FEDERAL AND STATE REGULATIONS AS AIDS TO OREGON CONSUMER BUYERS OF FOOD

by

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A THESIS submitted to the
OREGON STATE COLLEGE

in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

July 1941
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ACKNOWLEDGEMENT

The writer wishes to express her sincere appreciation to Agnes M. Koleshorne, associate Professor of Foods and Nutrition under whose supervision this study was made, for her guidance and untiring assistance; to Jessamine Chapman Williams, Head of the Department of Foods and Nutrition, for her encouragement; and to others throughout the state of Oregon who have offered helpful suggestions.
INTRODUCTION

The old saying, "He who pays the piper calls the tune", can well mean, "A consumer who buys should receive satisfaction from goods purchased." Such satisfaction may result when consumers become aware of the protection and aid given them through legislation which has been passed by both the Federal government and the state in which such consumers live. Consumer buyers may be considered well informed if they understand the scope and content of the Federal and state laws that govern the products they buy.

This thesis is a compilation and study of the Federal and state regulations which directly and indirectly aid the Oregon consumer buyers of food. However, only those provisions required or suggested by the Federal and state governments are considered. Laws or precedents of organizations other than those directly a part of the United States or Oregon governments are not included.

The study is not intended to be a complete compilation of the present-day laws governing food. Rather it involves those laws which in the judgment of the various authorities comprising the bibliography and in the opinion of the writer are believed to be most pertinent to Oregon consumers. In most cases, the laws have been stated and referred to in simplified and abridged forms.
METHOD OF PROCEDURE

The material included in the thesis was obtained by three methods: (1) a study of the Federal and state publications, (2) conferences with those having valuable material and helpful suggestions in regard to the study, and (3) correspondence with various Federal and state departments and their representatives.

Careful study was made of the regulations published by the Federal and Oregon State governments. Regulations which contributed to the present-day laws governing food were studied as well as those regulations now in force.

Conferences were held in Portland, Oregon, with the State Sanitary Engineer of the Oregon State Board of Health and a Federal representative of the United States Department of Agriculture. Further conferences were held in Corvallis, Oregon, with a state representative of the Oregon State Department of Agriculture and those professors on the campus of Oregon State College who are authorities on the legal phases of various classes of foods discussed in the thesis.

Recently published material available in Washington, D.C., was obtained through correspondence with the United States Department of Agriculture, several of its bureaus, and the Superintendent of Documents. Material was also received from the Director of the State Department of
Agriculture, Chief of the Division of Foods and Dairies, and Chief of the Division of Plant Industry, all located in Salem, Oregon.
PURPOSE

In submitting the thesis, "Federal and State Regulations as Aids to Oregon Consumer Buyers of Food," it is the writer's purpose to make available to Oregon consumers the regulations concerning food so that they may become familiar with the laws protecting and aiding them in their everyday food buying.
PART I

REVIEW OF GENERAL LEGAL PROTECTION OFFERED
OREGON CONSUMER BUYER
OF FOOD

Regulations and practices of the Federal government and the state of Oregon which form a foundation upon which are made the regulations for specific foods.
Although the Federal Food, Drug, and Cosmetic Act has jurisdiction only over those foods which pass into inter-
state commerce, it provides one of the chief laws protecting the consumer buyers of food in Oregon. The act, passed in
1938 as a revision of the first Federal Food and Drug Act of 1906, became effective June 25, 1939.

The earlier law of 1906, often called the Pure Food and Drug Law, closed interstate commerce to "adulterated" and "misbranded" foods. According to the law, "adulterated" foods were of two classes: (1) those foods from which a valuable constituent had been removed with or without a less valuable constituent having been substituted, or those so treated as to diminish their strength or quality or in such a way as to conceal damage or inferiority; (2) those foods consisting in whole or in part of a filthy, decomposed, or putrid substance or of a diseased animal or one that had died otherwise than by slaughter, or foods to which had been added a poisonous or deleterious ingredient potentially rendering the article injurious to health.11

"Misbranded" foods, according to the 1906 Federal Food and Drug Act, were those whose package or label was marked with any erroneous or misleading statement, design or device regarding such article or the ingredients or sub-
stances contained in the article. The Food and Drug Administration had authority to censor the labels found on foods entering into interstate commerce and to charge violation of the law if the analysis of the sample showed a discrepancy or variance between the actual character of the foodstuff and that indicated on its label.11

Under the 1906 Federal Food and Drug Act, the Department of Agriculture had announced advisory definitions and standards of identity for various foods, but these had no legal force, so that in the trial of cases before courts and juries in different parts of the country, conflicting verdicts were given even where the composition of the products in question was substantially the same. This gave rise to chaotic conditions in many important industries throughout the country. Manufacturers who wanted to keep high standards found that competition forced them to lower the quality of their manufactured products. In 1923, the butter industry succeeded in passing an amendment to the 1906 Food and Drug Act requiring that to be legally called butter the product must contain not less than 80 per cent milk fat. Thereafter when a manufacturer did not meet this standard, the government had only to show by testimony of laboratory analysts that the butter contained less than 80 per cent milk fat and was, therefore, not entitled to be called butter.4 This standard is retained in the Food, Drug, and Cosmetic Act of 1938.
The amendment of 1923 was not, however, the first amendment to the Federal Food and Drug Law. From time to time the 1906 law was modified. In 1913, the so-called "net-weight" amendment to the Food and Drug Law was passed, providing that the net contents by weight, count, or measure of packaged foods must be plainly and conspicuously marked on the label.

Another strengthening section to the 1906 Food and Drug Act was the McHenry-Mappes Amendment passed in 1930. This authorized the Secretary of Agriculture to establish by regulation a minimum standard of quality and fill of container which, with certain exceptions, each class of canned food must meet. Under this amendment canned food which fell below the minimum standard was required to bear a statement on the label indicating its substandard quality or fill. ²

The limitations of the 1906 Food and Drug Act were several, and for that reason a movement was initiated about 1930 for the revision of the act. Some of the most noteworthy shortcomings were:

(1) It failed to provide for the inspection of places, processes, and materials of production as a means of ascertaining the cleanliness and wholesomeness of a product.

(2) It prohibited injurious food only when a poisonous substance had been added. Consumers were not pro-
tested from any poisons which might have been naturally present in the food.

(3) It contained no legal authority for the establishment of definitions and standards of identity except in the case of butter and certain canned fruits and vegetables.

(4) It contained no authority to establish standards of quality.

(5) It provided specifications for fill of container only in the case of canned goods.

The Federal Food, Drug, and Cosmetic Act of 1938 preserves the worthy features of the earlier act of 1906. Its major purpose is to more effectively check adulteration and misrepresentation of foods, drugs, and cosmetics entering interstate trade.

A number of provisions under the Federal Food, Drug, and Cosmetic Act increase the legal protection given the consumer buyer of food. All adulterated products passing in interstate trade are forbidden. General and specific regulations which pertain to the adulteration of food are:

(1) A food is adulterated if: (a) it bears or contains any poisonous or deleterious substance which may render it injurious to health; (b) any valuable constituent has been in whole or in part abstracted or omitted; (c) any substance has been substituted wholly or in part; (d) damage or inferiority is
concealed in any way; (e) any substance has been added to increase its bulk or weight or to reduce its strength or to make it appear better or of greater value than it is.

(2) Confectionery is adulterated if it contains any alcohol or non-nutritive article or substance except harmless flavoring, harmless resinous glaze not in excess of four-tenths of one per cent, natural gum, and pectin. Alcohol in confectionery is permitted up to one-half of one per cent.

(3) If a product has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated or rendered injurious to the health, it is adulterated.

(4) Products in containers composed of any deleterious substance which may render the contents injurious to health are declared adulterated.

Although labeling is discussed in chapter V, general and specific regulations which pertain to the misbranding of food may be mentioned at this time. These laws are:

(1) Labeling false or misleading in any particular is forbidden.

(2) All packaged foods must bear the name and address of the manufacturer, packer, or distributor.

(3) All required information must be on the label and must be so placed that it is easily seen.
tion must also be stated in such a way that it is easily understood by an ordinary individual.

(4) A food offered for sale under the name of another food is misbranded. If the food is an imitation of another food, it must be labeled "imitation" directly after the name of the food imitated.

(5) A food for which a standard of identity has been established is misbranded if it does not (a) conform to the standard set up for that food, (b) bear the name of the food on the label, and (c) bear the common names of whatever ingredients are present.

(6) A food is misbranded if it is represented as one for which a standard of quality or fill of container has been prescribed and yet it falls below the standard without a statement to that effect on the label.

(7) In cases where the standard has been promulgated, a food is misrepresented unless the label bears the common or usual name of the food; and in case it is made from two or more ingredients, the common or usual name of each ingredient must be given, except in such products designated as spices, flavorings, and colorings.

(8) A product cannot be shipped without a label, goods passing between processing and packing establishments excepted.
(9) A food represented as having certain dietary uses is misrepresented unless the label bears information concerning its mineral, vitamin, and other dietary properties that purchasers may be informed as to its values for such uses.

(10) If a food bears or contains any artificial coloring or chemical preservative, its label must state that fact. Rulings as to artificial coloring do not apply to butter, cheese, or ice cream. (Florida oranges colored with coal-tar dye must be marked "color added." The use of ethylene gas to hasten the development of color in ripe California oranges is permitted without the necessity of informing consumers of the artificial process.)

Among the major advances of the present Federal Food, Drug, and Cosmetic Law over the 1906 Food and Drug Act in the regulation of foods sales are the following:

(1) Reasonable standards of quality and fill of container are, with few exceptions, to be set up for all foods.

(2) The label of food mixtures sold under the brand name must now declare its major ingredients, although the act does not require those ingredients to be listed in order of importance. For example, a meat mixture containing 10 per cent chicken and 90 per cent veal may be labeled chicken and veal.
(3) Information required must be plainly stated, and containers must not be filled or shaped so as to deceive. False bottoms and bottles with concave sides should disappear.

(4) Labeling is misleading if it fails to reveal fact material concerning consequences which may result from use of the article to which the label relates, if such use is under the conditions prescribed on the label. (It is the opinion of the authorities that this notable advance will prove one of the most important sections of the law, since it constitutes not only a guide to the administration and the courts in the interpretation and application of the act, but also a warning to the industries that informative labeling is essential to safety from prosecution and seizures.)


(6) The substantive provisions of the law itself make certain aspects less difficult than they were under the act of 1906.

The Food and Drug Act of 1906 provided three basic judicial and administrative procedures for the enforcement of prohibitions against the interstate shipment of adulterated or misbranded foods. These provisions were:

1 judicial
criminal proceedings with fine or imprisonment as the penalty; (2) judicial libel for condemnation proceedings with forfeiture and either destruction, disposition by relabeling or reconditioning, or sale of the articles as a penalty; (3) administrative exclusion-of-imports pro-
ceedings with either destruction, exclusion from domestic commerce, or relabeling or reconditioning as the penalty. A later amendment to the Food and Drug Act provided an ad-
ministrative inspection proceeding covering sea foods.6

The foregoing enforcement procedures are retained by the new Federal Food, Drug, and Cosmetic Act of 1938. In addition, new regulations pertaining to the enforcement of the act include some important changes.12

(1) The standards of identity once established are a matter of law and simplify enforcement in that the product's validity does not have to be periodically re-established.

(2) The act specifically advises the Secretary of Agriculture to send warnings in case of minor offenses. This helps concentrate enforcement on major offenses.

(3) Methods of securing records and samples are much improved. Factory inspection for all types of establishments is provided. The request must be made of the owner of the establishment, and per-
misson must be received before such inspection
takes place.

(4) Provision is made for inspection under a compulsory emergency permit system. It is applicable to any class of food that may be contaminated from microorganisms during manufacturing, processing, or packing, if such contamination might be injurious to health and cannot adequately be determined after the food enters interstate commerce. This emergency-permit system is applied only temporarily when such inspection is necessary to protect public health.

(5) Multiple seizures are permitted in case of adulteration if alleged misbranding has been the basis of a prior judgment in favor of the United States; or if the Food and Drug Administration has reason to believe from facts ascertained without hearing that the misbranded article is dangerous to health, or that the labeling is fraudulent or would be in a material respect misleading to the consumer.

(6) If the defendant so wishes, the case may be tried in a district of reasonable proximity to the claimant's place of business, unless good cause can be shown for refusal.

(7) The Food and Drug Administration may replace criminal proceedings by an injunction, an order from courts to cease certain acts. The injunction proceedings are based on the common-law right to abate and
restrain public nuisances through court orders. The enforcement of this regulation provides an effective and prompt method of forestalling offenses and preventing public injury.

(6) The fines or penalties for violation of the act are increased in severity up to a maximum of $10,000 and three years imprisonment.

(9) The Food and Drug Administration is permitted to disseminate information regarding foods involving either imminent danger to the health of the consumer or his gross deception.

The enforcement of the Food, Drug, and Cosmetic Act is entrusted, as was that of the 1906 law, to the Food and Drug Administration. Until recently, this Administration has been under the control of the United States Department of Agriculture. However, the Federal Reorganization Plan in 1940 transferred the Food and Drug Administration from the Department of Agriculture to the Federal Security Agency. The powers of the Secretary of Agriculture pertaining to the Federal Food, Drug, and Cosmetic Act and including the authority to promulgate standards of identity and quality were automatically transferred to the Federal Security Administrator.

Although the recent Federal Food, Drug, and Cosmetic Act is a definite improvement over the 1906 act, it still cannot be regarded as a perfect law. Those opposing the bill
in Congress succeeded in curtailing several provisions which
supporters felt would be desirable. In the opinion of some
authorities a few of the 1938 act's failures are: (1) the
rejection of the advertising provisions insofar as the
advertising regulations under the Food and Drug Administra-
tion might have been more effective than under the Federal
Trade Commission; (2) the unsuccessful attempt to secure
compulsory multiple standards of quality of food; (3)
the rejection of the provision that the label of food
mixtures must list ingredients in order of importance.12
CHAPTER II
THE WHEELER-LEA AMENDMENT TO THE FEDERAL
TRADE COMMISSION

The Federal Food, Drug, and Cosmetic Act of 1938 does not have the authority to regulate advertising of foods, drugs, and cosmetics. Control over such advertising is under the jurisdiction of the Federal Trade Commission, whose powers were augmented by the Wheeler-Lea Amendment enacted in March, 1938.

The general purpose of the Wheeler-Lea Amendment is to increase and strengthen control over false and misleading advertising of products entering interstate trade. Prior to the amendment, the Federal Trade Commission had since 1914 been authorized to prohibit all "unfair and deceptive practices," and false and misleading advertising was one of the major practices which it had attempted to check. The Commission, however, was handicapped in its limited control because of: (1) the necessity of confining its efforts to those cases where injury to competitors could be shown (Commission had not power to directly protect consumer); (2) the lack of authority to impose penalties; (3) the slowness of the process of bringing judgment against offenders.

The passage of the Wheeler-Lea Amendment brought about three major changes in the functions and powers of the Federal Trade Commission:

(1) It is now directed to prevent business practices
which are injurious to consumers as well as those which are damaging to competitors.

(2) Through increased penalties and changes in procedures it can now enforce its orders more effectively.

(3) Specific powers are given it to prevent false advertising of foods, drugs, and cosmetics.

The commission can proceed, however, only against advertising which is false and misleading in any material respect. The amendment allows considerable "trade puffing" and leaves wide opportunity for disagreement in interpretation.

The effect which the Wheeler-Lea Amendment has had and will have in curbing false advertising depends upon two factors: (1) the interpretation of that which constitutes an offense, and (2) the legal procedures and penalties provided.

What constitutes an offense? The Wheeler-Lea Amendment makes it unlawful to disseminate a false advertisement by U.S. mails or by any means, for the purpose of inducing, directly or indirectly, the purchase of food, drugs, devices, or cosmetics. The circulation of false advertising within a state is illegal insofar as it moves by U.S. mails and if it induces an interstate purchase.12

A false advertisement is defined as an advertisement, other than labeling, which is materially misleading. The
amendment states that in finding an advertisement misleading the following are to be considered: "representations made or suggested by statement, word, design, device, sound, or any combination thereof, but also the extent to which the advertisement fails to reveal facts and material in the light of such representations or material with respect to the consequences which may result from the use of the commodity to which the advertisement relates under the conditions described in the advertisement, or under such conditions as are customary or usual."12

The Wheeler-Lea Act gives the Federal Trade Commission several legal procedures and penalties with which to check offense. The Federal Trade Commission now has power to check false and misleading advertising in three ways:

(1) It may use the cease-and-desist order, the method formerly used in checking unfair practices. For some time the Federal Trade Commission has dealt with minor violations of advertising under stipulations largely in the nature of gentlemen's agreements. These stipulations have no force of law; hence violations bring no punishment. The major disadvantage of the present cease-and-desist procedure is the long period during which the false advertising can continue without the advertiser being liable to fine. For example, the
Federal Trade Commission may note the occurrence of false advertising. A complaint is then issued setting forth the charges against the advertiser. At the end of thirty days, a hearing is held before trial examiners who submit a report to the Commission which considers the case. At this time, the respondent has a right to be heard by the Commission. On the basis of findings, the Commission may issue a cease-and-desist order. This order is subject to court review. If such review is not sought, the order becomes final at the end of sixty days. If a final order is violated, a maximum fine of $5,000 may be imposed.12

(2) Injunction may be used to restrain the dissemination of certain advertisements. This may be employed only when the Federal Trade Commission is bringing proceedings against the advertisers. This injunctive procedure has all the advantages of speed. Improper advertisements can be summarily halted by a restraining order. Once obtained, the injunction is a serious deterrent against future violations, which are punishable as contempts. The Commission may seek a temporary injunction only when such relief would be to the interest of the public. In this way, false advertising can be halted at once.8
(3) Criminal proceedings may be used in a limited number of cases. Penalties are provided, apart from violations of cease-and-desist orders, for any person who disseminates a false advertisement (a) "if the use of the commodity advertised may be injurious to health because of results from such use under the conditions prescribed in the advertisement, or under such conditions as are customary or usual" or (2) "if such violation is with intent to defraud or mislead." The maximum penalty for a first offense is $5,000 or six month's imprisonment.12

According to some authorities, the Wheeler-Lea Amendment has the following shortcomings:

(1) The procedure is for the most part slow with little penalty for false advertising.

(2) The effect of the act depends largely on the interpretation of the courts in regard to such terms as "misleading," "material respect," "interest of the public," and "customary or usual."

(3) The act makes no specific provision for affirmative disclosure of vital information.

(4) The Federal Trade Commission is given no power to promulgate rules to guide advertisers in improving their copy.

(5) Nothing is done to correct the effect of false
Through the Wheeler-Lea Act, Oregon consumer buyers of food are now receiving protection from much false advertising. Highly advertised foods are often those which enter interstate commerce, and the Wheeler-Lea Act has aided the consumer considerably through regulating such advertisements.
CHAPTER III
STATE REGULATIONS OFFERING GENERAL PROTECTION TO
CONSUMER BUYERS OF FOOD

Oregon has in its most recent legislature, 1931, passed an act to be known as the Oregon Food Act. Much of this new law is patterned after the Federal Food, Drug, and Cosmetic Act of 1938. Provisions of the Oregon Food Act increase the legal protection Oregon consumers receive when they purchase food.

The new state act conforms with the Federal Food, Drug, and Cosmetic Act in that the manufacture, sale or delivery, holding or offering for sale of any food that is adulterated or misbranded are prohibited. The Oregon terms "adulterated" and "misbranded" are synonymous in meaning with the same terms in the Federal law. Whenever an authorized representative of the State Department of Agriculture finds or has cause to believe that any food is adulterated or misbranded, he may affix to that food a tag or marking indicating that the article is or is suspected of being adulterated or misbranded. The tag must not be removed and the article may not be disposed of until permission has been granted or until a hearing has been held before the State Department of Agriculture. Any food which is unsound and unsalable as human food may be condemned and destroyed by the department or by an authorized representative without the delay of an investigation. 16
The Oregon Food Act prohibits the sale, delivery for sale, holding for sale, or offering for sale of any article injurious to health because of contamination during manufacture, processing, or packing. If such injurious foods are discovered for sale, the State Department of Agriculture has authority to issue provisions governing the manufacture of the food for a temporary period. Manufacturers, processors, and packers of the class of foods in which violation has occurred may not offer for sale any such food unless they hold a permit issued by the department. Furthermore, the State Department of Agriculture is authorized to suspend immediately upon notice any permit issued whenever any of the conditions have been violated. Should a manufacturer holding a permit from the department deny access to state inspectors who wish to ascertain if conditions of the permit are being upheld, the permit may be suspended.

Oregon prohibits the dissemination of any false advertisement. According to the law, advertisement includes all representations disseminated in any manner other than by labeling for the purpose of directly or indirectly inducing the purchase of food. An advertisement of a food is deemed false if it is false or misleading in any particular. Oregon also prohibits the giving of a false guaranty with food.16
Under the Oregon Food Act, the State Department of Agriculture now has authority for free access at all reasonable hours to any factory, warehouse, or establishment in which foods are manufactured, processed, packed, or held for introduction into commerce, or to enter any vehicle used to transport or hold such foods in commerce for the purpose: (1) of inspecting such establishment or vehicle to determine if any of the provisions of the Oregon Food Act are being violated, and (2) to secure samples or specimens of any food upon paying or offering to pay for such samples.

Whenever the action will promote honesty and fair dealing in the interest of consumers, the State Department of Agriculture has authority to promulgate regulations fixing and establishing for any food or class of foods a reasonable definition and standard of identity and a reasonable standard of quality and fill of container. The definitions and standards so promulgated must conform so far as practicable to the definitions and standards promulgated by the authority of the United States.16

Any person who violates any of the provisions of the Oregon Food Act shall be guilty of misdemeanor and upon conviction be subject to imprisonment of not more than six months in the county jail, or a fine of not more than $500, or to both imprisonment and fine. If a violation is committed after a former conviction, the penalty is doubled.16
For the protection of the consumer buyer, Oregon regulates the sanitary conditions under which food may be manufactured, packed, stored, or sold. Every building, room, basement, or cellar occupied or used as a bakery, confectionery, cannery, packing house, bottling house, slaughter house, restaurant, hotel, dining car, grocery, meat market, dairy, creamery, butter factory, cheese factory, or other place used for sale, manufacture, packing, storage, sale, or distribution of any food must be properly lighted, drained, plumbed, ventilated, and maintained in a clean, healthful, and sanitary condition.
CHAPTER IV
STANDARDS AND GRADES

Standardization and resulting grades are considered by Alice Edwards as "stepping stones in progress" for the consumer buyer. The ultimate aim of food standards and grades is to give the consumer buyer a greater satisfaction for money spent. Marius Farioletti states that the purpose of standardization is to reduce uncertainty and waste in buying and selling.

In past years the Federal government has done much to aid the consumer by formulating standards and grades for food and food products. A standard may be regarded as any measure of quantity, quality, or value established by law or by general usage and consent.

The relative quality of a product is commonly designated through the use of comparative terms such as good, better, or best. The genuine standard of quality may be expressed in terms of description or accurate specification. A practical standard of quality of a product is determined by considering many characteristics, such as dimension, composition, performance, construction, texture, finish, color, flavor, odor, and freedom from imperfections.

In the United States, there are both mandatory and permissive standards and grades for practically all foodstuffs. Federal mandatory or official standards are those required by law should the article pass into interstate
commerce and thus come under the jurisdiction of the Federal government. State mandatory standards are those set up by the state and apply to food sold within the state. Mandatory state standards may be the Federal standards adopted by the state. Oregon has in her recent Food Act authorized the State Department of Agriculture to adopt Federal standards when they are thought to be for the best interests of the consumers.

Permissive standards may be of two types. They may be those suggested by either the Federal or state government and adopted by persons or establishments as general practices or policies. On the other hand, permissive standards may be those Federal standards which are mandatory in interstate commerce but are optional for foods sold within the state.

In 1923, the first mandatory food standard of identity, the butter amendment previously mentioned in chapter one, was promulgated by the Federal government as an amendment to the 1906 Food and Drug Act. Seven years later, in 1930, the Molony-Mapes Amendment to the 1906 Food and Drug Act was passed. This amendment, discussed in Chapter I, has contributed much to the progress of standardization and grading of food products made in the past eleven years. It gave consumers information which helped prevent them from unknowingly buying substandard food as standard food.

With the passage of the new Federal Food, Drug, and
Cosmetic Act in 1938, more authority was given the Federal
government for the establishment of standards. "Whenever
in the judgment of the Secretary of Agriculture such action
will promote honesty and fair dealing in the interest of
consumers, he shall promulgate regulations fixing and
establishing for any food, under its common or usual name
as far as practicable, a reasonable definition and standard
of identity, a reasonable standard of quality, and reason-
able standard of fill of container." (With the trans-
ferring of the Federal Food, Drug, and Cosmetic Act from
the United States Department of Agriculture to the Federal
Security Agency, it is now the Federal Security Adminis-
trator who has the power to promulgate standards for food.)
The provision further stated that no definitions and
standards of identity or quality were to be established for
fresh and dried fruits and vegetables except avocados,
cantaloupes, citrus fruits, and melons. The standards for
these four classes of food are to relate only to maturity
and to effects of freezing.

Since the passage of the Federal Food, Drug, and
Cosmetic Act, many standards of identity and minimum
standards of quality and fill have been established. These
standards are mandatory if the particular food passes into
interstate commerce. Many of the Federal standards will
eventually be mandatory in Oregon, since the Oregon Food Act
specifies that the State Department of Agriculture has power
to establish standards of identity and quality or to adopt those standards promulgated by the Federal government.

Before a Federal standard of identity, quality, or fill becomes mandatory in interstate commerce, the following steps are taken:

(1) A compilation is made by the Food and Drug Administration of information from various sources as to the composition of the food for which a standard is to be set, methods of manufacture which influence its quality, and abuses of consumer welfare. Surveys may be made in producing areas of the country to determine practice and consumer understanding of the composition of the food.

(2) Information is summarized and submitted to the Food Standards Committee for consideration. The committee may consult a wide range of authorities, including experts in industry and home economists and representatives of consumer groups. It may even hold informal hearings.

(3) On the basis of the Food Standards Committee's recommendation, Federal Security officials draft a proposed standard and label requirements which are printed in the Federal Register. A date is set for a public hearing at least thirty days following its announcement.

(4) All interested persons are permitted to appear at
the public hearing. Government officials and experts, representatives of manufacturers and others in the trade, and consumers are usually represented at the hearings.

(5) Following the public hearing, the representatives of the Federal Security Administrator submit to the Administrator proposed findings of fact and suggest a form of definition and standard of identity, or standard of quality, or fill of container, or all three. This statement is again printed in the Federal Register, and ten days are allowed anyone who participated in the public hearing to file a brief and argument opposing any provision in the statement. Data based on material submitted are presented to the Administrator for final action.

(6) The new definition and standard are then promulgated by the Federal Security Administrator but unless an emergency exists do not go into effect for ninety days.

(7) After it is promulgated, the definition and standard may be reviewed by the court if this action is called for by any interested parties.

Since the passage of the Federal Food, Drug, and Cosmetic Act, many standards of identity, of quality, and of fill have been established. In 1939, Federal standards for
the following were promulgated: dried egg yolks, dried whole eggs, egg yolks, frozen whole eggs, frozen egg yolks, liquid whole eggs, liquid mixed eggs, canned peaches, tomato catsup, tomato juice, tomato paste, tomato puree, and canned tomatoes. In 1940, definitions and standards were established for the following: canned apricots, canned asparagus, canned cherries, cream, whipping cream, fruit butters, jellies, concentrated milk, dried skim milk, evaporated milk, sweetened condensed milk, canned pears, canned peas, preserves, and jam. From January to July, 1941, standards have been established for flours and grains and oleomargarine.

As a method of simplifying the information given to consumers, grades when present have come to represent standards. A grade indicates certain characteristic qualities and is, therefore, somewhat of a tool of standardization. Such grading is a method for increasing consumer purchasing efficiency. It is a practical and honest way of telling consumers the quality of foodstuffs that they may intelligently compare the different qualities with different prices. 19

The grade standards most used at the present time have been developed and promoted by traders and producers to standardize their daily business transactions. The consumer seldom knows what the commercial grades are if the quality is designated by brand names. Producers may use grade terms,
but the labeled grades are usually not consistent between

different companies unless the companies have adopted

Federal or state grade labeling.

Permissive United States grade standards are issued by

the Agricultural Marketing Service. Their value lies in

the fact that they are being used by some companies, and

may eventually form the basis for mandatory grade standards.

Grading under Federal grade standards is being used by an

increasing number of companies and introduces a degree of

uniformity and reliability in interstate and interstate

trading that would be otherwise difficult to achieve.

To the consumers, the advantages of standardization

and grades are four-fold. First, the guesswork and un-

certainty is taken out of buying. Second, goods move more

freely and at less cost. Third, consumers are better

satisfied. Fourth, there are fewer returned goods because

consumers select those products best adapted to their

individual needs.
CHAPTER V
FEDERAL AND STATE LABELING

Labeling of food products should be of great aid to consumer buyers. Through the passage of regulations providing for more accurate and helpful labels on food products, the Federal and state governments have gradually increased the importance of labeling. The Federal Food, Drug, and Cosmetic Act and the Wheeler-Lea Act have done more for the labeling of foods shipped into interstate commerce than have other Federal regulations. Oregon's new Food Act has revised and restated the powers of the state in regard to the labeling of food.

The purpose of labeling is twofold. First, the label provides a means of identification of the product through printed and perhaps pictorial matter. Second, the label may provide information concerning the product. It may state only that which is required by Federal and state law, such as net weight, name and address of manufacturers, packers, or distributors, and quality of fill of pack if below standard. On the other hand, the label may include additional and useful information regarding the product. There are two methods by which additional information may be given on the label—descriptive labeling and grade labeling.

Descriptive labeling may include such items as: number of servings or pieces in the container or package; size of
the food—for example, the size number of peas; the density of the syrup or brine in canned goods; the species of the class of food; directions for use. Manufacturers often include at least one or more of these items in addition to the required information. In descriptive labeling, the quality may not be indicated other than by the brand name.

This is a disadvantage because too many brands must be tried by the consumer before he will discover the preferred quality.

Permissive grade labeling has been promoted recently by both manufacturing firms and the Federal government. In this type of labeling the actual grade—Fancy, Choice, Standard, or A, B, C,—is stated on the label. The meaning and advantages of the grades have been discussed under standards and grades and will be further considered under specific regulations concerning canned fruits and vegetables.

In its new Food Act, Oregon defines a label as "a display of written, printed, or graphic matter upon the immediate container of any article."

The state law requires that any word, statement, or other information appearing on the label must not be considered to comply with the law unless such word, statement, or information also appears on the outside container or wrapper of the retail package of such article or is easily legible through such outside container or wrapper.

Oregon requires the correct name and address of the
manufacturer or producer to be given upon the label of all food products. The words, "packed for" or "distributed by" must be added to the label in case the name which appears upon the label is not that of the actual manufacturer or producer, or the name of the place not the actual place of manufacture or production.¹⁴

All food in package form must be labeled with: (a) the name and place of business of the manufacturer, packer, or distributor; (b) an accurate statement of the quantity of the contents of the package in terms of weight, measure, or numerical count; (c) the name of the product plainly printed for easy discernment by the purchaser; (d) the grade and standard of quality when required by law. When a trademark or brand is used, it must be designated in small letters "Trademark" or "Brand."¹⁴

In its new Food Act, Oregon prohibits the alteration, mutilation, destruction, obliteration, or removal of the whole or any part of the labeling on a food product while it is being held for sale. Forging, counterfeiting, simulating, or falsely representing, or without proper authority using any mark, stamp, tag, label, or other identification device is specifically prohibited.
PART II

REVIEW OF REGULATIONS WHICH AID OREGON CONSUMERS IN BUYING SPECIFIC FOODS

Regulations and practices of the Federal government and the state of Oregon which directly pertain to foods offered for sale in Oregon markets.
CHAPTER VI
MILK, CREAM, AND ICE CREAM

Milk

Milk consumers in Oregon are protected to a large extent through the establishment of state standards regulating the production and marketing of milk.

Although grade labeling of milk is not mandatory in Oregon, the State Department of Agriculture has authority to inspect milk for wholesomeness, butterfat content, and also the conditions under which the milk is produced and marketed.

Wholesomeness of milk depends upon the bacterial count and sediment. The Oregon laws state that in order to be legal, milk, graded or ungraded, raw or pasteurized, must contain not more than 50,000 bacteria per cubic centimeter.\textsuperscript{14}

In Oregon, milk is sold in the raw or pasteurized state without a grade designation, or as Grade A or Grade B. Milk, raw or pasteurized, labeled as Grade A must contain not more than 30,000 bacteria per cubic centimeter.\textsuperscript{14} Conditions under which the milk is produced must be of a higher standard than those under which ungraded milk is produced. Several cities in Oregon have adopted a Grade A Milk Ordinance. All milk sold in these cities must meet the state regulations applying to Grade A milk. Sometimes milk, raw
or pasteurized, is labeled Grade B because it has temporarily failed to come up to Grade A standard.

According to Oregon law, fresh whole milk must contain not less than 3.5 per cent of solids not fat and not less than 3.2 per cent of milk fat or butterfat. Cities wishing higher milk standards than those required by the state may develop standards sufficiently higher to be approved under the Standard Milk Ordinance.

In 1940, eight hundred and seventy-five cities in the United States had adopted the Standard Milk Ordinance of the United States Public Health Service and Bureau of Dairy Industry. Several cities in Oregon are at present operating under this model milk ordinance and inspection code. The grading is done on a twofold basis: (1) the bacterial count of the milk, and (2) the rating from a sanitary standpoint of the conditions of production and handling.9

No Federal standards of identity or quality have been set up for fresh milk, but standards have been promulgated by the Federal Security Administrator for concentrated milk, dried skim milk, evaporated milk, and sweetened condensed milk. Oregon has in its most recent legislature promulgated standards for evaporated and condensed milks. No person within the state may sell or have for sale any condensed or evaporated milk which does not conform to the following standards and conditions.22

(1) It must be prepared by evaporating the fresh, pure
whole milk of healthy cows.

(2) It must contain total solids of 25.9 per cent and the per cent of milk fat may not be less than 7.9 per cent.

(3) It must contain no added butter or butter oil incorporated either with whole milk or skim milk or with evaporated milk at any stage of manufacture.

The Oregon law provides for sanitary protection in that the State Department of Agriculture inspects both the herds and the dairies. Cows are tested for tuberculosis by a licensed veterinarian before any milk is sold and thereafter at least every twelve months. A certificate signed by the veterinarian and filed with the State Department of Agriculture is the only valid evidence of the test. Every diseased animal is removed from the herd at once, and no milk from diseased cows is allowed to be offered for sale. All reacting animals failing to pass the T.B. test are branded with the letter "T" on the left jaw and are removed at once and slaughtered under the direction of the veterinarian.14

Herd's are also tested for Bang's Disease (contagious abortion). An agglutination test of all cows is made by the Division of Animal Industry of the State Department of Agriculture before any milk is sold and thereafter at least every twelve months. All abortion disease reactors are marked or branded and separated from the herd until progress
is made toward the control and eradication of the disease.\textsuperscript{14}

Regulations have been set up for the dairy barn and the milk house, including their construction, general cleanliness, waste disposal, lighting, and water supply. Regulations regarding the construction, cleaning, disinfection, storage, and handling of utensile are enforced. Standards of cleanliness have been established for the milking, cooling, and bottling processes.

Milk consumers in Oregon receive additional milk protection in that no owner is allowed to permit any person to work in the milk industry who is affected with any contagious, infectious, or communicable disease. The law authorizes the State Department of Agriculture to require medical examinations for persons suspected of being affected by such diseases. Some cities require all employees handling food to have a health certificate.\textsuperscript{14}

The process of pasteurizing milk to a certain temperature below which all communicable disease germs are killed is regulated in Oregon. According to the law, the term pasteurization refers to "the process of heating every particle of milk or milk products to a temperature of not less than 142^\circ\text{Fahrenheit} and holding at such temperature for not less than thirty minutes in the pasteurization apparatus approved by the department."\textsuperscript{14} No milk or milk products may be pasteurized more than once except as may be specially permitted by the State Department of Agriculture. The construction, facilities, and sanitation of the pasteurization
plant are under state regulations.

Although in some countries milk is still dipped out of a container and sold from door to door, this practice is not common in the United States. As a sanitary precaution, bulk milk is not permitted to be sold in Oregon.

A definite aid to the consumer is the state law requiring certain information to be placed on milk containers. All bottles, cans, or packages enclosing milk or any milk products must be plainly labeled or marked with: (1) the name of the contents, (2) the grade of the contents if graded, (3) the word "pasteurized" or "raw", and (4) the name of the producer or distributor. This information is frequently given on the bottle top.

Oregon has not overlooked the need for regulations concerning the serving of milk in eating places. All milk sold at any lunch counter, restaurant, or public eating place must contain at least 3.2 per cent butter fat unless notice is given that skim milk is served. Skim milk may be served if it be so stated on the bill of fare or on printed notices so placed that they may be easily read by anyone entering the room. In addition, every restaurant, cafe, soda fountain, or other establishment serving Grade A milk may display at all times in a place designated by the State Department of Agriculture a card stating that it sells and serves Grade A milk. Moreover, any such place displaying a Grade A card must not handle, distribute, or sell any milk
of any other grade than Grade A. 14

If the State Department of Agriculture finds any milk or milk products misbranded with respect to grading or being sold without a license, it has the power, should conditions warrant, to denature the milk with rennet or some harmless coloring matter and destroy the milk.

Oregon consumer buyers of milk have price protection as well as sanitary protection and informative aids. In 1933, the Oregon Legislature enacted the Milk Control Bill which provided for the supervision and control of the fluid milk industry in Oregon and created a Milk Control Board. This board has the power to establish minimum prices to producers, to market middlemen, and to consumers; to define market areas; and to license those persons or firms producing and marketing milk for human consumption. Investigators believe that the administration of the Milk Control Act has tended to stabilize the milk industry to the advantage of both the industry and the consumer public. 3

Cream

Oregon laws require all cream, labeled or sold as such, to contain not less than 18 per cent butterfat. Cream meeting this minimum fat requirement is called light, commercial, or coffee cream. Cream labeled or sold as whipping or heavy cream must contain not less than 30 per cent butterfat. Some cities and counties throughout the state require a higher butterfat content in both types of
cream. Cities are allowed to fix their own standards but they must meet at least the minimum standards as set up by the state. Those cities under the Standard Milk Ordinance require cream to contain not less than 20 per cent butterfat.

Federal standards have recently been set for cream and whipping cream. These standards, mandatory in interstate commerce, require cream to contain not less than 18 per cent butterfat if it is to be called cream. Whipping cream must contain 30 per cent butterfat.

Some cream in Oregon is sold without a grade designation. However, whether graded or not, all cream to be legal must contain not more than 50,000 bacteria per cubic centimeter. This requirement applies to both raw and pasteurized cream.

If cream, raw or pasteurized, is labeled as Grade A, it must contain not more than 30,000 bacteria per cubic centimeter. Most of the cream sold in the state is Grade A. Only Grade A cream is allowed to be sold in cities operating under the Standard Milk Ordinance.

Although bacterial count is one of the chief factors considered in the grading of cream, several other factors must also be considered. These are odor, flavor, smoothness, acidity, and sediment.

The state law has set up regulations concerning the serving of milk in eating places. All cream sold in eating places throughout the state must contain at least
16 per cent butterfat. "In all cases where the bill of fare contains the word 'cream', whether it be served separately or with cereals, or with fruit or with coffee, or if cream be ordered as part of any meal, whether it appear on the bill of fare or not, if it be served upon an order of cream, it shall be considered as coming under the provisions of this act, and shall contain not less than 16 per cent butterfat."¹⁴ To maintain the required butter-fat standard, laboratory analyses are continually being made by the State Department of Agriculture.

Ice Cream

The manufacturing of ice cream on a commercial scale has been a growing industry in the last twenty years, and during that time the product has greatly improved in quality. Although the ice cream industry is a comparatively new one, both Federal and state governments have laws regulating the production and selling of ice cream.

States are at liberty to adopt any of the Federal provisions they wish. According to the United States Department of Agriculture, quality of ice cream is based upon four points. These are: (1) purity or freedom from bacteria, (2) butterfat content, (3) total solids, and (4) amount of air beaten into the ice cream.⁹

For purity, the Federal regulation requires that the ice cream mix be pasteurized and that the bacteria count
must not exceed 100,000 per cubic centimeter. A few states require pasteurization of all milk products used, and nine states have adopted the Federal law regulating the bacterial count. Oregon does not require pasteurization of milk and cream used in ice cream, but it does have standards for milk and cream to be used for manufacturing purposes. The factors considered in regulating such milk and cream are: (1) wholesomeness, (2) bacterial content, (3) acid content, and (4) sediment.

Butterfat content, the second factor determining ice-cream quality, is regulated in every state in the union. The Federal government requires 12 per cent butterfat in the ice cream it buys. The states' minimum butterfat content requirement ranges from 8 to 14 per cent. Oregon has adopted a minimum of 12 per cent butterfat for all ice cream with the exception of fruit ice cream and nut ice cream. The two latter types have a minimum butterfat content of 10 per cent.

Twenty-two states, including Oregon, regulate the per cent of milk solids in ice cream. Oregon requires a minimum of 20 per cent, including 12 per cent butterfat, in all ice creams with the exception of fruit ice cream, which must contain at least 18 per cent milk solids including the 8 per cent butterfat. In other words, all ice cream sold in Oregon must contain at least 10 per cent milk solids other than butterfat.
Since most ice cream is sold by measure, it is important to consider the last factor determining ice-cream quality. While it is desirable to have some air beaten into ice cream, many companies are tempted to dilute it by whipping more air into the mix than is necessary. The Federal regulations specify a maximum of 50 per cent air, or a minimum weight of four and one-half pounds per gallon (one pound, two ounces, per quart).\(^9\) Fourteen states have regulations concerning this factor, most of them making about the same requirements as the Federal government in its purchases. Oregon, however, is not one of these states.

According to Oregon law, ice cream is adulterated if it does not conform to the following definitions and standards:

1. "Ice cream is the frozen product made from pure, wholesome sweet cream, sweet butter or sweet evaporated or condensed milk and sugar, with or without flavoring, and, if desired, the addition of not to exceed one per cent by weight of a harmless thickener, and contains not less than 20 per cent of milk solids which must not be less than 12 per cent by weight of milk fat, and the acidity must not exceed three-tenths of one per cent.

2. "Fruit ice cream is the frozen product from pure,
wholesome sweet cream, sweet butter or sweet evaporated or condensed milk, sugar, and sound, clean, mature fruits, and, if desired, the addition of not to exceed one per cent by weight of harmless thickener, and contains not less than 18 per cent of milk solids which must not be less than 10 per cent by weight of milk fat.

(3) Nut ice cream is the frozen product made from pure, wholesome sweet cream, sweet butter or sweet evaporated or condensed milk, sugar, and sound non-rancid nuts, and, if desired, the addition of not to exceed one per cent by weight of a harmless thickener, and contains not less than 18 per cent of milk solids which must not be less than 10 per cent by weight of milk fat."

Oregon considers ice cream to be unwholesome if it:

(1) is made, stores, or held for sale in a dark, unclean, unventilated, or insanitary basement, room, booth, or store, or under conditions in violation of any of the provisions relating to cleanliness, sanitation and ventilation, or protection against contamination; (2) has been made in unclean freezer or utensil; (3) has been held for sale or stored for more than ten days in any store or booth; (4) has been refrozen after being exposed for sale in any store or booth; (5) contains disease producing germs or an excessive number of bacteria.
Oregon makes it unlawful for any person within the state to manufacture for sale, offer for sale, hold in possession with intent to sell, or sell any unwholesome ice cream or ice cream which does not conform to the Oregon standards. 14

In the manufacture of ice cream, Oregon permits the use of fresh, wholesome, unsalted butter and skim milk, or any other dairy product, homogenized and used in place of cream.

At present in Oregon there are several frozen mixtures being sold in accordance with the law, even though these mixtures do not meet the minimum fat content specified for ice creams. 14

(1) Substandard Ice Cream is a frozen mixture made as ice cream but which contains less than 12 per cent butterfat by weight and not less than 6 per cent.
(2) Ice Milk is any such product which contains less than 6 per cent butterfat by weight but not less than 3.2 per cent.
(3) Ice Skin Milk is any such product other than sherbert which contains less than 3.2 per cent butterfat.
(4) Frozen Dessert is any frozen substance, mixture, or compound which is made in imitation of, or has the appearance of, ice cream, substandard ice cream, ice milk, or ice skin milk, and which con-
tains no butterfat, milk solid, or other dairy or
milk product, and is not a sherbert or a water ice.

To protect consumers, Oregon has carefully set up
provisions regulating the labeling, advertising, and selling
of substandard ice creams. Upon every package, carton, or
container of substandard ice cream sold, offered, or exposed
for sale there must be a plainly printed statement giving:
(1) the name of the manufacturer, (2) the name of the pro-
duct indicating that it is substandard ice cream, (3) the
per cent of butterfat by weight, and (4) the total milk
solids not fat by weight. The statement "Substandard Ice
Cream" must be printed in the same color and size of type
and be given equal prominence with other wording, trade-
mark, or description on the carton or container.14

A further aid to consumers is the Oregon law which
requires that any confectionery, drugstores, restaurant,
or eating place serving substandard ice cream, ice milk,
or ice skim milk must conform to the legal standards.
In addition, these eating places must include a statement
concerning the substandard ice cream on the bill of fare
and must display in a spot easily seen by customers a
printed sign stating in bold-faced type at least two inches
in height, "We Use Substandard Ice Cream," or "We Use Ice
Milk," or "We Use Ice Skimmed Milk," as the case may be.
CHAPTER VII
BUTTER AND CHEESE

Butter

According to the Federal Food, Drug, and Cosmetic Act, butter must contain at least 80 per cent, by weight, of milk fat. Oregon has adopted this Federal standard as mandatory. Therefore a buyer in Oregon need give little heed to the selling claim that a given brand of butter is of superior merit because it is made of extra rich cream.

The United States government has also set up standards for grading butter. These standards are permissive, and a state is at liberty to adopt them or not as it chooses. In 1937, Oregon adopted a mandatory grading system in which butter must be designated as either Grade A, Grade B, or Grade C.

The qualities considered in grading butter in Oregon are several. Chief among these is flavor, which may receive a total of 45 points. Other factors considered in scoring are: body and texture, 25 points; color, 15 points; salt, 10 points; packaging, 5 points. To be labeled Grade A, butter must score 92 points or above. Grade B butter must score less than 92 points but not less than 90 points. Grade C must score less than 90 points but not less than 88 points. Butter of a lower quality than Grade C is not sold for human consumption in retail trade.
Butter grading is done in each creamery by a licensed grader. Since 1938, the State Department of Agriculture has been checking the scores by collecting samples monthly in all parts of the state. The samples are brought to the Department office in Salem where they are scored by a committee of three judges and analyzed for fat content.

Oregon permits the use of harmless coloring in butter without a statement of fact upon the label. Because the color of butter would vary during the different seasons and because consumers prefer a uniform color, harmless colorings are permitted.\textsuperscript{14}

Certain specific information required on all creamery butter wrappers and cartons in the state include:\textsuperscript{14}

1. The net weight of the package.
2. The emblem, Grade A, Grade B, or Grade C.
3. The number which designates either the creamery at which the butter was produced or the firm by which the butter was distributed.

In addition, the brand and the name of the creamery or distributor may be found on a wrapper.

Most of the butter sold in Oregon is creamery butter and must be labeled as set forth in the preceding paragraph. However, some dairy butter is sold in Oregon and must be designated as such. The net weight and the name and address of the producer must also be stated.

Oregon has regulated the sale of reworked butter,
short-weight butter, and imitation butter. Reworked and renovated butter may not be offered for sale or sold in Oregon unless the statement "Reworked Butter" or "Renovated Butter" is clearly labeled on the container. It is unlawful to sell any short-weight butter in Oregon. Imitation butter may not be sold as butter. However, this does not refer to the sale of oleomargarine, since this is sold not as butter but as a butter substitute.

Cheese

Nearly two-thirds of all the cheese made in the United States is of the cheddar variety, and it is this variety with which the Federal and Oregon regulations are most concerned.

The United States Agricultural Marketing Service rates different qualities of cheddar cheese as follows: flavor, 30 points; body and texture, 40 points; finish and appearance, 20 points; color 10 points. The quality rating of cheese is seldom given, however, in the retail market. Cheddar cheese scoring 95 and above is rated as U.S. Extra Fancy; that scoring 92 to 94 inclusive, U.S. Fancy; that scoring 89 to 91 inclusive, U.S. No. 1; that scoring 86 to 88 inclusive, U.S. No. 2; that scoring 83 to 85 inclusive, U.S. No. 3; and that scoring below 83, Gulls. Oregon has no such compulsory scoring of cheddar cheese.

Oregon does, however, specify grades of cheese which
are dependent upon the milk-fat content. These grades are:

1. Oregon Full Cream Cheese—cheese which contains in the water-free substance not less than 50 per cent milk fat.

2. Oregon Half Skim Cheese—cheese which contains in the water-free substance not less than 25 per cent milk fat.

3. Oregon Quarter Skim Cheese—cheese which contains in the water-free substance not less than 12 per cent milk fat.

4. Oregon Skim Cheese—cheese which contains in the water-free substance less than 12 per cent milk fat.

Every person who manufactures cheese in the state must, at the place of manufacture, distinctly and durably brand in letters not less than one-half inch in height on the bandage of every cheese and on the box the true grade of the cheese (one of the four above).

Mandatory standards of identity promulgated by the Federal Security Administrator have been set up for cheddar cheese entering interstate commerce. According to the standard, cheddar cheese is a food prepared from milk which contains not more than 39 per cent moisture and whose solids contain not less than 50 per cent milk fat.

State standards have been set up for brick cheese known as "Cream Brick" and Emmenthaler cheese known as Domestic Swiss cheese. Brick cheese made from whole milk must contain
not less than 50 per cent milk fat nor more than 42 per cent moisture, with a tolerance of one per cent. Domestic Swiss cheese must contain not less than 43 per cent milk fat.

The sanitary conditions of cheese factories in Oregon are regulated by law. Lighting and ventilation, as well as the cleanliness of the building, utensils, and workers, are regulated. "No dairy product shall be prepared or manufactured as food for man unless it shall be securely protected from filth, flies, dust, and other contaminating, unclean, unhealthful, or insanitary conditions." 14

According to Oregon law, when artificial color is added to cottage cheese, the product is adulterated and unlawful. The addition of artificial color tends to create the impression that the color of the product is due entirely to the presence of cream. Inferiority of the product is thus concealed, and the purchaser is thereby deceived.

Oregon states that no person may offer for sale or sell any substance in imitation of cheese not made exclusively and wholly of milk or cream with salt, rennet, and with or without harmless coloring matter, and containing fats or oils not produced from milk and cream unless the words "Filled Cheese" are conspicuously stamped or printed upon the cheese or the package.

Every person in the state of Oregon who manufactures
cheese must apply to the State Department of Agriculture for a factory number giving the quality or grade of cheese manufactured. Each box of cheese offered for sale or sold must bear the assigned number on the box and on each cheese. 14

When buying cheddar cheese, an Oregon consumer receives the following information on the box, package, or cheese: (1) name of the product, (2) quality grade—particularly if it is less than 50 per cent milk fat, (3) factory number of the cheese manufacturer, and (4) net weight on packaged cheese.
CHAPTER VIII
FRUITS AND VEGETABLES

Fresh Fruits and Vegetables

The Federal government and the state of Oregon have formulated regulations both permissive and mandatory which are becoming increasingly important to the Oregon consumer buyer of fresh fruits and vegetables.

In the past quarter century, the Federal Bureau of Agricultural Economics has set up 52 permissive standards for 57 different fruits and vegetables. Although these standards have been used mainly in wholesale transactions, their use has brought about definite improvement in the quality and uniformity of products shipped to market. Minimum quality requirements have been set up for each grade and these give the consumer an increasingly better product for every dollar he spends. Consumers should remember that these minimum quality requirements are permissive, since the Federal Food, Drug, and Cosmetic Act specified that no standards would be set up for fresh fruits and vegetables.

It is usually impossible for consumers to buy United States grade designated fruits and vegetables in retail market. Because it is more economical to put up consumer packages of produce at shipping points, the more perishable fruits and vegetables, if graded U.S. No. 1 when packaged, may not meet U.S. No. 1 standards when they arrive at the retail market. Sometimes this is true of even the less
perishable potatoes and onions. The number of consumer-sized packages of potatoes, onions, apples, and citrus fruits bearing United States grade designations has increased materially, however, in the past few years.\(^2\)

Often when produce arrives at a retail market with U.S. grade designation, containers are discarded by the retail grocer before he presents the products to the public. Most fruits and vegetables are sold from bulk displays. If these displays were to be labeled with grade designations, a trained inspector would have to be present to inspect the produce each morning. At present, the facilities for training such inspectors are not available.\(^2\)

Grades are based upon such factors as: variety, color, size, maturity, shape, and freedom from defect caused by dirt, disease, insects, and climatic conditions. Differences between U.S. No. 1 and U.S. No. 2 grades are mainly in appearance, taste, and preference. Federal grades do not often specify size, since size depends upon variety.\(^6\)

The established grades vary somewhat according to the varieties of fruits and vegetables. For many fruits there are two Federal grades, U.S. No. 1 and U.S. No. 2. Sometimes a higher grade, U.S. Fancy, is used, and there may be lower grades, U.S. No. 3 and U.S. No. 4. For many vegetables there is only one grade established, U.S. No. 1, but vegetables, too, may have a high grade, U.S. Fancy, and several lower grades. Fruits and vegetables labeled "Unclassified" are
simply ungraded. Unclassified produce may be either of the highest quality, or of such low quality that it could not be given a grade.

The Federal government has somewhat standardized fruit and vegetable containers through the passage of three laws in 1915, 1916, and 1928. The first law regulates the capacity and subdivisions of the barrel. The second regulates the capacity and sizes of berry boxes, till baskets, and climax baskets. The third regulates the capacity, sizes, and shapes of hampers, round stave baskets, and splint or market baskets.9

In Oregon, the State Department of Agriculture is authorized to fix grades and standards for agricultural products. A recent amendment by the Oregon Legislature provided that the use of grade standards authorized to be established are not to be mandatory unless so specifically provided.16

Although fruits and vegetables other than potatoes and onions do not have mandatory standards, a consumer knowledge of the factors considered in grading gives consumers points of choice in selection. The State Department of Agriculture bases grades, standards, or classifications for any horticultural or agricultural product upon the following factors: *degree of maturity; size, measured by dimensions or weight; degree of freshness, as determined by physical examination or chemical test or analysis;
moisture content; uniformity; color; firmness; tenderness; freedom from injury; freedom from insect pests; freedom from diseases; appearance; freedom from mixture with other varieties; freedom from decay; conformation; soundness; varietal characteristics or type; number of specimens per pound; nature of pack; presence of dirt or other foreign material; condition as to temperature and extent to which the product is hot or heating or is in a sour condition; extent to which the product has been affected by handling or treatment; extent to which commodity is satisfactory for human or other consumption and use; extent to which the product has a commercially objectionable odor or flavor; and other factors indicative of quality or condition and the value or suitability of the commodity involved for the commercial or other use to be made thereof. 14

Oregon laws state that the containers in which fresh fruits and vegetables are sold or shipped must meet certain sanitary standards. All foreign matter must be removed, and previous markings, brands, or labels on the container must be obliterated by refinishing or entirely covering the former markings with a cloth or paper label.

Oregon requires that all persons or firms operating under their own private brand in the state of Oregon and engaged in the business of packing or canning fruits and vegetables must plainly designate that the goods were
"Oregon Grown" or "Packed in Oregon." A consumer buyer in Oregon who buys fruits or vegetables in the original packed container is thereby informed as to whether the product is "Oregon Grown" or "Packed in Oregon."

State compulsory inspection and grading are required only on potatoes and onions. Because of the mandatory requirements, an Oregon consumer buyer can purchase both these products by grade in the Oregon markets.

All onions sold or offered for sale or shipment in the state of Oregon must conform to the standards set up by law. The six quality grades of onions are: U.S. No. 1, U.S. No. 1 Boilers, U.S. No. 1 Picklers, U.S. No. 1 Commercial, U.S. No. 2, and Cull Grade.14

According to the standards, U.S. No. 1 consist of onions of similar varietal characteristics. The onions must be mature, fairly well-shaped, free from doubles, and splits, and from damage caused by sprouting, freezing, disease, insects, or mechanical or other means. A tolerance is permitted for U.S. No. 1 of not more than 10 per cent by weight damaged by peeling and not more than 5 per cent below remaining requirements of the grade. U.S. No. 1 Boilers and U.S. No. 1 Picklers meet all requirements for U.S. No. 1 except size. U.S. No. 1 Commercial do not quite meet the quality requirements of U.S. No. 1, but are of a higher quality than U.S. No. 2, which are reasonably firm and free from serious damage. Cull Grade onions are not
graded in conformity with the foregoing grades.

Size grades have also been established for onions. The minimum size of U.S. No. 1 and U.S. No. 1 Commercial, unless otherwise specified, is 1 1/2 inches in diameter. U.S. No. 1 Boilers are not less than one inch or more than 1 5/8 inches in diameter. The minimum size of U.S. No. 1 Picklers is not more than one inch in diameter.

Oregon requires that the following information be given on onion containers: (1) name of the product, (2) name of the state where grown, (3) name and address of grower, shipper, or packer, (4) onion grade, and (5) net weight. The containers of onions U.S. No. 1 grade sold or offered for sale or shipment in the state of Oregon must be uniform, new, sound, and clean.14

The state of Oregon has set up mandatory standards for potatoes with the following grades: U.S. Fancy, U.S. Extra No. 1, U.S. No. 1, U.S. No. 2, and Cull Grade. The grades commonly found on the Oregon market are U.S. No. 1 and U.S. No. 2.15

U.S. No. 1 potatoes must consist of potatoes well-shaped and all of one variety. They must be free from freezing injury, soft rot, sunburn, hollow heart, shriveling, sprouting, and scab. The potatoes of this grade must be free from insects or mechanical means. Not more than 6 per cent of the potatoes so labeled may be below the quality requirements of the U.S. No. 1 grade. U.S. No. 2 potatoes
may be more irregular than U.S. No. 1. They must be free from serious damage, but they may contain more cuts and defects than those allowed for the U.S. No. 1 grade. Not more than 6 per cent of the potatoes so labeled may be below the quality requirements of the U.S. No. 2 grade.

Size requirements specify that not more than 5 per cent of the potatoes in any container may be below specified minimum size for the grade. The diameter of U.S. No. 1 potatoes must not be less than 1 7/8 inches, and the diameter of U.S. No. 2 potatoes must not be less than 1 ½ inches.14

Oregon requires certain information on the 100, 50, and 25 pound bags. Containers of 15 pound lots or less must also give certain information. The larger pound bags must bear: (1) name of the product, (2) name of the state where grown, (3) name and address or brand of grower or dealer, (4) grade of the potatoes, and (5) net weight. Containers of 15 pound lots or less require: (1) name of the product, (2) name of the state where grown, (3) grade of the potatoes, and (4) net weight.14

Potatoes sold or displayed for sale in Oregon in a bin or on a display table must have a legible label or placard stating: (1) grade of the potatoes, (2) name of the state where grown, and (3) name and address or brand of grower and dealer.14

The containers of potatoes of No. 1 grade or better
sold or offered for sale or shipment in the state of Oregon must be uniform, clean, and sound. All sacks must be new or number one second-grain sacks.

Standards have been set in Oregon for fruits and vegetables other than onions and potatoes, but these standards are permissive. Those Oregon vegetables having standards are: asparagus, snap beans, bunched beets, cabbage, bunched carrots, cauliflower, celery, green corn, lettuce, peas, spinach, and tomatoes. Oregon fruits for which permissive grade standards have been set up are: apples, apricots, cherries, grapes, peaches, summer and fall pears, winter pears, plums, and prunes. Standards have also been set for cantaloupes, loganberries, and strawberries. The State Department of Agriculture specifies that producers wishing to use grades for the above-mentioned fresh vegetables and fruits may use either the Oregon standards or the United States grades.

Although the standards set up for fruits and vegetables in Oregon are not mandatory, they do have an effect upon the uniformity of the fresh products on the market. In past years, mixed lots of produce have become fewer as voluntary grade labeling has increased. The fact that there are standards available insures the consumer that individual producers or concerns are not unaware of the requirements set up in the permissive standards.

The Division of Plant Industry of the Oregon State
Department of Agriculture has published small leaflets giving the permissive Oregon standards established for the individual fruits and vegetables grown in the state. Consumers may receive any or all of these leaflets by writing to the division located in Salem, Oregon.

**Canned Fruits and Vegetables**

To purchase intelligently, the consumer buyers need some means of identifying food products. Naturally, consumers cannot see through a tin can; therefore the wise buying of canned fruits and vegetables has been and still is a difficult problem.

Reading the information on the label is perhaps the consumer buyer's best method of learning the contents of the can. The Federal government has set up mandatory standards through the Federal Food, Drug, and Cosmetic Act regarding information which must appear on canned fruits and vegetables entering interstate commerce. When the consumer buys canned fruits and vegetables, she is insured of learning: (1) the name of the product, (2) the name of the packer or distributor, (3) the net contents in weight, measure, or numerical count, and (4) whether the product is below standard grade or slack filled.

Consumers have had little or no insurance as to the quality of the products they buy in cans. The situation with which consumers are confronted is particularly diffi-
cult because it is impossible to try all the brands on the market to discover the best. In a survey made by a peach grower's association in California in 1929, it was found that 56 per cent of the sample cans of peaches taken from retailers' stock bearing labels which the packers stated they used on "Fancy" peaches were not "Fancy" and that 44 per cent of those supposed to represent "Choice" or "Extra Standard" did not conform to that grade, according to the standards of the Canner's Association.9 Circumstances like these are a serious disadvantage to the consumer buyer because price comparisons are difficult to make, and the same quality of canned fruits or vegetables may vary greatly in price.

Consumers are protected from slack fill in that fill of container has been regulated under the McNary-Mapes Amendment and under the standards now being promulgated by the Federal Security Agency for all canned fruits and vegetables entering interstate commerce. Fill of container refers to the content of the pack. According to the Food and Drug Administration before the new Federal Food, Drug, and Cosmetic Act was passed, two general fill requirements were set up for all canned fruits and vegetables.18 First, the head space—the distance from the underside of the can cover to the top point of the product—could not be more than 10 per cent of the inside height of the can. Second, there could not be an excessive amount of water, brine, sugar
solution, or other liquid packing medium. Under the
Federal Food, Drug, and Cosmetic Act, in prescribing any
standard of fill of container, the Federal Security Admini-
strator must give due consideration to the natural shrinkage
in storage and the need for necessary packing and pro-
tective material. 24

The evident need for better guides in choosing canned
goods has given rise to much discussion of the desirability
of official grading and grade labeling. The McNary-Mapes
Amendment made mandatory the identification of the lowest
grade of products, yet gave no assistance in determining
the grade of a better quality. On canned fruits and
vegetables of below standard quality or fill, the statement
"Good Food--Not High Grade" is required. Consumer groups
have considered the McNary-Mapes Amendment a step toward
eventually mandatory official grading.

Under the authority of the Federal Food, Drug, and
Cosmetic Act, standards of identity, quality, and fill have
been set for a few canned fruits and vegetables. Standards
have been published in the Federal Register for the following:
peaches, tomatoes and tomato products, apricots, asparagus,
cherries, pears, and peas.

To facilitate and encourage the grading and grade
labeling of canned goods, the Agricultural Marketing Service
of the United State Department of Agriculture has developed
permissive grades for a wide variety of products, including
many canned fruits and vegetables. Grades have been
developed for the following canned fruits and vegetables:

<table>
<thead>
<tr>
<th>Fruits and Vegetables</th>
<th>Fruits and Vegetables</th>
<th>Fruits and Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>Corn, cream-style</td>
<td>Pimentos</td>
</tr>
<tr>
<td>Apple sauce</td>
<td>Corn, whole-grain</td>
<td>Plums</td>
</tr>
<tr>
<td>Apricots</td>
<td>Fruits for cocktails</td>
<td>Potatoes, sweet</td>
</tr>
<tr>
<td>Asparagus</td>
<td>Grapefruit</td>
<td>Pumpkin</td>
</tr>
<tr>
<td>Beans, dry</td>
<td>Grapefruit juice</td>
<td>Raspberries</td>
</tr>
<tr>
<td>Beans, lima</td>
<td>Mushrooms</td>
<td>Sauerkraut</td>
</tr>
<tr>
<td>Beans, snap</td>
<td>Okra</td>
<td>Spinach</td>
</tr>
<tr>
<td>Beets</td>
<td>Peaches, freestone</td>
<td>Succotash</td>
</tr>
<tr>
<td>Blackberries</td>
<td>Peaches, yellow</td>
<td>Tomatoes</td>
</tr>
<tr>
<td>Carrots</td>
<td>clingstone</td>
<td>Tomato catsup</td>
</tr>
<tr>
<td>Cherries, red sour</td>
<td>Pears</td>
<td>Tomato juice</td>
</tr>
<tr>
<td>Pitted</td>
<td></td>
<td>Tomato pulp</td>
</tr>
<tr>
<td>Cherries, sweet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Agricultural Marketing Service feels that informative labeling is particularly desirable as it enables the consumer to make selections actually on the basis of the quality preferred. Regardless of the brand name or the price asked, all canned fruits and vegetables can be classified as grade A, B, C, or D. Synonymous trade terms are Fancy, Choice, Standard, and Substandard. Canned fruits and vegetables in any one of these grades are nutritious and wholly acceptable for human consumption.

In Grade A (Fancy) only the finest fruits and vegetables are included. They are carefully selected as to size, color, degree of maturity, and freedom from blemishes. The fruits are meaty, highly colored, and ripe. They are almost always packed in syrup, which may be extra-heavy (very sweet), heavy, medium, or light; for certain purposes, however, the fruit may be packed in water. Grade A canned vegetables are the most tender and succulent forms produced and processed.
The products in Grade B (Choice) are of excellent quality, though not quite as well selected as to color, size, and maturity as Grade A products. Grade B canned fruits are well developed and well colored, and are packed in syrup or water as specified for Grade A. Grade B canned vegetables are not quite as succulent and tender as those of Grade A.

The products in Grade C (Standard) are of good quality but are not so uniform in color, size, and maturity as are Grade B products. Grade C canned fruits may not be so highly colored, or so carefully selected as to size and symmetry, and though mature may vary somewhat in ripeness. The fruits may be packed in syrup or water. In some cases Grade C vegetables may have more food value than either Grade A or Grade B as they are more fully mature than the products in the higher grades.

Canned fruits and vegetables below Grade C in quality, and usually below the standards quality promulgated under the Federal Food, Drug, and Cosmetic Act are designated Grade D (Substandard or Below U.S. Standard). The products are wholesome, but the quality is below that of Grade C.

The canner of fruits and vegetables may grade his own products. If he wishes, he may use the grades developed by the United States Department of Agriculture, or he may use grades he has set up independently. If he uses the grades A, B, C, or Fancy, Choice, Standard, his products so labeled
must conform to the requirements of the specified grade as defined by the United States Department of Agriculture. Or he may employ trained inspectors from the United States Department of Agriculture to inspect and certify the grade of his products.

Some canners are operating under the "continuous inspection" plan. Government inspectors requested by the canners are on duty all the time the plants are in operation. The inspectors observe each step in the operation, and the canners pay the cost of the service. Only those plants cooperating with the United States Department of Agriculture in grade labeling their products are eligible for this service. The products packed in plants under the "continuous inspection" plan are the only ones which may use the letters U.S as a prefix to the grade designation. The U.S. grade is signified by a small shield outlined on a label containing the words "U.S. Grade A" or such grade as the case may be.1

Canners who label their products with the terms, A, B, C, or Fancy, Choice, Standard are liable to penalties for mislabeling provided under the Federal Food, Drug, and Cosmetic Act if their merchandize does not meet the requirements of the grade claimed.

In Oregon retail markets, no grade-labeled canned fruits or vegetables are available to consumers. Most of the grades of canned fruits and vegetables are indicated
by the brand name on the label.

The Oregon consumer buyer of canned fruits and vegetables receives protection and aid, however, in four ways. First, the consumer is given certain information on the label encircling the canned fruit or vegetable. Second, the Federal Food, Drug, and Cosmetic Act makes it unlikely that the canned fruit or vegetable is either adulterated or misrepresented, since much of the canned goods consumed in Oregon has entered interstate commerce. Third, Oregon laws provide that no packer or dealer in preserved or canned fruits or vegetables may sell or offer for sale such canned articles unless they are entirely free from substances or ingredients deleterious to health. Fourth, if the product is of substandard quality or slack fill and has entered interstate commerce, it must be labeled as such.

**Dried Fruits**

Dried fruits on the market are either sun dried or dehydrated. In Oregon, the locally dried fruits are dehydrated. Oregon, Washington, and California ship large amounts of dried apples, apricots, peaches, and prunes throughout the country. Because these fruits enter interstate commerce, they fall under the jurisdiction of the Federal government. According to the Federal Food and Drug Administration, apples, apricots, peaches, and prunes may be labeled "dried" only if the moisture content does not exceed
24 to 26 per cent, the amount varying with the fruit.⁹

Often dried fruits are treated with sulfur to improve their appearance and kill organisms that might cause spoilage. When this is done, the words "sulfur dioxide" must appear on the label of the container. Sometimes a lye bath is used on raisins and prunes for cleaning purposes and to crack the skins for faster drying. The Federal Food and Drug Administration has not been able to find any harmful effect on human health from whatever sulfur or lye remains on the fruit.⁹

The Federal Food, Drug, and Cosmetic Act provides that no definitions or standards of identity are to be promulgated for dried fruits. There are no Federal grades for quality or for size. However, commercial grades are sometimes found on packs of dried apricots, currants, dates, figs, peaches, pears, prunes, and raisins.
CHAPTER IX
EGGS

When a consumer buyer purchases eggs, a knowledge of both the size and quality of the eggs is important. Laws established by the Oregon legislature give the consumer buyer the desired information in that all eggs sold through retail trade channels in Oregon must be graded for size and quality.

The Agricultural Marketing Service of the Department of Agriculture has formulated Federal standards for retail grades of eggs. Some states, including Oregon, have passed laws providing that eggs must be graded and grade marked for retail trade; these states have patterned their mandatory grades somewhat upon the suggested grades of the Federal government. The Federal quality grades are U.S. Special, U.S. Extra, U.S. Standard, and U.S. Trade. Federal standards for size are established separately from quality grades since weight does not affect interior qualities. Size grades are: Large, minimum average weight per dozen, 24 ounces; Medium, 20½ ounces; Small, 17 ounces. Cartons of Federal graded eggs bear a certificate stating both quality and size grades together with the date of grading.22

Federal graded eggs are not sold in Oregon because the state has its mandatory state grades. The three quality grades of eggs in Oregon are: Grade AA, Grade A, and
Grade B. Grade A is most commonly found in the retail markets. "Candling" is the process through which the quality of eggs may be determined. The quality grade indicates the condition of the egg when candled, not when sold. In Oregon, eggs are graded by the producer, the wholesaler, or the retailer.

Grading is based on the condition of the shell, the size of the air space, the appearance of the yolk, and the appearance of the white. The established state grades and standards of quality and condition applicable to all eggs intended for human consumption in Oregon are:

(1) "Grade AA: The shell must be sound, normal, and reasonably clean. The air cell must not exceed one-eighth of one inch in depth and it must be regular. The yolk must be well centered, its outline indistinct, and it must be free from visible germ development and other defects or blemishes. The white must be firm and clear.

(2) "Grade A: The shell must be sound, normal and reasonably clean. The air cell may be slightly tremulous, but it must not exceed one-fourth inch in depth. The yolk must be fairly well centered and its outline may be moderately defined. The yolk may be slightly mobile, but it must be free from germ development and practically free from other defects or blemishes. The white must be
firm and clear.

(3) "Grade B: The shell must be reasonably clean and must be sound but may be slightly abnormal. The air cell must not exceed three-eighths of one inch in depth and may show movement not in excess of one-half inch. The yolk outline may be well defined. The yolk may be mobile and may show slight germ development. The white must be reasonably firm and clear." 

Size grades as established by the 1939 Oregon state laws are: Oversize, Large, Medium, Small, and Undersize. Specifications for these sizes are summarized in the following table.

**TABLE I**

**SIZE GRADES FOR OREGON EGGS**

<table>
<thead>
<tr>
<th>Size</th>
<th>Minimum weight per egg</th>
<th>Minimum weight per dozen</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ounces</td>
<td>Ounces</td>
</tr>
<tr>
<td>Oversize</td>
<td>2 1/6</td>
<td>27</td>
</tr>
<tr>
<td>Large</td>
<td>1 5/6</td>
<td>23 1/2</td>
</tr>
<tr>
<td>Medium</td>
<td>1 7/12</td>
<td>20 1/2</td>
</tr>
<tr>
<td>Small</td>
<td>1 1/4</td>
<td>17</td>
</tr>
<tr>
<td>Undersize</td>
<td>less than 1 1/4</td>
<td></td>
</tr>
</tbody>
</table>
Grading prevents wide variation in egg quality; yet a certain tolerance is permitted in a lot or case containing thirty dozen eggs or more.

Grade AA: Five per cent may consist of eggs not reasonably clean or sound; 10 per cent may consist of Grade A eggs.

Grade A: Five per cent may consist of eggs not reasonably clean or sound; 10 per cent may consist of Grade B eggs.

Grade B: Fifteen per cent may consist of eggs not reasonably clean or sound.

Oregon laws aid a consumer in the choice of eggs by requiring certain information to be present on all containers of eggs: (1) the full, correct, and unabbreviated designation of the size and quality grade; (2) the name and address of the producer, wholesaler, or retailer, by or for whom the eggs were graded and packed.14

The law further provides that no person may sell eggs in Oregon from any bulk lot other than those raised and sold on the same premises unless he displays a plainly legible sign or placard giving the quality grade and the size grades.

Consumers need not be misled by the terms "fresh," "strictly fresh," or "newly-laid", since the state law requires that all eggs so advertised must be of no other grade than Grade AA or Grade A.
Under the Oregon law, "Fresh" denotes quality rather than age. Therefore the term "fresh" may be applied to cold storage eggs which have been cangled after removal from storage and found to have the qualities of Grade A.
CHAPTER X
MEAT AND POULTRY

Meat

There are many regulations, both Federal and state, which directly and indirectly aid the consumer in buying meat and meat products. Chief among them are those which concern inspection of meat for wholesomeness.

Since 1907, the Federal government has been allowing for shipment in interstate commerce only such meat as is sound, healthful, wholesome, fit for human food, and packed under sanitary conditions. "Upon inspection of any carcasses to be entered into interstate trade, if the inspectors shall find carcasses to be sound, healthful, wholesome, and fit for human food, the inspectors shall mark, stamp, tag, or label the carcass as 'Inspected and Passed.' If the carcass does not conform to standards suitable for human food, the carcass must be labeled 'Inspected and Condemned' and destroyed in such a manner that it may not be used as food." 23 All plants doing interstate business must have all meat slaughtered and processed in their plants inspected, whether the meat is shipped interstate or not.

Provision is made for veterinary examination of all cattle, sheep, swine, and goats before they can be slaughtered, packed, canned, or rendered. Federal examination of carcasses and organs are also made at the time
Sanitary conditions of slaughter-houses and packing-houses must be approved. The Secretary of Agriculture of the United States Department of Agriculture shall cause to be made inspection of all slaughtering, meat canning, salting, packing, rendering, or similar establishments if the meat therefrom is to enter interstate trade. He may prescribe the rules and regulations concerning the sanitary condition of such establishments.

Meat inspected by the Federal government has the small round purple stamp containing the words "U.S. Inspected and Passed." This stamp is placed on each wholesale cut of the carcass, and on each product or package. Also appearing on the stamp is the number of the establishment at which the meat was inspected. Only three plants in Oregon operate under the Federal inspection and use this stamp, a facsimile of which is given below.

The Federal government allows only approved ingredients, seasonings, and preservatives to be used in meat
products shipped in interstate commerce. Common salt, sugar, wood smoke, vinegar, pure spices, sodium nitrate or nitrite, and saltpeter may be used, and sodium benzoate if its presence is stated on the label. Only harmless colorings as designated by the Secretary of Agriculture may be used. If any product contains cereal, its presence must be indicated on the package label or tag.

The Oregon State Department of Agriculture has promulgated laws directly affecting the wholesomeness of meat which consumers buy. Regulations applying to the inspection of meat, slaughterhouses, meat packing plants, and employees handling meat and meat products have been established.

Oregon allows no person or firm to sell, offer for sale, or to prepare for use as human food, any meat or meat product from an animal whose flesh is unsound, unhealthful, unwholesome, or otherwise unfit for human food.

The laws in Oregon require certain standards for the construction and sanitation of buildings used for slaughtering, packing, canning, or manufacturing meats or meat products. Requirements are set up for cleanliness and construction of floors, walls, and utensils, and the lighting and ventilation of rooms in which meats are prepared, packed, stored, or canned. Oregon also requires its meat markets to be properly lighted, plumbed, ventilated, and kept in clean and sanitary condition.
In addition to sanitary requirements for meat establishments, Oregon has also set up the regulation protecting consumers from buying meat which has been handled by employees having communicable diseases. Persons afflicted with tuberculosis or any other communicable disease may not be employed in establishments handling or selling meat.

As a precaution in protecting the consumer from trachiniae in pork, Oregon specifies that articles of food sold or offered for sale which consist wholly or in part of pork muscle tissue, such as bologna-style sausage, Vienna-style sausage, frankfurt-style sausage, summer sausage, to be eaten by customers without cooking must be subjected to heat of a temperature not lower than 137°F Fahrenheit or to twenty days refrigeration at a temperature not higher than 50°F Fahrenheit.14

Oregon has defined the meaning of sausage and hamburger. "Sausage" is considered to be a mixture of minced or chopped meats with or without spices. Any particular kind of sausage indicated, must be made wholly from the meat of that particular species of animal. For example, pork sausage must be made from pork meat. Hamburger must be made from beef meat and must not contain beef hearts, tripe, or similar products.14

The selling of horse meat for human food is regulated in Oregon. It is unlawful to sell such meat unless each quarter of each carcass is stamped with the words "Horse
Meat in green ink in words legible in full-faced type not less than one inch in height. Horse meat sold directly to the consumer must be so marked either by label on the package or by stamp. Furthermore, every butcher shop, grocery store, public market, sales room, restaurant, or other public selling or eating room must have posted a sign "Horse Meat Sold Here" or "Horse Meat Served Here" in legible, full-faced type not less than three inches in height and in a conspicuous spot easily seen by customers.

Oregon makes it unlawful for any person to carry or transport through any street, alley, or thoroughfare the carcass or meat of any cattle, sheep, or swine intended for sale or distribution as food unless it be entirely covered with a clean cover and so thoroughly protected from dust, dirt, and flies.

Oregon as a state does not require mandatory inspection of meat sold within the state. Inspection service is, however, available to any person or firm wishing it. The state of Oregon has created for each county, with the exception of Tillamook County, the office of county meat and herd inspector. This official works under the direction of the State Department of Agriculture and is governed by its rules and provisions. Upon written application of owners or managers of meat establishments, the State Department of Agriculture will appoint local agents or the county meat and herd inspector to make complete examination
of all animals, carcasses, meats, and meat-food products used, prepared, or stored in local slaughtering, packing, canning, rendering, or similar establishments and to affix an approved stamp or mark to the meats and meat-food products that are found to be sound, healthful, wholesome, and fit for human food. In 1941, there were in Oregon only five plants operating under the state inspection service.

Establishments having complete inspection follow a program in which both ante-mortem and post-mortem examinations of all cattle, sheep, swine, and goats are made. Each establishment at which complete state inspection is maintained is given an official number, which is indicated on the state inspection stamp.

A triangular-shaped stamp containing the words "Insp'd and Ps'd. Oregon State Department of Agriculture", or its abbreviation, and the official slaughter-house number or veterinarian's name is the officially adopted and recognized meat inspection stamp of the state of Oregon. The stamp, a facsimile of which is drawn below, is placed on the wholesale cut of each carcass passing the meat-health inspection.\(^1\)

\[\text{\begin{figure}[h]
\centering
\includegraphics[width=0.3\textwidth]{stamp.png}
\end{figure}}\]
Oregon allows cities within the state to establish mandatory meat inspection laws, providing the state mandatory laws regulating sanitation of meat and meat establishments are taken as minimum standards and that the State Department of Agriculture approves of the municipal laws. At present, four Oregon cities require all meat retailed to be either Federal, state, or city inspected.

All meat used in the city of Portland, Oregon, must be inspected at some stage by either Federal, state, or city authorities. The Portland Health Service provides facilities for meat inspection under the authority of the Portland ordinances. This inspection is of three types: (1) inspection of the actual slaughter of animals killed within the city of Portland except those killed at plants operating under Federal inspection, (2) inspection of dressed meat brought into the city except that from plants operating under Federal or state inspection, and (3) inspection and supervision of general sanitation at all wholesale and retail meat-handling establishments in the city of Portland except those operating under Federal inspection.13

The United States Department of Agriculture has set up standards for grading quality of meat as a further aid to the consumer. These grades are permissive, but are considered a definite step toward helping consumer buyers purchase the quality of meats they wish.
Meat is graded on the factors which affect tenderness and flavor. The particular grade to which a piece of meat belongs is determined by the conformation, finish, and quality of the animal. Conformation refers to the general build or shape of the animal. Finish is determined by the thickness, color, character, and distribution of the fat. Quality in its technical sense is the characteristic of the lean and the intermingled fat.

When carcasses and cuts of meat are to be labeled for grade, a roller stamp applied by the government grader or under his immediate supervision is carried down the length of the carcass by a continuous motion. Other imprints of the stamp are so made that the label appears on all the principal retail cuts. The stamping fluid, a pure vegetable compound, is entirely harmless, and the imprint usually disappears when the meat is cooked. 21

In 1940, the Agricultural Marketing Service had government grades for beef, lamb and mutton, and veal and calf. Tentative grades are being formulated for pork. The official grades for beef are: U.S. Prime, U.S. Choice, U.S. Good, U.S. Commercial, U.S. Utility, U.S. Cutter, and U.S. Canner. The official grades for lamb and mutton are: U.S. Prime, U.S. Choice, U.S. Good, U.S. Medium, U.S. Common, and U.S. Cull. More lamb than mutton is labeled because the quantity of mutton sold in many retail markets is small

Government-graded meat is not sold in all markets in the United States. No U.S. graded meat is retailed in Oregon at present; yet it is an advantage to Oregon consumers to be familiar with meat grading in case they are ever confronted with such grades.

The meat-grading and stamping service is available through offices of the Agricultural Marketing Service located at Baltimore, Boston, Chicago, Cincinnati, Cleveland, Columbus, Des Moines, Detroit, Indianapolis, Kansas City, Los Angeles, Memphis, St. Louis (Missouri), East St. Louis (Illinois), New York, Omaha, Oklahoma City, Philadelphia, Phoenix, San Francisco, Seattle, St. Joseph, St. Paul, Waterloo, and Washington, D.C. 

Poultry

Oregon has specific regulations for sanitary standards pertaining to poultry and the surroundings in which live poultry are kept. These regulations help consumers to know that the poultry they buy has been kept under sanitary conditions as prescribed by the Department of Agriculture in Oregon.

The law requires that all poultry houses and yards be maintained in a sanitary condition. Regular disposal of
waste products is required if the poultry house and yard are to meet state requirements. All bags used for poultry feeds and mashers must be cleaned and disinfected before being filled at the mill.

Whenever it has become known that any contagious or infectious disease exists in a flock of poultry within the state, such flocks must be placed in quarantine by a state or deputy-state official. Certain precautions must be taken during the quarantine, which must continue until released by the State Department of Agriculture.

The state of Oregon has set up two regulations in regard to the transportation of poultry. "All crates or other containers used for transportation of poultry by a poultry producer or anyone buying and selling or otherwise transporting poultry must be properly scraped, cleaned and disinfected in a five per cent solution of a recognized coal tar disinfectant each time after being used." In addition, dressed poultry being transported through the street must be entirely covered with a clean cover to protect it from dust, dirt, and flies.

The Agricultural Marketing Service has established a permissive grading system for dressed poultry. Factors upon which quality is graded are: (1) amount of flesh, (2) amount of fat, (3) tenderness, (4) conformation, (5) dressing, and (6) bleeding. The U.S. grades are U.S. Special, U.S. Prime, U.S. Choice, and U.S. Commercial.
The present method of marking individual poultry carcases with the grade is prescribed by the Agricultural Marketing Service. The grade name is printed on a label or tag which is attached to the individual bird by means of a seal that passes through the skin of the breast or wing. The seal is so devised that it breaks when removed and so cannot be used on another bird. The printing of the U.S. Grade name on the cellophane sheets for use in wrapping full-drawn carcases is another method of marking individual poultry carcases with the U.S. grade.
CHAPTER XI

FISH

In purchasing fish, Oregon consumer buyers receive more protection through state regulations than through Federal regulations. Oregon has many fish-yielding rivers and is bordered on the west side by the Pacific Ocean; therefore much of the fish purchased in Oregon is from the Oregon rivers or the Pacific ocean and falls under state supervision.

The Federal government does not have compulsory inspection for fish entering interstate trade. In a general provision of the Federal Food, Drug, and Cosmetic Act, it is stated that no fish in a decomposed or unwholesome condition may be shipped into interstate commerce.

Federal inspection in the fish industry is accessible even though it is not required. Any packer of sea food in the United States may apply for government inspectors, directed by the Secretary of Agriculture, to examine and inspect all premises, equipment, methods, materials, containers, and labels used by the applicants in the production of sea food. If the food conforms to Federal requirements, the applicant is authorized to mark it to indicate such conformity. For example, the Federal inspection of canned shrimp has been provided for since 1934. On the label of inspected canned shrimp is stamped, "Production supervised by U.S. Food and Drug Administration."
The State of Oregon has promulgated laws concerning the sanitary condition and wholesomeness of food fish. Oregon has a Fish Commission which, among its duties pertaining to protection and propagation of food and shell fish, has authority to control and regulate the entire fish industry and so provide sanitary methods and prevent deterioration and waste in the sale, packing, preserving, manufacturing, and processing of fish or fish products other than salmon.

Oregon also prescribes that the Fish Commission, whenever it finds that salmon, shad, or sturgeon about to be packed, canned, preserved in ice, or sold on the open market is unfit for human consumption, must so notify the packer or possessor of the fish. If, in spite of the warning, the packer should have the fish packed, he is required to keep it separate from his output and make a full report to both state and Federal health authorities.

The Fish Commission exercises full jurisdiction and control over the processing, packing, or preserving of sardines. The Commission may specify the process to be used in the canning of such fish in order to assure a quality product and prevent the use of certain substitute oils resulting in inferior grades.

Oregon declares it unlawful to sell or offer for sale, to can or preserve for food any salmon, striped bass, shad, sturgeon, or other food fish or shellfish that has been removed from the water for a period longer than sixty hours,
unless such fish has been artificially chilled.

It is unlawful in the state of Oregon to sell or can crabs measuring less than six inches across the back. It is also unlawful to sell or expose for sale crabs from which the backs have been removed.

In October, 1939, the Oregon State Board of Health adopted regulations governing the sanitary control of shellfish. These regulations while not mandatory are adhered to by many Oregon packers and dealers of oysters, mussels, and clams. To receive a Shellfish Shucking and Packing Plant Certificate from the State Board of Health, the packers or dealers must make a written request. If they comply with the requirements set up by the board, they receive a numbered certificate. The State Board of Health in turn reports this number as a check to the United States Public Health Department. 

The regulations which the State Board of Health require include provisions concerning: growing areas, protection from pollution and contamination, water storage, boat sanitation, oyster house sanitation, health of employees, shucking and packing plants, shipping, and records.

No shellfish may be taken from any waters of the state except from such growing areas as have been approved by the State Board of Health. Shellfish are protected from pollution and contamination through the State Board of Health's authority to designate shell-fish growing areas.
Sanitation requirements state that shellfish must not reach contamination in water storage, or in storage on boats and in culling houses.

No person who has, or is a carrier of, a communicable disease, or who is living in a household in quarantine for a communicable disease, or who has open lesions on the hands, arms, or face may be employed or retained in any capacity within the shellfish growing area, culling house, or in a shellfish shucking or packing plant. Persons having had typhoid or paratyphoid must submit to examination by the Oregon State Board of Health.

To receive and keep the certificate of the Oregon State Board of Health, shucking and packing plants must meet certain sanitary requirements. Provisions set up as to construction of the plant include such factors as: lighting, ventilation, storage facilities, plumbing, and flooring. Water, utensils, and shipping containers are also under regulation. The use of shipping containers other than metal or glass for shucked stock are not permitted except non-returnable, non-reusable containers of waxed paper. These waxed-paper containers must be stored and handled so that the inside surface does not become contaminated. In general, the entire operation of the shucking or packing plant must abide by the regulations of the State Board of Health if the plant wishes to receive or keep the certificate issued by the board.
Shucked shellfish must be cooled to a temperature of 50° Fahrenheit or less within two hours after they are shucked. No ice or other foreign substances are allowed in contact with shellfish after processing has been completed.

Shucked oysters and clams must be stored and shipped under such temperature conditions as will prevent storage spoilage. Only the outside containers are provided with ice. The containers for shipping must be marked on the side with the packer's certificate number impressed or embossed and proceeded by the state abbreviation. The following information must be tagged on shipments if the plants are operating under the provisions set forth by the Oregon State Board of Health: (a) name and address of consignee, (b) name and address of shipper, (c) name of state of origin, and (d) certificate number of shipper.

Shell stock must be packed in clean sacks, barrels, or boxes, and handled and shipped under such temperature conditions as will keep them alive. Tags on shell stock must give the following information: (a) name and address of consignee, (b) name and address of shipper, (c) certificate number, (d) state of origin, (e) date upon which shellfish were removed from beds, (f) date of shipment or of re-shipment, and (g) name of local waters from which shellfish were taken.

The state of Oregon has set up a law in regard to the
selling of shucked oysters. "It shall be unlawful to offer
or expose for sale or sell any shelled oysters, uncooked,
in any other manner than by numerical count, weight, or
standard liquid measure, and it shall be unlawful to include
as a part of the weight or measure any water or liquid in
any greater amount than sixteen (16) per cent of the
weight or measure of the oysters offered or exposed for
sale or sold. Any oysters containing more than 16 per cent
water by weight or measure are "floated" and considered
adulterated. 14

Oregon has, through her own mandatory regulations and
through the permissive regulations of the Oregon State Board
of Health, extended definite protection to the consumer
buyer, particularly in regard to sanitation. What is not
covered by law through Federal and state regulations is
sometimes cared for by the specific industries which have
done much to standardize the fish industry and thus
directly aid the consumer.
CHAPTER XII

FLOUR AND BREAD

Flour

Federal standards have been promulgated for wheat flour and other grain products. Because much sacked flour sold in Oregon has entered interstate trade, these mandatory standards concern Oregon consumers. Official standards have been set up for wheat flour, enriched flour, whole-wheat flour, cracked wheat, durham flour, farina, and self-rising flour.

Since the contents of white flour and enriched flour are of primary interest to consumers, the definitions of these flours will be given in this chapter.

Wheat flour, or white flour, is defined as the food prepared by grinding and bolting cleaned wheat other than durham wheat. The flour is freed from bran and the germ to such an extent that the ash content is 1/20 of the percent of protein. The moisture content is not more than 15 percent. When any optional bleaching ingredient is used, the label on white flour must bear the word, "Bleached."26

Enriched flour conforms to the definition and standard of identity of white flour except that it also contains in each pound: (1) not less than 1.66 milligrams and not more than 2.5 milligrams of vitamin B1(thiamin); (2) not less than 1.2 milligrams and not more than 1.8 milligrams of
riboflavin; (3) not less than 6 milligrams and not more than 24 milligrams of nicotinic acid; (4) not less than 6 milligrams and not more than 24 milligrams of iron. Vitamin D may also be added so that each pound of enriched flour contains not less than 250 U.S.P. units or more than 1000 U.S.P. units. Calcium may be added so that each pound of enriched flour contains not less than 500 milligrams or more than 2000 milligrams. Enriched flour may not contain more than 5 per cent by weight of wheat germ or partially defatted wheat germ.26

Oregon has not set up standards of identity for flour, but the state has, through the power of the Oregon Food Act, the authority to adopt the Federal standards or to promulgate standards of its own.

The state of Oregon has set up weight standards for barrels of flour and subdivisions of barrels sold in the sack. The standard weight of a barrel of flour must be 196 pounds net; of 1/2 barrel, 98 pounds net; of 1/4 barrel, 49 pounds net; of 1/8 barrel, 24½ pounds net.14

The state of Oregon has also set up a weight standard for a bale of flour, 98 pounds net, or ten sacks of 9.8 pounds each, net weight.

As a protection to consumers and competitors, Oregon has made it unlawful to expose for sale or sell in the sack, flour, either white, whole wheat, graham, or rye, in other than the standard sack sizes and weights as provided by the
The state of Oregon has formulated regulations applying to bakeries and bakery products, which insure the consumer buyer of bread produced in sanitary conditions and of standard weight and quality.

Provisions have been established which regulate the sanitary condition of bakeries, and the vehicles which deliver bakery products. "Every building, room, or other place occupied or used in the manufacturing of bakery products shall be properly lighted, drained, plumbed, ventilated, and conducted with strict regard to the effect of such condition upon the wholesomeness of the products produced therein."14

All vehicles used for the transportation or distribution of bakery products must be enclosed to protect the products from dust, flies, and other contamination. The insides of the vehicles must be so constructed that they can be easily cleaned. The shelves should be removable. All vehicles must conspicuously display the bakery's license number and the name of the bakery or distributor together with the principal address. If the brand or trademark is displayed, the name and address of the baker or distributor is not necessary.14

The state of Oregon requires every bakery to be pro-
vided with adequate means for proper protection of all foods or food products from contamination and for washing and cleaning of all utensils and equipment. Suitable containers in which bakery products are kept must be tightly covered.

Every person engaged in handling bakery products must maintain a reasonable standard of personal cleanliness and must wear clean clothing and hat or head band. No person may work in any bakery who is affected in any manner with any contagious, infectious, or communicable disease.

The laws of Oregon state that no person may operate any bakery within the state without a bakery license. To receive such a license, the person must apply to the State Department of Agriculture. Upon receipt of the application and the required fees, the department makes a detailed inspection of the premises and equipment. If the application is approved by the department, the applicant receives a licensed certificate which he must post conspicuously in his bakery. Oregon consumers are therefore informed through this certificate that the bakery has met the requirements set up by the State Department of Agriculture. Bakeries must renew their licenses yearly.

Periodical inspection of bakeries is carried on by the State Department of Agriculture to determine whether the bakeries are operating in accordance with the department requirements.

Oregon has set up mandatory standards pertaining to
the weight of loaves of bread. Bread, manufactured or made for the purpose of sale, must be one of the following standards of weights: one pound, one and one-half pounds, or multiples of one pound. Variations at the rate of one ounce per pound in excess or in deficiency of these specified weights are permitted in individual loaves, but the average weight of not less than ten loaves of any kind of bread within twelve hours after baking must not be less than the net weight prescribed. 14

The state has also set up standards in regard to the size of baking pans and forms used in the manufacture of bread. The dimensions to be used are: 14

1 pound loaf, 9 inches by 4% inches
1½ pound loaf, 12% inches by 4½ inches
1¾ pound twin loaf, 7 inches by 3 inches
1¾ pound Pullman loaf, 13 inches by 4 inches by 4 inches
2 pound Pullman loaf, 16 inches by 4 inches by 4 inches
3 pound Pullman loaf, 20 inches by 4½ inches by 4½ inches

To protect the consumer from unknowingly buying stale bakery products at a grocery or market, the state makes it unlawful for any person to sell or offer for sale any stale bakery product at any place other than the establishment where the product was made.

Federal standards of identity have not yet appeared for bread and bread products. When these do appear, Oregon may pattern her standards after them.

In buying bread, Oregon consumers are particularly aided
through those provisions which regulate sanitary conditions and the weights and measures to be used.
CHAPTER XIII
MISCELLANEOUS STAPLES

The Federal government and the state of Oregon have specified certain provisions which regulate the manufacture and sale of such miscellaneous staple items as tea, coffee, vinegar, spices and condiments, jellies and fruit butters, and extracts and flavorings. Many of these items sold in Oregon have entered interstate commerce and are thus under the jurisdiction of the Federal Food and Drug Administration and the Federal Trade Commission as well as the Oregon laws. Items imported into this country, such as tea, coffee, and spices, automatically fall under the jurisdiction of the Federal government. General provisions relating to the adulteration, misbranding, and advertising of miscellaneous staples are found in the Federal Food, Drug, and Cosmetic Act and in the Wheeler-Lee Act.

Tea

The consumer is protected and aided in the buying of tea mainly through the Federal government's Tea Act. An examination of all tea offered for entry into the United States is provided for in this act. Only that tea which meets the standards of quality, purity, and fitness for consumption as specified by the government may be admitted.17

The United States maintains tea examiners in five big ports. Their duty is to see that all teas, from the cheapest
to the most costly, are sound, pure, and clean, and do not drop below the minimum standard of quality.

Tea must be designated in three different classifications: green or unfermented, oolong or semi-fermented, and black or fully-fermented. In order to be sold, tea must contain its classification on the label in addition to the information the Federal and state governments require on all foodstuffs.

Coffee

Since 1906, the Federal government has forbidden the sale of coffee substitutes as coffee. The government has also stated it to be an unlawful practice to make coffee appear better than it is for the purpose of sale.

Although the Federal government has established no minimum quality standards for coffee, it does, as part of its routine activities, keep an eye on all coffee imports.20

Oregon requires that if a chicory, cereal, fig, or other ingredient is mixed with coffee, it must be labeled a "coffee compound" with the name of each ingredient contained. The name and address of the manufacturers or distributors must appear below this information.9

Restaurants, hotels, and public eating houses in the state where coffee compounds are used must post a notice in a conspicuous place stating, "Coffee compounds used here."
Vinegar

Oregon has set up several provisions applying to vinegar. No persons in Oregon are allowed to manufacture, sell, or offer for sale any vinegar which does not comply with the state regulations.

No vinegar may be sold as apple, orchard, or cider vinegar which is not the legitimate product of pure apple juice. Upon test, such vinegar must contain not less than 1.5 per cent by weight of cider vinegar solids and .25 per cent of ash, and not less than 4 per cent absolute acetic acid.4

"Distilled vinegar" is that which has been made wholly or in part from grain, syrup, or refuse from sugar refineries by process of mashing and distilling. Such vinegar must be free from coloring matter added during or after distillation. Distilled vinegar must contain not less than 1.25 per cent by weight of solids, not less than .025 per cent ash, and not less than 4 per cent by weight of absolute acetic acid.14

No person may manufacture for sale or sell any vinegar containing ingredients injurious to health.

All bottles, and other vessels containing vinegar must be labeled with the kind of vinegar, and the name and address of the manufacturer.
Spices and Condiments

To receive entry into this country, all imported spices must meet the standards required by the Federal government.

According to the laws of Oregon, spices and condiments include all substances known and recognized in commerce as spices and used as condiments. Any person selling or delivering any spice or condiment which is adulterated must label the outside and face of each package with the following information: (1) name and location of firm manufacturing or distributing such spices and condiments, and (2) the words "mixture" or "adulterated." 14

Jellies and Fruit Butters

Oregon requires that no person may manufacture for sale, or sell as fruit jelly or fruit butter any imitation jelly or fruit butter made of glucose, dextrin, starch, or other substances colored in imitation of fruit jelly or butter. Every can, jar, and pail of such jelly or butter sold in Oregon must be plainly labeled "Imitation Fruit Jelly" or "Imitation Fruit Butter." 14

All manufacturers and bakers of cakes, pies, or other food who use in such products any imitation fruit jellies or butters must post a conspicuous notice in their places of business stating that imitation jellies, butters, and fruit juices are used. 14

Restaurants or public eating houses which serve cakes, pies, or other food in which imitation jellies, butters, or
fruit juices are used must also place a conspicuous notice stating that such imitation jellies, butters, and fruit juices are used.

The Federal government has promulgated standards of identity for jellies, fruit butters, jams, and preserves. In interstate commerce, these products must comply with the standards of quality set up by the Federal Security Administration.

**Extracts and Flavorings**

Oregon specifies that the term "extract" implies an alcoholic product. Flavoring products prepared without alcohol may not be labeled "extract."

All extract or flavorings sold, or offered for sale, if not made from the plant or product which the name bears, must be labeled "Artificial" or "Imitation" on the cartons in which the extracts or flavorings are kept for sale and also on the bottle in the same size lettering as the other letters on the container.14

No Federal standards have as yet been set up for extracts and flavorings.
CONCLUSION

The presentation of this thesis has been made with the hope that all or part of the material will in some form reach present and future consumer buyers of food in Oregon.

The writer feels that consumers hearing or reading the compiled information will receive an understanding and appreciation of the Federal regulations and the Oregon laws which pertain to food, its production, distribution, and sale.

A more educated consumer public, it is hoped, will result from such an understanding. Probable benefits which the state of Oregon and its people would derive from such knowledge are; (1) higher standards and more efficient methods in the wholesale and retail trade because of increased intelligent buying on the part of the consumers; (2) greater co-operation between producers, manufacturers, distributors, and consumers; (3) greater advances in legal aid and protection for consumer buyers of food.
BIBLIOGRAPHY

1. Agricultural Marketing Service. The A B C of canned fruits and vegetables, 1941. (U.S. Dept. of Agriculture.)

2. Agricultural Marketing Service. The consumer and the standardization of farm products, 1940. (U.S. Dept. of Agriculture.)

3. DeLoach, B.B., and West, W.A. Some economics implications of milk control in Oregon, 1940. (Agricultural Experiment Station, Oregon State College. Station Bulletin, No. 375.)


5. Fretz, R.E. The Federal Trade Commission and consumer protection. (mimeograph copy of address given in Oxford, Ohio, June 14, 1940.)


