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The Midwife.

Common Errors in Infant Feeding.

An interesting article on the above subject is contributed by Dr. Eric Pritchard to a recent issue of *The Clinical Journal*, in which the writer points out that errors in the feeding of infants, and the catastrophes that follow, are by no means confined to artificial methods; they are equally common amongst infants brought up on the breast, and he proceeds to analyse some of the causes which lead to the disasters which are attendant on both systems of feeding.

Some fifteen years ago Dr. Pritchard pub-lished an article on the "percentage system" of feeding infants. The aim and object of this method, as is now well understood, was to adjust the nutritive supply to the nutritional re-quirements. It was clear, therefore, that if cow's milk was adapted to the nutritional requirements of the calf, it could not also satisfy the needs of the human infant, and no amount of dilution could make it do so. It was claimed, however, that the food elements which existed in cow's milk could be separated by analysis, and re-combined by synthetic methods in the required proportions, and the results of the method have proved abundantly that this is true. And from this aspect, if the method fails it is the fault of the individual who employs it, and not of the method. "I frequently see it stated," says Dr. Pritchard, "by authorities who, in my opinion, might be expected to take wider views, that the percentage method is inferior to the old system of milk dilution; this is tantamount to saying that guess-work is better than a certainty, for the percentage method enables us to employ with accuracy any degree of dilution we please."

The writer proceeds to show that the infants with whom he had his early successes were all over one month of age. Some had been breast fed, others had been brought up on the bottle, but all of them were failures in some respect or otherwise he would not have found it necessary to interfere with the method of feeding, but the moment he attempted to apply the same method to the case of new-born infants, the disillusionment came, and he had to confess that the system had been weighed in the balance and found wanting.

balance and found wanting. Why? Here comes in an interesting point, showing the value of observation and practical experience on the part of a nurse, which although unsupported by scientific proof, afforded the key to the puzzle.

Dr. Pritchard writes: "The answer to this question was unexpectedly supplied me by a maternity nurse, who had worked for me, and who was quite enthusiastic over the new method. She told me that she tound her cases did much better when she peptonised the milk mixtures for the first few weeks of life. This, then, was the secret of my own failures, and I set to work to study why Nature did not fail in the same way. I knew perfectly well that Nature did not peptonise the human infant's food . . . however, when I came to ex-amine the character of the food which Nature supplied to the new-born infant, I had to acknowledge that if it was not exactly peptonised it was at least of a composition that required little or no digestion before it could be absorbed from the alimentary tract.

"During the first few days of the puerperal period the mammary secretion, or colostrum, is extremely scanty in quantity; it is non-stimulating, non-coagulable, and yet adequately nutritious for the then existing requirements of the nursling. In fact, it is exactly the sort of food that on theoretical grounds ought to be supplied to a small, sensitive, and undeveloped digestive organ such as the stomach at the time of birth. To indicate how nicely adjusted colostrum is to the physiological needs of the new-born infant, I may mention that the sugar which it contains is capable of immediate absorption without any alteration in the digestive tract of the infant. The sugar of colostrum is dextrose, and not lactose, the milk sugar by which it is replaced after the establishment of full activity of the mammary gland. . . Nature therefore provides the new-born infant with a mono-saccharide sugar (dextrose), which is immediately available for absorption and for the purposes of nutrition."

The transition from colostrum to coagulable milk is relatively slow; it may be ten days before the mammary secretion assumes the character of a true milk. During this time the stomach has been functionally aeveloping, acquiring tolerance in the presence of coagulated casein, and learning to peptonise or liquefy the clot soon after its formation. There can be no evasion or short-circuiting of this route, and that is why new-born infants who are started in life on the statutory mixtures or the most approved percentage combinations so often fail to do justice to the method of feeding.

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