

much as albumin and globulin are readily soluble and easily digested and absorbed, while casein is insoluble and must undergo certain transformations before it can be absorbed, it will be seen that the proteid of cow's milk ( $\frac{4}{5}$  casein) requires more digestive effort than the proteid of woman's milk ( $\frac{1}{3}$  casein).

It may be seen the amount of curd formed in milk depends upon the proportion of casein present, and the less bulky the curd the more easily digested is the milk. White and Ladd, of Harvard, as a result of their experiments, have arrived at the conclusion that, by the use of whey as a diluent of creams of various strengths, they are able to modify cow's milk so that its proportions of casein and soluble (whey) proteids will closely correspond to the proportions present in human milk—thus rendering it much more digestible and suitable for infant feeding. They claim that whey cream mixtures yield a much finer, less bulky and more digestible coagulum than plain modified mixture with the same total proteids. They admit, however, that barley water mixtures yield a coagulum equally fine. It will be seen, therefore, that it is to break up the curd of cow's milk, and thus furnish a small quantity of easily absorbable food, that cereal gruels (in which the starch has been converted into dextrin and maltose) are advocated as diluents; it having already been shown that the curd of cow's milk, with a digested gruel diluent, passed through a sieve having 900 meshes to the square inch, while those with water diluent remained on the sieve. How much effect a digestive gruel has on the curd of milk depends, of course, on the strength of the gruel and the dilution of the milk.

Thus, after years of careful study and experiment, it has been found that cow's milk may be so modified as to correspond very closely to mother's milk, not only in the relative proportions of its total constituents (proteid, fat and sugar), but also in the composition of the proteid itself—the casein being so reduced that a much less bulky curd is formed which is more easily digested. It is for this latter purpose that White and Ladd's "whey mixtures" and Chapin's "cereal infusions" have been recommended; and, though experience has proven that they are advantageous in many cases, yet the fact remains that, though the curd has been reduced in amount, it is not of the same *character* as that formed from mother's milk, *i. e.*, it is still often re-