

ON THE PREVENTION OF SUMMER DIARRHŒA OF INFANTS.

IN preventing summer diarrhœa in young infants there are practically two special points to attend to: First, absolute cleanliness in relation to the food, bottles and other vessels used in preparing the food, &c., with the free employment of heat, in the form of hot water and steam, for sterilization; and, second, to avoid over-feeding. The greatest danger is from hand or bottle feeding, and as pointed out in this JOURNAL last month, milk rapidly deteriorates in hot weather and becomes actually poisonous to the delicate stomach of the baby. When it cannot be fed while yet quite fresh, direct from the cow, after proper dilution—as the mother's milk is taken direct from the breast, it should be boiled and kept at nearly the boiling temperature for half an hour, or steamed, as in an ordinary cooking steamer, for a like period of time. Any so sterilized and not immediately fed, may be kept in a cool place in one or more bottles stoppered with pledgets of cotton. Six or eight small bottles, for the day's feeding, may be thus prepared every morning. We repeat, use boiling water or steam, or both, freely and often on all the vessels; look well to the inside of the bottles and nipples, turning these often, and avoid rubber tubes.

Over-feeding is a constant cause of diarrhœa. One of the most distinguished physicians of the last generation, Dr. James Jackson, of Boston, wrote, in his published *Letters to a Young Physician*, that a certain intestinal ailment of infants had often puzzled him in the first years of his practice. It was characterized by the occurrence of green and unhealthy frequent stools, showing imperfect digestion. After observing a considerable number of infants that had such evacuations, and learning the mode and frequency of their feeding, the truth gradually dawned upon him that the unhealthy stools resulted from over-feeding. By diminishing the amount of food given at each feeding, and lengthening the intervals between the feedings, these infants

were soon cured, when medicines had failed to give relief.

In a late number of the *Dietetic Gazette*, Dr. J. Lewis Smith, of New York, said:—In December last, I attended an infant of four months that had been very fretful and with insufficient sleep for weeks. The wet-nurse who had charge of it had apparently the proper requisites, such as health, youth, robustness, and well-developed breasts, which seemed to furnish sufficient milk, and of good quality. But the infant, though fairly nourished, had so little sleep and was so fretful, crying so much during the night, as well as day, that the whole household were deprived of the needed rest. The nature of the baby's ailment was soon detected, for its stools presented the appearance indicative of indigestion and intestinal catarrh. They contained numerous whitish masses of casein, mixed with mucus and thin fecal matter. Pepsin preparations, with bismuth, were at first employed, without any marked result, but improvement began at once when the infant, instead of being frequently applied to the breast, as had been the practice, was allowed to take it only every third hour, and was fed nothing in the interval. It had been simply over-fed.

Some infants, Dr. Smith continued, if over-fed, regurgitate the surplus food, but others do not, and the part which is not digested undergoes fermentation, and acts as an irritant to the stomach and intestines. Acids, as the butyric and lactic, and gases, which distend the stomach and intestines and cause colicky pains, form from the fermentation. An infant thus suffering from over-taxed digestion, and from the presence of irritating acids and gases in the stomach and intestines, is usually fretful, and its sleep is disturbed and broken. The cause of its restlessness is often misunderstood by the mother, who thinks that it may be due to insufficient nutriment, and, accordingly, it is applied more frequently to the breast, or if bottle-fed, it is given the bottle more frequently.