

**ESSENTIALS OF MILK HYGIENE: A
PRACTICAL TREATISE ON DAIRY AND
MILK INSPECTION AND ON
THE HYGIENIC PRODUCTION AND
HANDLING OF MILK, FOR STUDENTS OF
DAIRYING AND SANITARIANS**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649169290

Essentials of milk hygiene: a practical treatise on dairy and milk inspection and on the hygienic production and handling of milk, for students of dairying and sanitarians by C. O. Jensen & Leonard Pearson

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C. O. JENSEN & LEONARD PEARSON

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A PRACTICAL TREATISE ON DAIRY AND MILK
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TION AND HANDLING OF MILK, FOR STUDENTS
OF DAIRYING AND SANITARIANS

BY

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BY

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ILLUSTRATED



PHILADELPHIA AND LONDON
J. B. LIPPINCOTT COMPANY

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Published June, 1907

*Electrotyped and printed by J. B. Lippincott Company
The Washington Square Press, Philadelphia, U. S. A.*

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AUTHOR'S PREFACE.

(TO THE ENGLISH EDITION.)

IN the hygienic movement of the times the control of the production and handling of milk has not been given a prominent place. But the significance of this subject is now plain and everywhere efforts are being made to institute such a control or to improve it. The efforts of cities to secure a wholesome supply of milk must of course differ and be adapted to local conditions, but they must all be governed by the same principles and rest on exact knowledge of the composition of milk and of the dangers that are to be avoided.

In the preparation of this book it has been my hope that it would not only be of use to my Danish colleagues, but that my colleagues in other countries would find it to be of service to them. For this reason I published a Danish and a German edition simultaneously and for the same reason I have been very glad to grant Prof. Pearson's request for permission to prepare an English edition.

C. O. JENSEN.

TRANSLATOR'S PREFACE.

THE production of market milk is a rapidly growing industry. The demand for milk in cities is continually increasing and there is reason to believe that the rate of increase will advance.

The milch cow transmutes the pasturage and forage of the farm into edible protein, lactose and fat—into units of nutriment for man—at less than one-half the cost of similar units in beef produced by the steer. Milk is not only the most economical but, when pure and undefiled, it is among the most wholesome and it is the most easily digestible of all foods of animal origin. These are the strongest possible reasons for its extended use.

On the other hand, there is no other food that, under ordinary conditions, is so exposed to contamination, that is so easily contaminated or that so fosters contamination as milk. Hence the necessity for the study of milk hygiene.

The subject is a broad one. Milk hygiene involves some knowledge of the physiology of cows, especially with relation to breeding, lactation and nutrition; of comparative pathology, particularly the various diseases of the udder of the cow, the abnormal conditions that affect milk secretion, and the infectious diseases of cattle and of man that may be transmitted by milk; of bacteriology, in regard to the pathogenic organisms and the saprophytes that occur in milk, their effects, their behavior under various conditions and especially at different temperatures; of the chemistry of milk and its adulterations and, besides these, there must be added