

PREPARING AND WEIGHING THE SAMPLE FOR TESTING.

The sample of cream to be tested should be warmed to remove any lumps from the cream. Should lumps be present, which will not disappear upon warming, the sample should be poured through a fine wire strainer and the lumps broken up and forced through the strainer. The sample is then carefully poured from one vessel to another several times and, by means of a pipette, cream is transferred to the bottle on the scale until the scale balances exactly.

If using a nine (9) gramme sample in a nine (9) gramme bottle, nine cubic centimetres of water should be added to the sample in the bottle from a nine cubic centimetre pipette. The full quantity of acid (17.5cc.) will be required with a nine-gramme sample, if nine cubic centimetres of water have been added to the bottle. The addition of water in the bottle usually gives a clearer fat column. For the same reason it is advisable to add a few cubic centimetres of water to the eighteen-gramme sample. The addition of water, however, necessitates the use of more than the usual quantity of acid, and care must be taken not to add too much water to the eighteen-gramme sample, as the bulb of the bottle will not be large enough to hold the extra acid required in addition to the water.

MEASURING CREAM SAMPLES WITH THE PIPETTE.

When strict accuracy is not essential fairly correct results may be obtained by using a pipette and measuring the cream into the test bottle. Since cream is lighter than milk, the pipette used for measuring the sample into the eighteen-gramme bottle should be larger than that used for testing milk. A pipette with a volume of eighteen cubic centimetres is used in connection with the eighteen-gramme bottle, and after the sample has been measured into the bottle a few cubic centimetres of warm water should be used to rinse the pipette, which rinse water is added to the bottle. For measuring the sample into the nine-gramme bottle a nine-cubic centimetre pipette is used and nine cubic centimetres of warm water is used to rinse the pipette and is added to the sample in the bottle.

As previously stated, the presence, in a cream sample, of gases due to souring or other fermentations, or of air incorporated by pouring, while introducing no appreciable error when the scales are used, will produce an appreciable error if the pipette is used. The presence of air and gas in the cream lessens the weight delivered by the pipette. Warming the sample reduces the body or thickness of the cream, facilitating the escape of the gas or air from the sample and to a great extent prevents error from this source. For this reason especial attention should be given to the warming of the sample when the pipette is to be used.

READING CREAM TESTS.

Especial care should be taken to have the fat at a temperature of 130° F. to 140° F. for reading. Owing to the volume of fat present in the neck of the cream bottle, considerable error may be introduced by having the samples too hot when read. Cream samples also require longer than milk samples to become adjusted to the temperature of the water bath.