

preeminence over all other foods has been so long received and allowed that assertion to the contrary would be largely regarded with considerable scepticism, and yet there can be little doubt that next to water it has been the most potent vehicle for the transmission of disease as well as an excitant and a stimulant to it. Milk for the typhoid sufferer was not long ago regarded as a necessary part of the treatment, the more consumed of it the better, and yet to the same dairy that supplied the nutriment it may well happen that the origin of the disease could be traced, like the goblet containing the apparently pure and crystal fluid but in fact abounding in death dealing organisms, spores or germs in the grateful draught of cow's milk may be and often is contained the same exciting cause of disease and death. It is essential to bear in mind that milk delivered fresh and unadulterated from the cow may be charged with the disease-producing germs. Inocuous to the animal the diseased products find their way into the lactiferous secretion entering the system most frequently in water. Again, the milk may, be impregnated with irritant matter from the herbage on which the cow feeds, which coming in contact with the inflamed glands of a typhoid patient or the delicate structures of a young infant may be the cause of serious mischief. Few that have treated many cases of typhoid that cannot call to mind the evident ill effects arising from the partaking of even a very small portion of milk, and its immediate influence in raising the temperature and occasioning considerable distress.

The extreme affinity which milk has to other matters is well known; placed in the same room with rancid or putrescent animal or vegetable matter it immediately assimilates with it, the conjunction setting up a process of fermentation and produc-

ing a very active poison called Tyrotoxicon. No liquid is more readily affected by surroundings than milk and yet how often is it to be seen by the bedside of patients suffering from various diseases and in the living rooms of families, when it is the sole nourishment of an infant. No article of human food requires more care to preserve its purity than cows' milk, and no matter what care may be expended upon it, as it comes from the animal it not infrequently contains matter inimical to health in the adult, and of course in a greater degree to the infant apart from the disease germs which may be taken into the system suspended in it. It must be remembered that cow's milk contains a vast amount of nourishing matter, and that it coagulates in the infant's stomach in lumps, not as the mother's milk does in flakes, and that this coagulation is the casein of the milk. As no satisfactory substitute has yet been discovered for human milk so good as that of the cow. The question arises how is the coagulation of casein to be prevented; this requires to be generally known and may be accomplished by peptonizing the milk, or partially digesting it. In the New York infant asylums five grains of extract pancreatis and ten grains of bicarbonate of sodium are added to a gill of warm water, this is mixed with a pint of milk warm and the vessel placed in water at a temperature of 100° F. for one hour, it is then to be placed on ice. While being treated at a temperature of 100° it should be frequently tasted and if bitterness is detected it should be immediately placed on ice, boiling will stop the peptonizing process but icing is to be preferred as it arrests without destroying it. Thus prepared from a healthy cow it approximates most nearly to the composition of human milk.

The first necessity is to ascertain