Testing milk and its products. a manual for dairy students, creamery and cheese factory operators, food chemists and dairy farmers

Farrington E H
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DR. S. M. BABCOCK
Inventor of the Babcock Milk Test
TESTING MILK
AND ITS PRODUCTS

A MANUAL FOR DAIRY STUDENTS, CREAMERY- AND CHEESE
FACTORY OPERATORS, FOOD CHEMISTS, AND
DAIRY FARMERS

BY

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With Illustrations

EIGHTEENTH REVISED AND ENLARGED EDITION

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The present volume is intended for the use of dairy students, factory operators, dairymen, food chemists, and others interested in the testing or analysis of milk and its products. The subject has been largely treated in a popular manner; accuracy and clearness of statement, and systematic arrangement of the subject matter have, however, been constantly kept in mind. The aim has been to make the presentation intelligible to students with no further training than a common-school education, but their work will naturally be greatly lightened by the aid of an able teacher.

Complete directions for making tests of milk and other dairy products are given; difficulties which the beginner may meet with are considered in detail, and suggestions offered for avoiding them. It is expected that a factory operator or practical dairymen, by exercising common sense and ordinary care, can obtain sufficient knowledge of the subject through a study of the various chapters of this book to make tests of milk, cream, etc., even if he has had no previous experience in this line.

For the benefit of advanced dairy students who are somewhat familiar with chemistry and chemical operations, Chapter XIV has been added giving detailed instructions for the complete chemical analysis of milk and other dairy products. The detection of preservatives and of artificial butter or filled cheese has also been treated in this connection.

As the subject of milk testing is intimately connected with the payment for the milk delivered at butter- and cheese factories, and with factory dividends, a chapter has been devoted to a discussion of the various systems of factory book-keeping, and tables greatly facilitating the work of the factory secretary or bookkeeper have been prepared and are included in the Appendix.

Madison, Wis., October 1, 1897.
Preface to Eighteenth Edition.

Each year that passes brings some valuable contributions to our knowledge of the subjects treated in this book and a frequent revision of it is therefore desirable. The present edition contains descriptions of methods and apparatus that have stood the test of actual use during the past few years; the new information published since the last revision of the book, has been carefully sifted, and what was deemed of sufficient importance has been incorporated in such detail as the scope of the book permitted; many changes and additions suggested by the experience of the authors have also been introduced.

The book has, in brief, been subjected to a renewed critical examination and careful revision. Among the new subjects discussed in this edition may be mentioned: Analysis of ice cream; estimation of water in butter by the Gray, Patrick, Irish, Dean, and Wisconsin oven methods; the Marschall acid test; the McKay and Michels' sampling tubes; milk and cream overrun; the Gottlieb method of determining fat in milk; the Hart casein test; standards for Babcock glassware, etc. The general adoption of the book as a text or reference book in American dairy schools, as well as the favorable reception which it has been accorded by the dairy public in general, will, it is hoped, be further justified by the present revision.


Madison, Wis., Jan. 4, 1908.
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