

**PURE FOODS, THEIR
ADULTERATION,
NUTRITIVE VALUE, AND
COST**

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Pure foods, their adulteration, nutritive value, and cost by John C. Olsen

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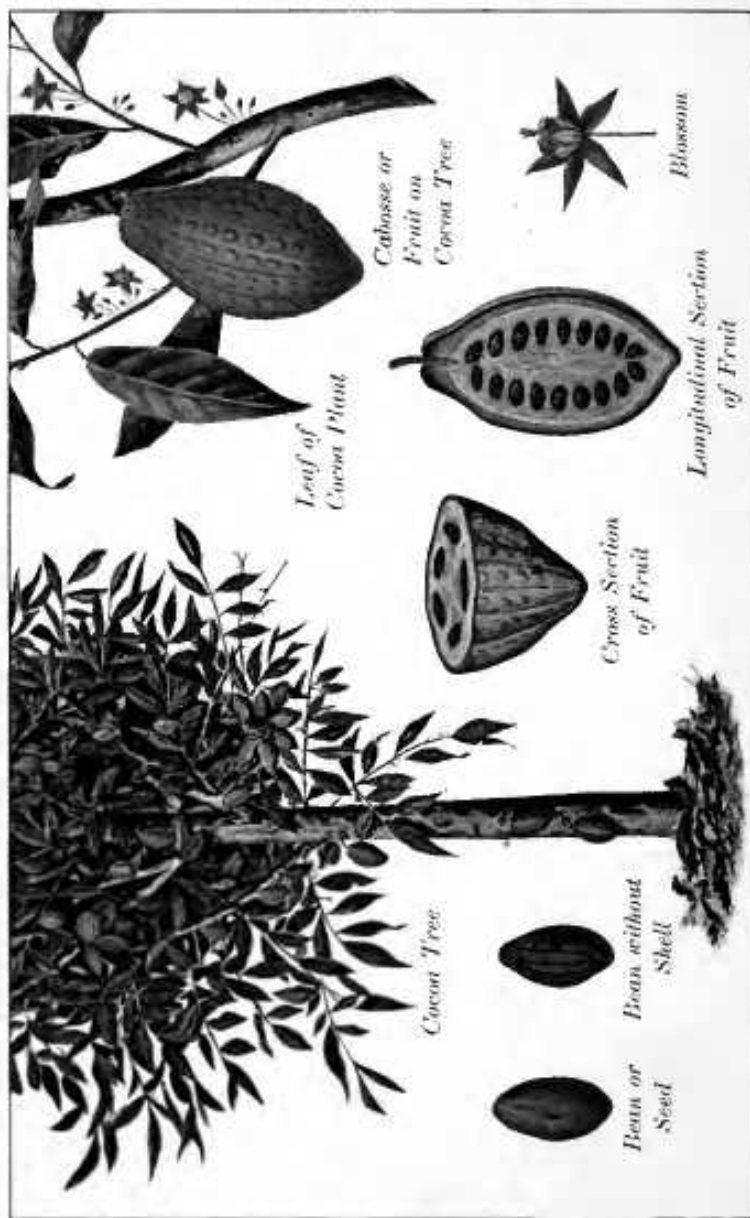
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THE COCOA TREE AND ITS FRUIT

UNIV. OF
CALIFORNIA

PURE FOODS

THEIR ADULTERATION, NUTRITIVE
VALUE, AND COST

BY

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PREFACE

This volume is the outgrowth of a series of public lectures on foods, which have been given by the author for a number of years. The interest shown by audiences of widely different character, as well as frequent requests for the substance of the lectures in printed form, has led to their publication. The experimental illustrations which accompanied the lectures are given in the form of a series of experiments at the end of each chapter. Some of these experiments are so simple that they may be carried out with ordinary household utensils, others require a few chemicals and simple apparatus which may be purchased at any drug store. Many of them require a fairly well-equipped chemical laboratory, while others have been included which can be performed only by those who have considerable chemical training and facilities at their command. Most of the descriptive matter can be understood by the average intelligent reader, although even here a knowledge of chemistry will enable the reader to comprehend the subject much more fully.

It is the hope of the author that this volume will be of some service to the very important class of teachers and students who are studying the chemistry of foods in the classroom and laboratory. It is hoped that the subject has been presented in such a manner as to stimulate the interest of such classes, and that domestic-science teachers will be able to explain and expand the necessarily brief expressions

of the text, as well as perform such experiments as are beyond the ability of the student. The author also hopes that the volume will be of service to the growing class of intelligent men and women who desire to obtain some knowledge of the composition and function of the foods which they prepare, sell, or consume.

Of the great need of a wider and fuller knowledge of the nature and functions of the food which is of such vital necessity to us, the author has the keenest realization. In an age when intelligence and knowledge are recognized as essential to the most efficient performance of even very simple tasks, it is surprising that most of us eat what we like, with very little thought of the ultimate result.

The steel for our bridges and buildings is bought and sold on the chemist's certificate of its composition to the thousandths of per cent. Foods are manufactured and sold on flavor and appearance, utterly regardless of composition or food value. The coal for our engines must be tested and analyzed, but the far more precious human organism is loaded with a heterogeneous mixture of fuel of unknown composition. We should not be surprised at low efficiency, inability to work, sickness, even the premature death of an organism which is given so little intelligent care. When an intelligent, well-informed public demands analyzed, tested foods, they will be better served by the food producer, manufacturer, and salesman; and if such food is consumed in the physiologically proper quantity and variety, there will be far less inefficiency, sickness, and mortality.

The author does not claim originality for any appreciable portion of this volume. For most of the general facts and ideas presented he is indebted to the large army of municipal, state, and national pure-food workers, who have accumulated so much valuable information on this subject.

The coming generations will reap large harvests of comfort and well-being from their quiet but effective work.

The author wishes to express his indebtedness to many of these workers whom it has been his good fortune to know personally, and also to many others whom he knows only through their publications. Statements made with reference to the actual conditions of our food supply are generally based, at least in part, on the author's tests of foods in the course of his consulting practice as a chemist, and on the results of investigations carried out to ascertain the composition of the foods on the market. He need hardly say that this volume was not written to meet the needs of the technical chemist.

The author takes great pleasure in expressing his obligation to Mr. Albert E. Seeker, of the United States Department of Agriculture, for reading the entire manuscript and making many valuable suggestions. He is also under obligations to Mr. H. C. Humphrey of the Corn Products Refining Company for reading the chapters on Carbohydrates and Candy.

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