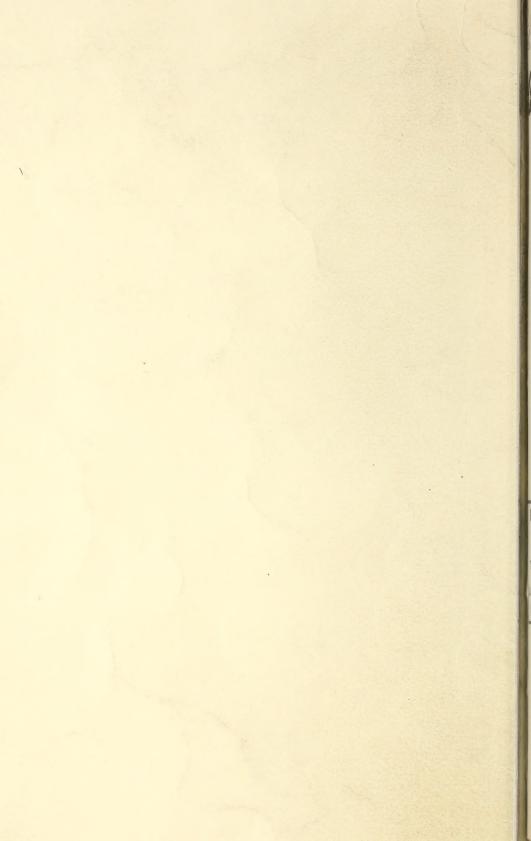
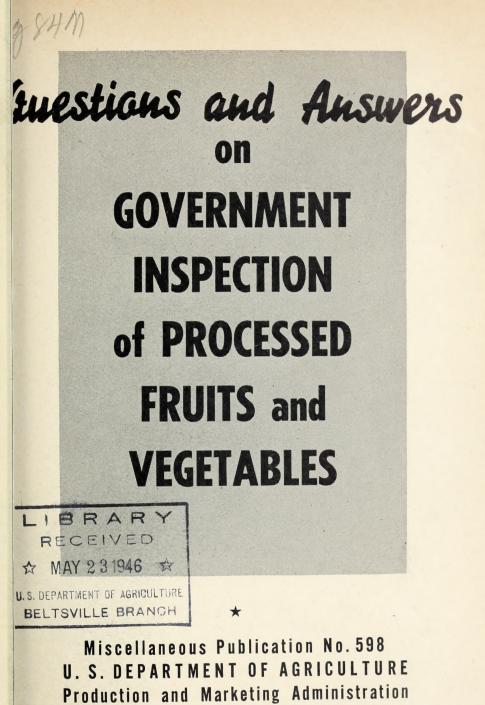
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



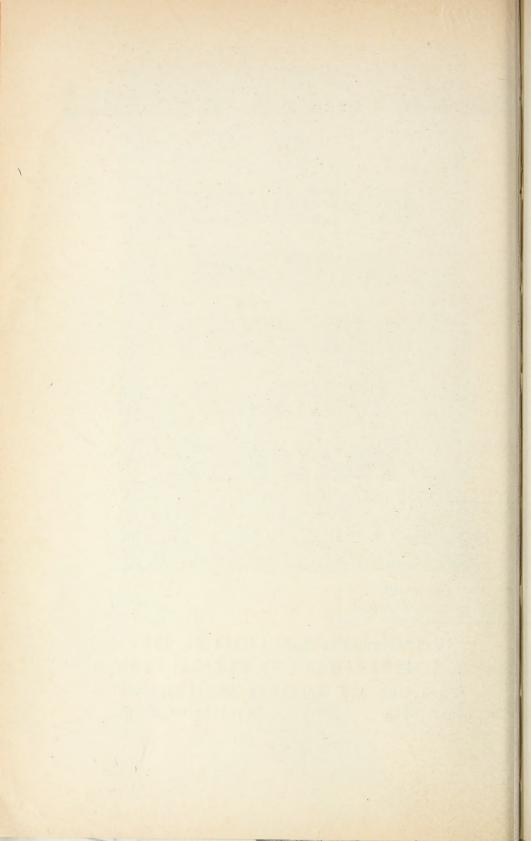


April 1946

*

Washington, D. C.

*

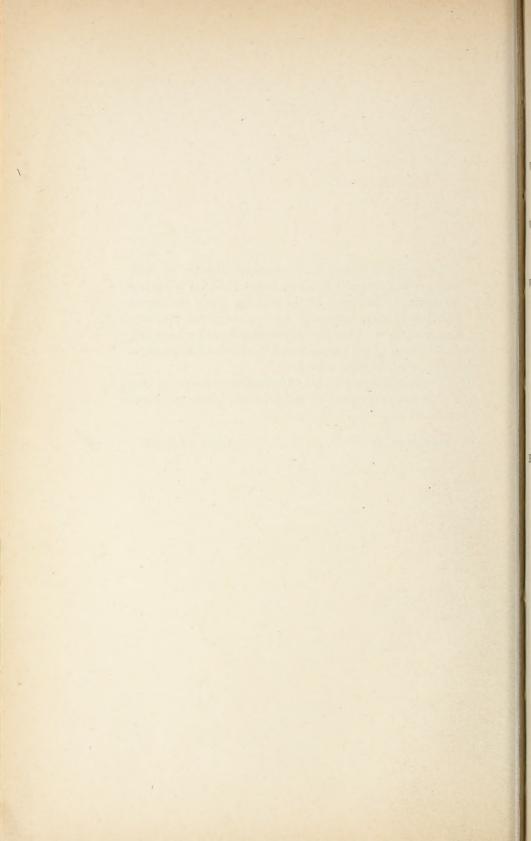


Those whose business is concerned directly or indirectly with processed fruits and vegetables are becoming increasingly conscious of the benefits which the use of the Government inspection service for these products brings to them. Consumers, too, are becoming more and more aware of the guarantee of quality which the Government grade label affords.

The many inquiries for information concerning this service have prompted the publication of these questions and answers.

Washington, D. C.

Issued April 1946.



CONTENTS

	Page
WHY GOVERNMENT INSPECTION?	1
What are processed products?	1
What are processed products? What is an official determination and certification of quality? What marketing purposes are served by inspection certificates?	ĩ
What marketing purposes are served by inspection certificates?	2
What legal value do inspection certificates have?	$\frac{2}{2}$
WHAT IS GOVERNMENT INSPECTION?	2 3 3 3 3
Does the law require all processed products to be inspected?	3
Who may ask for inspections?	3
Are official inspectors Government employees?	3
Who may ask for inspections? Are official inspectors Government employees? What qualifications must an inspector have?	3
WHAT ARE UNITED STATES STANDARDS?	$3 \\ 3 \\ 4 \\ 4$
Who issues the United States standards? For what processed products are United States standards in effect?	3
For what processed products are United States standards in effect?	4
How are they developed?	
How can the United States standards help the farmer?	4
How can the United States standards help the processor?	4
How can the United States standards help the distributor?	5
How can the United States standards assist the institutional buyer?	5
How often are United States standards revised?	5
How are United States standards revised?	4 4 5 5 5 6 6
What does the scoring system indicate?	6
On what is the scoring system based? Why are there only two grades for some products? What is a trade standard? Will Government standardization tend to discourage individuality in	6
Why are there only two grades for some products?	6
What is a trade standard?	6
Will Government standardization tend to discourage individuality in	0
the production of processed foods?	7
HOW IS INSPECTION ACCOMPLISHED?	777
How are samples submitted or selected for inspection?	7
How many samples are drawn for inspection?	8
Where are inspection laboratories located?	9
Do inspections cover factors other than quality?	10
Do inspections cover factors other than quality? If a packer or applicant is not satisfied with the grade, what can he	
do?	10
Is a fee charged for inspection?	10
How much is the fee for inspection? On what forms are inspections reported?	11
On what forms are inspections reported?	12
Who receives the inspection certificate?	12
Are other forms issued?	12
Of what benefit is inspection to the packer or processor?	13
How will inspection serve the banker or financier?	13
Of what benefit is the inspection service to the food broker, wholesale	
grocer, or chain-store buyer?	13
How are other interests served?	13
How are other interests served? Does the Department or its inspectors act as arbitrators if disputes	10
arisa?	13
arise?	13
mat does the Department recommend to racintate salest	10

CONTENTS

	Page
HOW IS LABELING RELATED TO UNITED STATES STANDARDS	
AND INSPECTIONS?	15
What quality terms does the Department advocate?	15
How do the A, B, C grade names compare with commercial quality	
terms?	15
How may Grade A foods be utilized to best advantage?	15
For what purpose may Grade B foods be used?	16
What class of food is found in Grade C and what is its recommended	
use?	16
What happens to food that is below Grade C?	16
Is there nutritional difference in the various grades?	16
What is comprehensive labeling? Is such labeling designed to replace brands?	17
Is such labeling designed to replace brands?	17
Who may label in this manner? What guarantee is there that Grade A products are Grade A?	17
What guarantee is there that Grade A products are Grade A?	17
Are all processed foods required to be labeled as to quality?	17
Is labeling foods for quality mandatory in other countries?	17
Has there been any Federal legislation requiring labeling of foods?	17
WHAT IS CONTINUOUS INSPECTION?	18
Why was this service started?	19
When was the service started?	19
Why was the service first considered an "experiment"?	19
Why was the service started in a few plants? Is this inspection required in all processing plants?	20
Is this inspection required in all processing plants?	20
What are some of the plant requirements in order to qualify for con-	
tinuous inspection? Who pays the cost of continuous inspection?	20
Who pays the cost of continuous inspection?	21
Are continuously inspected foods high priced?	21
How may these products be identified by the consumer?	21
Are all foods packed under continuous inspection required to be labeled	
with a "U.S." grade?	24
Are frozen fruits and vegetables and dried fruits processed under con-	07
tinuous inspection?	25
What can consumers contribute to further the continuous factory in-	
spection program and the labeling of processed fruits and vegetables	00
in terms of U. S. grades?	26
LIST OF REFERENCES	26

QUESTIONS AND ANSWERS

GOVERNMENT INSPECTION OF PROCESSED FRUITS AND VEGETABLES

By F. L. SOUTHERLAND, chief, and ELINORE T. LINDERER, marketing specialist, Standardization and Inspection Division, Fruit and Vegetable Branch, Production and Marketing Administration

WHY GOVERNMENT INSPECTION?

The warehousing, financing, and marketing of processed fruits and vegetables involve transactions amounting to millions of dollars every year. Huge loans are frequently supported by official certificates indicating the quality of the foods covered by warehouse receipts. Millions of dozens of containers and packages of processed foods are sold annually on the basis of quality—quality either stated or implied. More and more fruit and vegetable containers are indicating the quality of these foods in order to assist the consumer in making a selection.

A need for officially determining and certifying the quality and condition of these foods was recognized. Out of it grew the standardization and inspection service for processed fruits and vegetables and related products as now conducted by the Production and Marketing Administration of the United States Department of Agriculture.

What are processed products?

Processed products are those commodities that have been subjected to special treatment in order to preserve them under the proper conditions. Processed fruits and vegetables include products that are canned, frozen, dried, or dehydrated. Related items such as peanut butter, fruit jams or preserves, pickles, and honey are also included under the term "processed products." Canned fruits and vegetables include commodities that are packed in glass jars or bottles as well as those packed in metal containers. Frozen products include foods preserved by various freezing methods, commercially known as coldpacked and quick frozen. Dried products are generally fruits from which moisture has been removed by evaporation, either by sun-drying or by artificial heat. Dehydrated products, as commercially recognized, generally contain much less moisture than dried products; this is accomplished by more controlled conditions of temperature, humidity, and air flow.

What is an official determination and certification of quality?

An official determination of quality includes the technical results, mechanical results, and experienced judgment of an official inspector, who is employed by the Federal Government. The results of official inspections are entered upon a certificate form of the United States Department of Agriculture and signed by the inspector. 2

What marketing purposes are served by inspection certificates?

They serve as documentary evidence of quality and condition to accompany warehouse receipts in financing operations; as proof of quality and condition to accompany sales offers, invoices, and shipping documents; to substantiate quality and condition of deliveries; and as a basis for labeling retail containers.

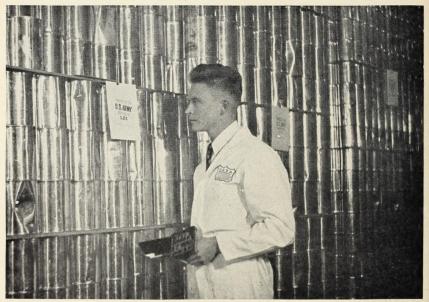
What legal value do inspection certificates have?

The inspection certificates issued by the official inspectors of the Department are admissible in all courts of the United States as prima facie evidence of the truth of the statements they contain.

WHAT IS GOVERNMENT INSPECTION?

The Congress of the United States authorizes the Secretary of Agriculture, in the annual appropriation act for the United States Department of Agriculture, to investigate and certify to shippers and other interested persons or firms, the class, quality, or condition of certain farm products, including fruits and vegetables.

Official inspectors perform inspections in accordance with rules and regulations of the Secretary governing this service. They inspect individual samples or representative samples drawn at random from lots of processed products upon the request of a financially interested person or firm. These are official inspections and may include inspections for quality or grade, condition of product, condition of containers, or other related aspects of food preservation, storage, and marketing, and special technical analyses.



PMA 14554

FIGURE 1.—A lot of canned goods, previously inspected and stored in a warehouse, is marked "Property of the U. S. Army" by an official inspector of the Department of Agriculture. The goods, thus identified, will be held in safekeeping until shipping orders are received.

Does the law require all processed products to be inspected?

No, the use of this service is optional—not compulsory.

Who may ask for inspections?

Any person who is financially interested in a lot of processed fruits and vegetables. Canners or other food processors, bankers, brokers, wholesale distributors, retail grocers, warehousing concerns, railroad agencies, and Federal, State, and city purchasing agencies are representative of the applicants for the service. During periods of national emergency requests for inspections from Federal agencies have priority.

Are official inspectors Government employees?

Yes, they are employed under rules of the United States Civil Service Commission which govern the qualifications, salary rates, and other personnel considerations.

What qualifications must an inspector have?

Qualification requirements vary according to the duties and responsibilities the inspector is to assume. A trainee inspector must have had at least 4 years of responsible employment in commercial organizations requiring an intimate knowledge of the processing, standardization, and inspection of processed fruits and vegetables. In lieu of this type of experience, education may be substituted, year for year up to 4 years, in certain agricultural and food subjects completed at a school of recognized collegiate grade. A person with more than 4 years of experience in the processed food field may be qualified for a more responsible position, depending on the nature of such experience. Valuable training and experience are gained while working, and as initiative and ability are shown inspectors can assume assignments of greater responsibility.

WHAT ARE UNITED STATES STANDARDS?

Inspections for quality are made in accordance with the United States standards for grades of the individual product. Specifications of Federal, State, or city governments may be used as a basis for inspection if requested. The United States standards are incorporated in the Federal specifications for processed foods and become the grade specifications for all food bought by Federal agencies.

The United States standards may be considered as a yardstick with which the quality of a product is measured. The standards are so established that each grade within the standard represents clearly distinguishable quality differences. The grade names in the standards for each product may vary, but generally they are:

Grade A or Fancy Grade B or Choice (for fruits) or Extra Standard (for vegetables) Grade C or Standard

Quality names for foods which are lower than Grade C or Standard may vary, because of mandatory labeling laws and the terminologies commonly used in the processing industry.

Who issues the United States standards?

United States standards for grades of processed fruits and vegetables are issued by the United States Department of Agriculture.

683657°-46--2

3

MISC. PUBLICATION 598, U. S. DEPT. OF AGRICULTURE

For what processed products are United States standards in effect?

Approximately 85 United States standards for processed fruits and vegetables are in effect—each for a different commodity. Canned apples, dried apples, canned peas, frozen peas, canned green or wax beans, raisins, peanut butter, canned tomatoes, tomato catsup, dried prunes, and canned pineapple are some of the products for which grades have been established. A complete list of the products for which United States standards have been issued, as well as copies of any standard, may be obtained without charge upon request of the United States Department of Agriculture, Washington 25, D. C.

How are they developed?

4

The United States standards are developed by the United States Department of Agriculture in cooperation with growers, processors, financing agencies, distributors, and consumers. Problems peculiar to each phase of production and marketing are carefully considered and the advice of each group is sought.

How can the United States standards help the farmer?

Growers are encouraged to produce better quality products so they can obtain higher prices. The quality-conscious packer or processor demands raw products of high quality and is willing to pay more for them. Growers often find that they receive a better return for a lesser yield of high-quality fresh products for processing than for a big yield of low-quality products.



FIGURE 2.—Growers' trucks line up at a canning factory with loads of grapefruit.

How can the United States standards help the processor?

Official standards for grades can serve the processor as a definite basis for contracting with buyers, and as a guide to improve packing operations. Official inspection certificates, based on United States standards, are of great assistance in financing his operations. The standards also assist the processor in meeting the ever-increasing demand for foods packed in accordance with definite grades.



USDA N-6847

5

FIGURE 3.—A Department of Agriculture inspector explains the grading of canned spinach in accordance with U. S. standards to a buyer interested in processed foods.

How can the United States standards help the distributor?

Distributors, such as wholesale and chain grocers, can select for their trade precisely the grade, color, size, and other factors desired, in the contract of purchase. By insisting upon having their purchases meet a definite Government grade, or a certain average score within the grade, they can maintain uniformity of quality under their various brands. Helpful and comprehensive information, including grade and other descriptive information in the standards, may be carried on their labels for the benefit of the consumer.

How can the United States standards assist the institutional buyer?

Many municipal, county, and State purchasing agencies use the United States standards, or specifications based upon these standards, in making their purchases. The quality of foods may be selected to fit the use for which intended, such as for diabetic patients in hospitals. Such purchasing agencies find the United States standards of assistance in drafting specifications to meet their peculiar needs.

How often are United States standards revised?

They are revised as often as necessary to meet new developments, such as in processing, in new seed strains, and in varieties of raw materials, in all of which respects products are continually being improved. Marketing practices and trends in consumer food demand change, and amendments to grades are made in order to take into account such changes. 6

How are United States standards revised?

Suggestions are invited from anyone who is interested in using the standards. Canners, buyers, brokers, wholesalers, industry and consumer organizations, and inspectors contribute valuable data. Committees made up of representatives of the food processing industry meet with Department officials to discuss these standards and to submit proposals for such revisions as they feel are needed. Letters are welcomed from any individual or organization that desires to comment on the practicability of the standards or to suggest amendments thereto. All are reviewed with great care and weighed in connection with related statistics and data.

What does the scoring system indicate?

All United States standards for frozen and canned fruits and vegetables include a scoring system. In dried fruits, allowances in terms of percentages are used instead of a scoring system. The scoring system for the theoretically perfect product would be 100 points. Each grade is allotted a range of score points, depending upon the product. For example:

	Canned tomatoes	 Canned red sour pitted cherries 	Frozen lima beans
Grade A	90 to 100 points	85 to 100 points	90 to 100 points.
Grade B	75 through 89 points	(No Grade B)	80 through 89 points.
Grade C	60 through 74 points	70 through 84 points	70 through 79 points.

On what is the scoring system based?

Each product is inspected and scored upon specific factors which reflect the quality characteristics of the finished product. In general, the quality factors for processed vegetables are color, size, excellence of workmanship, and succulency; for fruits the important factors are color, size and shape, excellence of workmanship, and ripeness. Flavor, of course, is considered in grading all processed commodities.

Why are there only two grades for some products?

Some products, such as canned spinach or canned grapefruit juice, have been marketed commercially in two grades only. If a product has been sold commercially for a considerable length of time as Fancy and Standard, it would not be desirable to include an additional grade because there would be no need for it, and to establish another grade would defeat the purpose of simplification and standardization. The Department has provided only the grades necessary to market a given commodity properly. If a product in the United States standards has only two grades—Grade A or Fancy and Grade C or Standard—it does not mean that a grade has been omitted. Most likely, the product is one for which only two grades for general consumer acceptance are necessary.

What is a trade standard?

In the infancy of the food-processing industry, there came into use "trade standards" or "commercial standards," few of which were reduced to writing. During the years when the industry was small and there were comparatively few canners, and products were not distributed in the enormous quantities they are today, these standards no doubt served a good purpose. But definite and well-written standards for grades become an imperative necessity when an industry grows to the huge proportions of today's food-processing industry. Trading must be based on well-defined standards which provide a "common language" in executing contracts and thus eliminate costly disputes between buyer and seller.

Will Government standardization tend to discourage individuality in the production of processed foods?

If a packer elects to pack to such permissive standards, he must exercise his individuality in accomplishing the end result. The scoring procedure provides him with a definite incentive to pack his products as to merit the highest possible score, and to compete for the enviable position of a high-quality packer.

HOW IS INSPECTION ACCOMPLISHED?

An official inspection will be made of samples of processed foods submitted to an inspection laboratory by the applicant himself, or of samples drawn by the inspector from a specific lot at the request of the applicant. Inspections may take place at canning plants, in a processor's laboratory, in warehouses, in freight cars, or at any of the many laboratories of the Department located in processing and marketing areas. The sample may be one or more in number and samples may be combined for inspection, depending upon the commodity and its characteristics or the analyses required for it.

How are samples submitted or selected for inspection?

1. Samples that are sent to an inspection laboratory or selected by the applicant for inspection are termed "unofficially drawn samples." They are submitted to the nearest inspection laboratory and the expense



USDA N-3694

FIGURE 4.—Sections of grapefruit are carefully examined and scored by a Department of Agriculture inspector to determine the final quality. The inspector here shown is working in a packer's laboratory where the inspection takes place after the grapefruit is canned.

7

of forwarding them should be prepaid. For example, packers may send to the processed products laboratories samples of their daily packs for daily check on quality; chain stores or grocery buyers may submit samples drawn from lots they expect to buy; or a consumer group may submit samples of a product which it is studying. Certificates on samples that are so submitted cover the inspection of the individual samples only.

2. Samples that are selected by a Federal inspector are termed "officially drawn samples." The samples thus selected are chosen and drawn at random in such manner that they are representative of the lot from which taken. That means that the official inspector must select samples of sufficient number to be representative of the size of the lot; and the samples must be chosen from the top, sides, bottom, and center of the warehoused lots to obtain samples so that the inspection will give a true picture of the lot inspected. Inspection certificates on samples drawn in this manner will cover the entire lot rather than the individual samples.

How many samples are drawn for inspection?

The number varies according to the type of commodity—canned, frozen, or dried—and to the size of the containers. The number of samples from 1,000 cases (or 24,000 cans) of No. 2 size container, a common size purchased by housewives, would be 12 cans. Each



FIGURE 5.—Federal inspectors make technical analyses of many kinds. Here an inspector fits a prepared slide under a microscope to complete an examination of tomato juice.

can is scrutinized and inspected in detail. For dried fruits, samples are chosen from representative boxes and the full sample is examined. For frozen foods in the smaller packages the samples are similar in number to those chosen for the canned products. If in bulk packages or barrels, samples are taken from these containers and examined.

Where are inspection laboratories located?

They are located for the most part in sections of the country where fruits and vegetables are produced and processed, or in the larger marketing centers. The laboratories at Winter Haven, Fla., and Weslaco, Tex., are examples of inspection stations situated in the heart of citrus-producing and processing areas. The laboratory at Fresno, Calif., is in the San Joaquin Valley where large quantities of dried fruits are grown and processed. Inspection stations in the Northwest handle products such as apples, cherries, and beans, grown and processed in that territory. Many laboratories are scattered throughout the Midwest—in Minnesota, Iowa, Wisconsin, Michigan, Illinois, and Ohio to care for the vegetable crops that are processed there. Philadelphia, Chicago, and New York are manufacturing centers where large quantities of pickles, peanut butter, jams, spices, and other processed foods are inspected. Other processed food inspection laboratories are established in the approximately 50 offices



USDA N-6855

FIGURE 6.—A Department of Agriculture inspector working on a sample of a spice to determine the ether-extract content which is a measure of spicy aroma or pungency. This analysis is made on spices, cocoa products, prepared mustard, and other products.

9



USDA N-6851

FIGURE 7.—An inspector carefully transfers a sample of sugar, which she has weighed on an analytical balance, to a flask in preparation for a polarization test that will determine the purity of the sugar.

scattered throughout the country. A few of these operate only seasonally.

Do inspections cover factors other than quality?

The inspector determines any facts that are necessary to give an inquirer an accurate description of quality and condition of samples. Every factor having a bearing on the market value of the lot is considered, including statements about damaged labels or shipping containers, leaking packages, or rusted or dented containers. Special analyses, in addition to the usual ones to determine the requirements of quality, are made upon request.

If a packer or applicant is not satisfied with the grade, what can he do?

He has recourse to an appeal inspection. If the person requesting inspection is not satisfied with the inspection and there is evidence that an error may have occurred, he may appeal the inspection and have his product examined again by two other inspectors, whose findings are final.

Is a fee charged for inspection?

Yes. Congress requires that a fee be charged to reimburse the Government as nearly as possible for the actual cost. The inspector does not collect the charges that are assessed. The applicant pays the amount assessed to the Treasurer of the United States.

How much is the fee for inspection?

If samples are unofficially submitted, the charge for inspection is based upon the number and size of them. If samples of canned products are officially drawn, the charge for inspection is based on the number of cases in the entire lot from which the samples were taken. Any additional expense incurred by the inspector in drawing the

Form AMA-146 (Superseding F. P. L-63 Rev.) UNITED STATES DEPAR	RTMENT OF AGRICULTURE
ORIGINAL CERTIFICATE OF QU	JALITY AND CONDITION FOR NO. 72191 TS AND VEGETABLES
This certificate is admissible in all courts of the of the truth of the statements therein conta failure to comply with any of the regulator Department of Agriculture or the Federal F	United States as prima facie evidence uned. This certificate does not excuse ry laws enforced by the United States soci and Drug Administration.
	Date Angust 29, 1945 Hour
To Jones Packing Company	Address Littletown, California
Shipper or Seller	Address
Receiver or Buyer	Address
I certify that in conpliance with the reculations of the Secretary of mated herein, pursuant o the act making appropriations for the United samples believed by me to be representative of the lot described below, a were as stated below:	[Agriculture governing the inspection and certification of the product desig- States Department of Agriculture, I personally drew at random and inspected nd that the quality and condition as shown by the samples on the above date
Lot or Car No. Lot No. E-Z-23	Where Jones Packing Company, Warehouse Located No. 3, Littletown, California
CAFNED TELLOW Product inspected CLINGSTONE PEACHES	Number, size, and kind of containers 22 - No. 2-1/2 cans AC2OX
Code or other identification marks on containers	
	10 cans 18
Principal title of label (if any)	
Net weight - $29-1/2$ to $31-$ Vacuum reading - 8 to 16 inche Drained weight - $17-1/4$ to $20-$ Sirup density - 19.4° to 23.2 Type - Yellow Clinge Style - Halves Count - 7 to 11 halve	s 3/4 ounces (Average 19-1/4 ounces) • Brix (Average 21.4° Brix) Eeavy Sirup tone
Grade: U. S. GRADE B or U. S. CHOICE Score Range - 83 to 88 points	
Remarks: packing operations Angust 19, 2,640 cases, 24/No. 2-1/2 cans northeast corner. Packed under Continu- Agriculture. Fee Contract basis Expenses Total	in good condition. Samples drawn daring 1945 and from warehouse Lot Mo. E-Z-23 of . located in plant warehouse, second floor, ons Inspection of the U. S. Department of <u>Édward</u> <u>Martin</u> Edward J. Martin 1238 E. Harding Way Address Stockton, California
PLEASE REFER TO THIS CERT	IFICATE BY NUMBER AND MARKET

PMA 14555

FIGURE 8.—Official certificates are issued on all processed foods inspected by the Department of Agriculture. This is a sample certificate issued for a lot of canned peaches packed under continuous inspection.

samples, such as transportation charges, telephone calls, or other expenses incident to the inspection, is also charged to the applicant. Fees for dried, dehydrated, and frozen products, when samples are officially drawn, are based upon the number of pounds instead of the number of cases. An inspection charge for a carload of canned goods containing 1,000 cases is approximately \$5. The fee is higher on products for which microscopical and chemical determinations are required.

On what forms are inspections reported?

Inspection certificates, bearing the seal of the United States Department of Agriculture and signed by the official inspector, are issued after each inspection. The name of the applicant, shipper or seller, receiver or buyer, if known, appear on the certificate together with the total charges for the inspection and expenses.

Who receives the inspection certificate?

Ordinarily the applicant receives the original inspection certificate and copies as provided in the rules and regulations governing the service. If additional copies are desired, they may be furnished at a nominal charge to persons with a financial interest in the product.

Are other forms issued?

Under some circumstances. For example, a score sheet including the details of the inspection may be issued to the applicant if requested. Such score sheets, in addition to the inspection certificate, may be obtained at a nominal fee. Ordinarily, the official inspection certificate will suffice unless the packer desires more detailed facts of the inspection.

UNITED STATES DEPARTMENT O						
SCORE SHEET FOR C		PEAS				
CONTAINER SIZE			1/0.2	9/0. Q	971.2	10.2 AP5X
CAN MARKS			5723X	5P23X	AP4X	AP5X
LABEL NET WEIGHT (OUNCES)			Unlabe 2014	20 34	2/14	201/2
VACUUM (INCHES)			12	9	10	9
TYPE			Sircet	Sweet	Early	Carly
SIZE			91: 3+4	970.3+4	970.4	910.4
FACTORS	SCC	RE POINTS				the second s
L. CLEARNESS OF LIQUID	4.) (B 10 0) ?- 8) 5- 6	S	9	5	.5-
II. UNIFORMITY OF COLOR	15 (A 15 (C 10	i) 11 = 13 i) 8 - 10	12	13	10	10
III. ABSENCE OF DEFECTS	30 (A (B (C) (C)) 23-26) 19-22	25	25	23	19
IV. MATURITY	45 (A (C) (C)) 34-39) 28-33	37	37	31	32
TOTAL SCORE	100		82	84	69	66
GRADE			B	B	C	C

PMA 14558

FIGURE 9.—The contents of every individual container of food that is inspected are scored for factors of quality on a score sheet similar to the one illustrated for canned peas.

Of what benefit is inspection to the packer or processor?

Routine inspections of the packer's daily production may reveal some material changes in quality or some irregularity in the pack not found by the packer's own employees, who may or may not be technically trained. Inspection after the products have been packed will give the processor definite information as to the quality of his pack, thus enabling him to maintain a clear-cut picture of his inventorial position at all times. Official inspection certificates, indicating the quality of the foods pledged for the purpose of obtaining loans, assist the packer in securing funds for operational purposes. Inspection certificates may be sent with invoices to buyers to assure them of the grade of the product as officially determined. Inspection certificates may be used instead of bid samples to acquaint an interested buyer with the merchandise offered for sale. They afford the packer a definite basis on which to label his products for the benefit of the consumer.

How will inspection serve the banker or financier?

Requests for huge loans are frequently supported by the official inspection certificates to indicate the quality of the canned foods covered by warehouse receipts. Inspection certificates give the banker concrete evidence of the quality (and thus market value) and other pertinent facts concerning the specific lots of foods used as collateral for loans.

Of what benefit is the inspection service to the food broker, wholesale grocer, or chain-store buyer?

Buyers may contract for processed foods on the basis of the United States standards. If consignments do not meet the expectations of the buyer on delivery, he may request an inspection at that time. The inspection certificates afford a splendid basis for adjusting differences if adjustments are in order. Distributors may wish their purchases inspected at the plant before labeling prior to shipment as a basis for accurate labeling.

How are other interests served?

Other interests are served as follows:

Public warehousemen frequently wish to know the grade or condition, often both, of merchandise offered for storage. Some warehouse concerns advance money to canners or other processors on the basis of grade certificates on foods stored with them.

Transportation companies often apply for inspection for condition and quality of processed goods offered for transportation or upon receipt from other lines or at destination. Buyers, sellers, or carriers often request inspection of carloads of frozen foods immediately upon arrival, especially if the consignment is in apparent poor or thawing condition. Inspection certificates afford a basis for settlement of claims.

Does the Department or its inspectors act as arbitrators if disputes arise?

No. Inspectors' duties are to determine and officially certify within their authority the quality and condition of the products.

What does the Department recommend to facilitate sales?

The Department feels it is in the best interest of both buyer and seller to specify definitely in sales contracts the quality in terms of

HORCACH LOT NO. 568785 BRAND JODGEVILLO LABELED OR Jebeled *ACCORDING TO GRADES APPROVED BY THE U.S. Street ならないのであるのでのなる U.S. GRADE GRADE (Fancy) 2 DEPARTMENT OF AGRI-CREEd Pride of WSL P.R.R. No.24342 CASE OR CODE MARKS COMP'T. NO. UNCASED RECEIPT STORED IN CASED OR CULTURE. 00000 Storage charges at the rate of WAREHOUSEMAN CLAIMS A LIEN ON SAID CANNED FOODSFOR CHARGESAND THE UNDERSIGNED LABILITIES AS FOLLOWS cents per Insurance per month Handling Advances CompanyFreight Service charge charge M1 3C . The Merchants Warehouse Company, Incorporated рово ме чело му текрат и влаго пина вселит во поче моняемовати и на ношати пи в ассити и му ве клитерь гоа ми до оптожи, вело мотехсерико оне чеак, ови и моче монаемовати и на постави и зно всели и и му ве клитерь по а ми до макановаеми в мотехсерико оне чеак, ови тек яесели мау ве избера за вноирели из монесиднова. Тне силеразоваеми макановаеми в мотехсерико оне чеак, ови поста сомер робо сочева в типа вселити типа за остави и сомном или и очнаеми и ческовается на поста самер робо сочева в типа вселити типа за съста сомном или и очнаеми и сомер на самер робо сочева ратив вселити типа за съста самер на сомном и поста очнаеми и сомер на самер робо сочева и типа вселити типа за съста самер на сомном или очнаеми и сомном самер на поста самер робо сочева и типа вселити типа за съста самер на сомном или очнаеми поста самер на самер робо сочева и типа вселити типа за съста самер на сомном и поста от самера. 52 SAID CANNED F0005 АЛЕ 111 111 1113111201 ВУ ТНЕ UNDERSIGNED WAREHOUSEMAN AGAINSTLOSSOR DAMAGE BYFIRE HAHTNING. АМО ТОЯМАФО, UNLESS EXPRESSIVE ТАТЕС О ОННЕМИЗЕ ОН ТМЕ FACE OF THIS RECEIPT. SAID CANNED F0005 АЛЕ АССЕРТЕР F0R З AND LIABILITIES DUE THE UNDERSIGNED WAREHOUSEMANASSTATED HEREON. SAID CANNED FOODS WILL BE DELIVERED TO THE ABOVE RECEIPT IS ISSUED, SUBJECT TO THE REGULATIONS FOR CANNED FOODS WAREHOUSES THERELUNDER, AND THE TERMS OF THIS CONTRACT 51 0 or Jonesville, N.Y. ŝ ONE THOUSAND (1000) CASES 24/2's Sieve J. SWEET TYPE PEAS Comptroller LICENSED AND BONDED UNDER THE UNITED STATES WAREHOUSE AC The Merchants Warehouse 0 Incorporated Fri] on Sept. S PH NEGOTIABLE ~ Jonesville, N.Y. 50 Halton î U Proprietor S - FOR CANNED FOOD E-I CHAN G 1 Agrees West Shore Canning Company WAREHOUSE ISSUED AT JODOSVILLO, N.Y. α_{i} HI I (m) 3 22 [#] JAZ-U-RO 123 E-I NAMED DEPOSITOR OR HIS OROER THE GRADE DESCRIBED HEREIN. UNITED STATES WAREHOUSE ACT, THE 12-10000 License Number Received for Astorage from -----10 3,5,5,5,5,5

FIGURE 10.—Specimen form of receipt issued under the United States Warehouse Act. The official certificate of quality and condition like PMA 14559 the one shown in figure 9 may be attached to a receipt like this one to indicate the quality or grade of samples taken from the lot covered by the receipt. the United States grades, and to state such other requirements as the kind and size of container, and the size, type, style, variety, and color of the commodity. In addition to the requirements for the product itself, information is necessary with respect to terms of sale, routing, labels, and swell allowances. The following statement, designed to avoid disputes on delivery, is now used in contracts negotiated by some sales agencies:

In the event that dispute should arise as to quality, the seller agrees to furnish, without expense to the buyer, an official inspection certificate of the United States Department of Agriculture in substantiation of grade of delivery.

HOW IS LABELING RELATED TO UNITED STATES STANDARDS AND INSPECTIONS?

Labeling in terms of quality on the basis of United States standards and inspection is one of the ways in which the standardization and inspection program of the United States Department of Agriculture benefits the consumer. After products are processed, particularly canned foods, they are generally stored without labels. When the packer receives an order to ship the goods, he may apply his own packer's label or he may apply a distributor's private label to the foods. The Department believes it is in the interest of a "square deal" for the housewife that she be permitted to choose the quality she desires. The Department believes that simple quality terms—tied to definitely established and written requirements for that quality—will make her choice easier when she markets.

What quality terms does the Department advocate?

The Department has adopted the simple terms of A, B, C which are easily remembered. The steps between these grades indicate degrees of quality value. Clear-cut names of this kind afford a valuable guide to the housewife in making purchases, for she can readily select a commodity of a known, not hidden, quality for the price she is able to pay and for the purpose she wishes to use it.

How do the A, B, C grade names compare with commercial quality terms?

The common commercial quality terms for canned foods (Fancy, Choice, Standard) are used synonymously with Grade A, Grade B, or Grade C by the Department, so that buyers and sellers who wish to use them may do so. Consumers, however, are not too familiar with the trade nomenclature. Nevertheless, the Department does not advocate the use of the Grades A, B, C to the exclusion of commercial terms which are not misleading.

How may Grade A foods be utilized to best advantage?

Grade A processed products are first-rate foods, carefully selected as to size, color, and ripeness or tenderness. Because of their fine appearance they are best suited for special dishes, fancy desserts, and for combinations such as fruit salads. It would not be good economy, for example, to use for an escalloped dish. Grade A tomatoes that are red ripe, practically free from skin and blemishes, and whole in shape. A lower grade would serve the same purpose.

16 MISC. PUBLICATION 598, U. S. DEPT. OF AGRICULTURE

For what purpose may Grade B foods be used?

Grade B products may not be as succulent as Grade A, but this is a suitable quality for general household purposes. They may not be so select as to size, color, and maturity, but in all these respects they are entirely satisfactory for most menus.

What class of food is found in Grade C and what is its recommended use?

All Grade C products are good, wholesome food. A large percentage of processed foods are found in this grade and it is considered a "thrifty buy." In some instances the product may not be so tender nor so ripe as Grades A and B, or blemishes may be more apparent than in the higher grades. For dishes in which appearance is not important and in which the product is further cooked, Grade C products are the most suitable. Casserole dishes, pies, sherbets, and soups are among the many possibilities for utilizing Grade C foods.



FIGURE 11.—Part of a label taken from a can of pears. These pears do not meet the minimum standards of quality prescribed by the Federal Food, Drug, and Cosmetic Act because the pieces are of varying sizes and unevenly trimmed.

What happens to food that is below Grade C?

Some of these products reach the consumers' hands. If their quality does not meet the minimum requirements of the Federal Food, Drug, and Cosmetic Act, special labeling is necessary.

At the present time, canned apricots, peaches, pears, cherries, fruit cocktail, peas, and tomatoes must be labeled "Below Standard in Quality-Good Food-Not High Grade," or an alternative statement if the products are, for example, "Poor Color," "Not Well Peeled," "Excessively Mealy." Other commodities are not required by law to be so labeled. Fruit products of this quality, if not sold to the consumer, are often used by bakeries in pies. Preserve manufacturers sometimes find a use for them when the quality is satisfactory for jams or jellies.

Is there nutritional difference in the various grades?

In many commodities the nutritional value is not lowered materially when the raw product is processed—generally because handling in commercial processing is quick and expert. For some commodities, like concentrated orange juice, a higher vitamin C content is required in Grade A than in the lower grades. Some of the lower grades of canned peas may have a greater mineral content than those in Grade A if they are more mature and starchy.

What is comprehensive labeling?

The Department long ago concluded that it would be distinctly beneficial and in the interest of honesty and fair dealing for label statements to include the following information for consumers, in addition to the brand name and other information required by law:

(1) A truthful, concise statement of grade—preferably such simple terms as "Grade A," "Grade B," and "Grade C," or the synonymous terms of "Fancy," "Choice or Extra Standard," and "Standard."

(2) Additional descriptive information that may be appropriate for the product, such as number of pieces in a can of peaches, sieve size of peas, strength of sirup on fruit, number of servings.

Is such labeling designed to replace brands?

No. The Department favors the inclusion of the foregoing information on labels in order to fortify and definitely tie-in factual quality information with brand names. Such pertinent information along with the brand name will do much to build confidence in a brand name and good will for the packer or distributor.

Who may label in this manner?

Any one packing or distributing processed fruits and vegetables may so label his products. Quality terms, such as "Grade A," "Grade B," or "Grade C," or "Fancy," "Choice" or "Extra Standard," or "Standard" on a label, mean that the product complies with the requirements of the grade set forth in the United States standards for the product. Only foods packed under continuous inspection, however, may include the letters, "U. S." before any of these grade terms.

What guarantee is there that Grade A products are Grade A?

The packer and distributor are both responsible for the accuracy of statements on labels. If the products are not of the grade claimed, the packer and distributor are subject to penalties for misbranding under the Federal Food, Drug, and Cosmetic Act.

Are all processed foods required to be labeled as to quality?

Except for certain commodities which are required to be labeled "Below Standard in Quality," comprehensive labeling is not compulsory; it is permissive.

Is labeling foods for quality mandatory in other countries?

Some countries have labeling laws which include quality. In Canada quality labeling of canned fruits and vegetables has been compulsory for almost 25 years.

Has there been any Federal legislation requiring labeling of foods?

Some bills have been presented to Congress to make compulsory various types of labeling, but none of them has been enacted except the Federal Food, Drug, and Cosmetic Act passed in 1938. Under this act, certain regulations provide that when products do not meet stated minimum requirements the applicable product must be labeled "Below Standard in Quality." Such products are of a quality lower than Grade C or Standard. The law does not require labeling for the higher-grade products.

In 1943, the Office of Price Administration required all canned fruits and vegetables of the 1943 pack to be labeled according to grade. This was intended as a means of enforcing price ceilings so that consumers



FIGURE 12.—The Department cooperates with State inspection services by furnishing Federal-State inspectors for grading fruits and vegetables for processing as they come from the growers. Here an inspector examines a basket of tomatoes.

would be in a position to compare price with grade. This ruling was rescinded, however, before any of the 1943 season's packs were offered on the market.

WHAT IS CONTINUOUS INSPECTION?

Inspection of processed products for the most part is on the finished product. Thus, as previously explained, the inspection service is furnished on samples of the product, and inspection takes place at an appropriate place.

A more recent development in the inspection service is known as continuous inspection. This differs from the customary service, procedures of which were previously outlined, in that a Federal inspector of the United States Department of Agriculture is stationed continuously at the processing plant while the goods are being prepared and packaged. The inspectors observe the product from its raw state through each step in the entire process, and make an inspection of the finished article for quality and condition. They also make certain that the products are prepared and packed under strict standards of cleanliness.



FIGURE 13.—A Department of Agriculture inspector at a plant under continuous inspection inspects citrus juice for sugar content and distills a sample of juice to determine the oil content.

Why was this service started?

In this country there is no Federal law that regulates sanitary operations in canneries. Some States have their own laws, but some do not. This service was started as an experiment at the request of consumers and interested canners. The purpose was to ascertain the reaction of consumers and industry to products packed under strictly sanitary conditions.

When was the service started?

The service was conducted in one plant during the canning season of 1939. The number of plants using this service has increased steadily since that year.

Why was the service first considered an "experiment"?

The Department wished first to find out if consumers and the industry would react favorably to this program before it was made a permanent service. The Department is constantly seeking ways to assist in marketing agricultural products more satisfactorily, and continuous inspection was introduced as one way to do this. As consumers develop a more wholesome regard for processed products as a result of such inspection, it may be expected that a wider market will develop for processed crops, and that both the producer and consumer will benefit.

Why was the service started in a few plants?

The service, started in one plant, was extended to only a few more, because the Department felt that it could best determine the value of such service by limiting the number to those carefully chosen in various parts of the United States and to those that packed a varied line of products. Plants granted this service were selected according to the suitability of their physical properties, the excellence of equipment, their proximity to processing crops, and the willingness of the management to cooperate with the Department in improving quality and maintaining standards of cleanliness.

Is this inspection required in all processing plants?

No, the service is not mandatory; in fact, the packer voluntarily requests it. Before the service is granted, however, the plant, its surroundings, and operating conditions are inspected for suitability.

What are some of the plant requirements in order to qualify for continuous inspection?

The plant property must be constructed properly so that walls and floors may be cleaned and maintained in a sanitary condition. Good ventilation and proper lighting must be assured for the employees.

Screening of openings into certain processing rooms and other means to control insects are important requirements. An adequate supply of approved water must be available at all times for processing and thorough cleaning of the plant. Refuse from plant products and other sewage must be disposed of properly. Machinery and equip-



USDA N-5984

FIGURE 14.—The standards of sanitation under continuous inspection require the tidy appearance of employees. Clean aprons and neat head coverings are worn wherever food is handled in this plant under continuous inspection. The management provides good, direct lighting to help the women sort tomatoes carefully.



FIGURE 15.—All products of this plant are packed under continuous inspection by the Department of Agriculture. Cans are cased for orderly storage in properly ventilated stacks.

ment must be arranged and covered to protect any food from contamination. Storage rooms must be maintained in a clean and orderly fashion and goods must be compactly stacked and warehoused under proper conditions of humidity and temperature. All of these prerequisites are necessary to maintain the good housekeeping standards of the Department.

Who pays the cost of continuous inspection?

The processor agrees in his contract to reimburse the Department for the cost of the service. The money he pays goes into the United States Treasury.

Are continuously inspected foods high priced?

In normal times retail prices of foods that have been continuously inspected are in line with prices of foods of corresponding quality packed in other plants. There are indications that continuous inspection has reduced other expenses of operation sufficiently to cover the cost of the service; however, the average cost of the inspection to the canner is from two ten-thousandths of a cent to four ten-thousandths of a cent for a can of the size sold to consumers.

How may these products be identified by the consumer?

These foods can usually be identified by the shield that is embossed in one end of metal containers or that often is blown into the bottom



PMA 14553

FIGURE 16.—Can with lid bearing the embossed shield which denotes that the product was packed under continuous inspection of the Department of Agriculture.

of glass containers. This shield means that the foods have been packed under continuous inspection, but it does not indicate the quality.

Labels, too, often indicate that processed products have been so packed by carrying the following statement: "Packed under continuous inspection of the U. S. Department of Agriculture." Such products can also be recognized by consumers through the quality statement on the label in which the letters "U. S." appear before the grade name, as—

U. S. Grade A or U. S. Fancy

U.S. Grade B or U.S. Choice

or U. S. Extra Standard

U. S. Grade C or U. S. Standard

These letters before the grade name on a label mean that the product was—

(1) packed under continuous Government inspection;

(2) inspected and certified as the grade states.

In other words, the prefix "U. S." with a grade name on canned or other processed fruits and vegetables identifies a product as one packed under continuous inspection. Labels on other processed fruits and vegetables may carry Grade A, B, or C, or Fancy, Choice or Extra

22



FIGURE 17.—A sample of a label used on tomato juice which bears the quality designation. "U. S. Grade A," and the legend : "Packed under the Continuous Inspection of the U. S. Dept. of Agriculture."



PMA 14560

FIGURE 18.—This comprehensive label is typical of those found on products voluntarily packed under Department of Agriculture continuous inspection. A label such as this one, giving complete facts, is the kind the Department of Agriculture recommends. It indicates: Brand name; quality in terms of U. S. grades; Government inspection; information required by law, such as name of product, style, variety, sirup, weight of contents, and other pertinent facts.

Standard, or Standard, but only foods packed under the continuous observance of a Government inspector may be labeled with a "U. S." grade.

Are all foods packed under continuous inspection required to be labeled with a "U. S." grade?

The Department urges packers who have this service to take advantage of this privilege. It is not required, but packers under continuous inspection agree in their contract to convey this information to consumers insofar as possible. More and more labels of more and

QUESTIONS AND ANSWERS ON GOVERNMENT INSPECTION 25

SLICED



 SELECTION
 INFORMATION

 No. 2½ size
 1 lb. 13 oz.

 3½ cups
 6 to 8 servings

U. S. GRADE B SUCED CUNCSTONE PEACHES are well-ripened —reasonably good color—reasonably uniform in size and symmetry—reasonably tender—with normal peach flavor.

USE them as they are far desserts—in combination with other fruits in cocktails or salods—spiced or pickled as meat accompaniment—in shortcakes and upside down cakes. Try peaches spiced and backed with ham. PREPARATION Store unused portion covered in refrigerator. The syrup may be mixed, flavored, colared and served as an appelizer, or frozen into sherbets. Boiled down it may be used to sweeten deserts, gelatins, souces, and beverages --as well as a syrup for basting meats--or adding to other cooked fruits--or combined with lemon and raisins for a special dessert source.

PEACHES

BLANK BRAND OFFERS A COMPLETE LINE OF U. S. GRADE B FRUITS AND VEGETABLES FOR U. S. GRADE A AND C-USE

All packed under the continuous inspection of the U. S. Department of Agriculture



U.S. GRADE STANDER

BLANK CO., INC. VITATOWN, CALIFORNIA

PMA 14561

F

FIGURE 19.—This portion of a comprehensive label shows typical facts found on a product voluntarily packed under Department of Agriculture continuous inspection. The label indicates: Size of container; size or number of pieces or number of servings; explanation of quality; packer or distributor's name and address (as required by law); and other important information.

more packers are being used to advise the housewife that their products are packed in this manner.

Are frozen fruits and vegetables and dried fruits processed under continuous inspection?

Yes, a few processors of these commodities are now operating under continuous inspection and others have requested the service and are being considered for approval by the Department.

26 MISC. PUBLICATION 598, U. S. DEPT. OF AGRICULTURE

What can consumers contribute to further the continuous factory inspection program and the labeling of processed fruits and vegetables in terms of U. S. grades?

Consumer groups can conduct studies of comprehensive labels-

- (1) to determine consumer reaction to labels which give statements of quality, such as Grade A or Fancy, and descriptive information in addition to the brand name and statements required by law;
- (2) to determine consumer reaction to products processed under U. S. continuous inspection and labeled in terms of U. S. grade A, B, or C, and with descriptive information in addition to the brand name and statements required by law.

Consumers should submit their individual reactions to U. S. gradelabeled merchandise which they purchase either to their consumer organizations or to the Production and Marketing Administration, United States Department of Agriculture, Washington 25, D. C.

LIST OF REFERENCES

The following publications may be had upon request from the Office of Information, United States Department of Agriculture, Washington 25, D. C.:

- The A B C of Canned Fruit and Vegetable Labeling. Misc. Pub. 460.
- Outline of Suggested Specifications for Purchasing Processed Fruits and Vetables. Misc. Pub. 565.

From the Production and Marketing Administration, United States Department of Agriculture, Washington 25, D. C., may be obtained the following material:

- Canned Food Labels in Terms of U. S. Grades. [Processed.] Institutional Purchasing of Processed Fruits and Vegetables. [Processed.]
- Plants Approved to Pack Processed Fruits and Vegetables Under Continuous Inspection. [Processed.]

What Do These Mean? A Short Short Story About U. S. Grade A, B, C Labels. [Processed.]

