better to use disease-free milk than any that may be contaminated. However, the method is open to suspicion for by its use any dirty, disease-laden milk can be used simply by pasteurising it. This is simply one way of making unsafe milk safe. This is obviously very undesirable for all the foreign matter, though killed by processing, is still in the milk.

Use T.T. milk always, for this is guaranteed milk from frequently-inspected animals. The inspectors of the animal health division of the Government are very severe and suspected animals are thrown out of a dairy herd immediately, without any hesitation whatsoever.

There is much publicity given to vitamins to-day, and doubtless they are vitally necessary to the health of human beings and animals, but artificially-introduced vitamins is a poor way to obtain these elements. The human body and the animal form are designed by Nature to manufacture their own vitamins in the correct quantity and balance. Sunlight on the naked body stimulates this necessary action, so it can be readily appreciated that exposure in commonsense doses to the rays of the sun is greatly beneficial to the growth and development of the immature child.

To sum up, mother's milk is best at all times. Cow's milk diluted with plain water without commercial sugar is a good substitute when a substitute is necessary. Necessary sugar should be obtained from strained grape juice or fig juice.

Sunlight in graduated doses and exposure to the fresh air is necessary to help the functions of the body to perform correctly.

Finally, consult your clinic, doctor or nurse if in doubt, but the foregoing remarks plus a reasonable application of commonsense will ensure that the most of the pitfalls of artificial feeding will be avoided.

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