By making the Leffman test this point can be demonstrated as described above There is no more convincing demonstration that can be made to a medical or technicalman than this test upon milk powder because few persons realize that it is possible to produce milk powder and have the enzymes preserved when it is ordinarily understood that in the production of any milk food the enzymes are the first element to be destroyed under ordinary conditions. Milk powder as produced by the spray process is therefore most extraordinary from this point of view.

Following this simple test it might be well to make a slight comparison of milk powder with the common condensed milk and evaporated milk because these two products are somewhat akin to milk powder and yet far removed from it.

Condensed milk is produced by removing a part of the moisture from the milk, then adding sugar to it as a preservative.

Evaporated milk is simply unsweetened condensed milk processed at high temperature to preserve it.

Naturally because of the process these two products have to go through the enzymes are destroyed and consequently condensed milk is not a satisfactory food for infant feeding when this one point is considered. In view of the heat to which these two products are subjected in the process of manufacture the chemical condition of the milk solids is changed. The casein of the milk is made insoluble. The milk albumen is coagulated and becomes insoluble. The milk sugar or lactose of the milk is broken down and carmelized and the ash, carbonates and salts of the milk are changed chemically. These changes make it impossible to restore either sweetened condensed milk or evaporated milk to their original condition.

There are two or three other points in connection with the handling of the milk that should be covered in this connection. Whole milk to be made into whole milk powder is precondensed before spraying in the ratio of $2\frac{1}{2}$ per cent. to 1 per cent. Separated milk before spraying is condensed in the ratio of $4\frac{1}{4}$ per cent. to 1 per cent. Naturally whole milk cannot be precondensed as low as separated milk on account of the fat content in whole milk.

The solids of milk in the form of milk powder made by spray process are absolutely soluble in cold water. When once dissolved the solids remain in solution and are the same as in the fresh liquid milk from which the milk powder was produced. This perfect solubility of milk powder is the one characteristic that makes it possible to use milk powder for every purpose for which fresh liquid milk can be used.

Since the process was perfected for producing soluble milk powder it has been the aim to produce milk powder that will have no process flavor or flavor caused by the handling of the milk in the process. The product as now manufactured for household use can hardly be distinguished from fresh liquid milk, and it will not be long before the flavor of the milk powder is so perfect that it cannot be distinguished from fresh liquid milk.

COST OF CLEANING.

There is another point in connection with the handling of milk and cream. Needless to say in order to produce a high grade milk powder with a clean flavor the sanitary conditions of milk powder plants must be perfect. More than 50 per cent. of labor expense and time covers washing and cleaning.

Milk that is brought from the morning milking at 6 o'clock or 7 o'clock in the morning is pasteurized, precondensed and dried into milk powder within a few hours after milking. Actually speaking a given quantity of milk is not in the process of drying more than 30 minutes from the time it is received until it is in the milk powder form, when the precondensing is done by the continuous process.