

'None of the creameries which I visited (with two exceptions in the north of England to which reference will be made later) supplied cream containing less than 40 per cent of butter fat. In most cases the cream contained well above this quantity; about 50 per cent being a usual amount. Samples from two creameries showed on analysis as much as 59 per cent of fat. In general a somewhat higher fat content was observed in cream supplied by the firms visited in the south of England than in the north.'

It is my belief that no injustice will be done to the dealer, and that a much needed protection will be afforded to the consumer, if the following definition of cream be made legal:—

1. Cream is that portion of milk, rich in milk fat, which rises to the surface of milk on standing, or is separated from it by centrifugal force; is fresh and clean, and contains not less than eighteen (18) per cent of milk fat.

2. When guaranteed to contain a higher percentage of milk fat than eighteen (18) per cent, it must conform to such guarantee.

3. Cream must be entirely free from gelatine, sucrate of lime, gums, or other substances added with a view to give density, consistency or apparent thickness to the article.

4. Cream must contain no preservatives of any kind; nor any colouring matter, other than is natural to milk.

5. Evaporated cream, clotted cream, condensed cream, or any other preparation purporting to be a cream, (except ice cream), must conform to the definition of cream as given above, and must contain at least twenty-five (25) per cent of milk fat.

It is pretty well known that a number of articles called *Cream thickeners* are on the market. These are intended to be added to cream for the purpose of giving it an appearance of greater density and richness than it really possesses. Gelatine is a constituent of most of them; but calcium sucrate (Sucrate of lime) gum tragacanth and other substances are often present. Some of the Cream samples of this collection were examined for 'thickeners', and evidence of gelatine was quite definitely found in 4 samples; while reaction sufficiently clear to justify a declaration of *trace of gelatine* were obtained with 9 other samples.

Evidently the cream producers of Canada are not above suspicion of employing these entirely dishonourable methods of giving a fraudulent appearance of richness to the article. This mode of fraud is particularly harmful in cases where a Dairy Company, counts among its patrons, a few who are guilty of the use of thickeners. It may be the aim of such company to supply honest cream; but, by intermixing ignorantly, a few gallons of the sophisticated article, a whole day's output may be contaminated. Of course, in such case, the company must be held responsible, should adulteration be detected. It is quite true that the guilty patron of such a company could not possibly reap any advantage to himself, provided that his cream was sold on its fat content; but agents interested in the sale of these 'cream thickeners', have been known to so misrepresent them, as to lead the purchaser to believe that his cream was actually improved by their use. The only safeguard which a Dairy Company can have, is the periodical testing of its cream for these thickeners.

On our next collection of cream, I shall see that a systematic examination for cream thickeners is made.

I beg to recommend the publication of this report as Bulletin No. 189.

I have the honour to be, sir,

Your obedient servant,

A. MCGILL,
Chief Analyst.