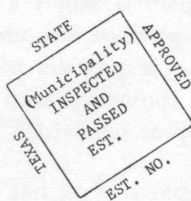
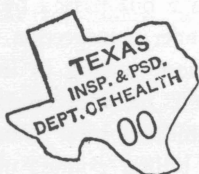
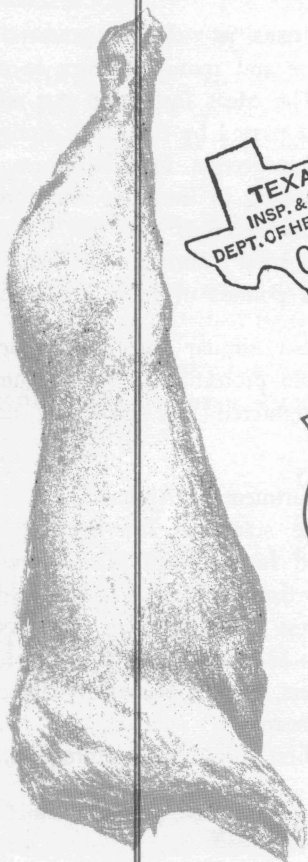
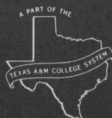


Meat Inspection and Grading in Texas



THE AGRICULTURAL AND MECHANICAL
COLLEGE OF TEXAS
TEXAS AGRICULTURAL EXTENSION SERVICE
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Meat Inspection and Grading in Texas

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TEXAS LIVESTOCK PRODUCERS, as well as consumers, are confronted daily with more and more reference to meat inspection and grading. The Meat Inspection Act which had its beginning in a bill passed by the U. S. Congress in 1906 required federal inspection for cleanliness and wholesomeness of meat moving in interstate and foreign commerce. Inspected meat accounts for the slaughter of more than 100 million meat animals a year and the processing of many billion pounds of meat products.

Following the federal act, similar state and municipal sanitary regulations extended protection to the consuming public for meat not slaughtered and processed under federal supervision.

In 1916 the U. S. Department of Agriculture initiated work in developing grade standards for livestock and meat which could be used for uniform grade terms by the Market News Reporting Services. The grading program is simply a process of subdividing highly variable products into uniform or standardized quality groupings. It provides producers, buyers, processors, handlers and consumers with a means of selecting the quality group or subdivision that best suits their requirements.

INSPECTION

Basically three different types of inspection are used in Texas — federal, state and state-approved or municipal.

Federal Inspection

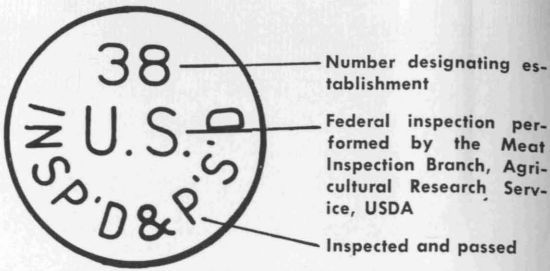
The bulk of the livestock slaughtered in this country is examined by federal inspectors. Sheep and lambs slaughtered under federal inspection in 1961 accounted for 88 percent of the total commercial slaughter in the United States. The comparable figure for hogs was 85 percent, cattle 78 percent and calves 65 percent.

Since initial approval of the Meat Inspection Act, additional supervisory actions have been adopted by the USDA. Responsibilities of the Meat Inspection Division, at present, include the following:

1. Examination of food animals prior to slaughter.
2. Postmortem examination of carcasses.
3. Destruction for food purposes of all diseased or unwholesome meat and meat products.
4. Supervision of prepared meat products.
5. Guarding against use of harmful preservatives or added ingredients.
6. Supervision of inspection mark application.
7. Supervision of informative labels on meat and meat products.
8. Certification of meat and meat products for export.
9. Inspection of meat and meat products for importation.
10. Examination for specification requirements of governmental purchasing agents.
11. Investigations to insure accuracy and effectiveness of inspection procedures.
12. Guarding against residue in meats resulting from ingestion, treatment or exposure to substance such as pesticides, growth-promoting substances, drugs or biologicals.
13. Developing and determining acceptable methods for humane slaughter of meat animals.

Meat passed under federal inspection is wholesome at the time of inspection. A meat inspection stamp denotes that a piece of meat was checked by a federal inspector and found free from disease or contamination and did not violate any of the numerous conditions.

All meat shipped in interstate commerce must be federally inspected. Meat may be slaughtered and sold within a state without inspection if state or local laws do not prohibit such sales. In Texas most municipalities have laws requiring some type of inspection.



The Federal Inspection Stamp

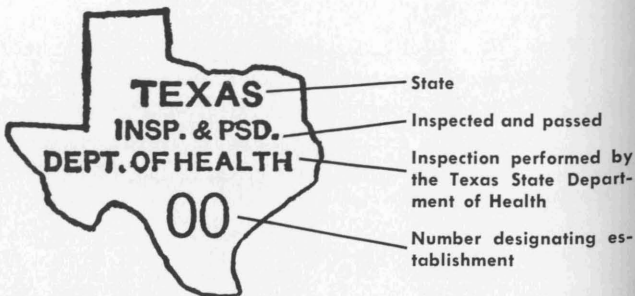
Many prepared and processed meat items, such as sausage, luncheon meat, canned ham and lard, also are inspected under federal regulations. Inspection, however, is required only if the products are for interstate movement. The entire cost of federal inspection is borne by the Federal Government, except for certain special provisions.

State Inspection

In 1955, the Texas State Department of Health contracted with several large meat packing companies in Texas to put its stamp of approval on meat products. The State Meat Inspection Program now includes 24 Texas meat packing and processing plants.

The State Meat Inspection Program basically follows the same regulations as the federal inspection system with the exception that it is voluntary.

State inspection is performed by employees of the State Department of Health. Operating costs of inspection are paid by the individual packer.

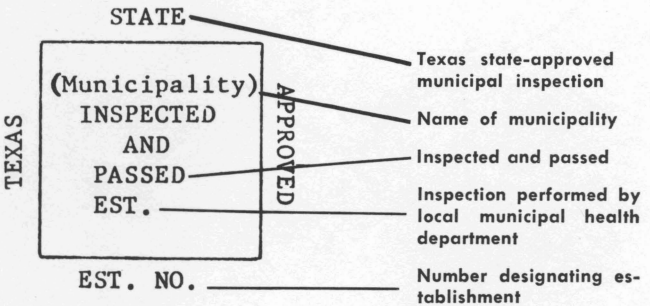


The State Inspection Stamp

State - approved Municipal Inspection

Under Section 12 of the Texas Meat Inspection Law, cities may pass an ordinance adopting the state rules and regulations governing meat inspection for use in a state-approved inspection system. Establishments in such municipalities, therefore, can operate under a state-approved inspection. Ninety-one plants in Texas now operate under the state-approval municipality system.

Inspection services in this system are performed by employees of the local municipal health departments, but are under the supervision of the Texas State Department of Health's Veterinary Public Health Division.



The State Approved Stamp

The Texas Meat Inspection Law, originally passed in 1945, provides that all meats or meat food products bearing either of the official inspection legends will be permitted to be offered for sale, sold or transported anywhere within the geographical limits of Texas.

Such a mark of inspection, in whatever form it may appear, is the consumer's assurance that the products on which the stamp appears have been subjected to an inspection and found wholesome and free from disease when slaughtered.

Neither state nor federal inspection has any effect on meat price levels. Inspection may affect the price indirectly, however, since federally inspected meat may have a larger distribution area and, consequently, a larger market.

MEAT INSPECTION PROVIDES PROTECTION



GRADES

and

GRADING



GRADING

Federal Grading

Federal grading is not performed on all carcasses. In fact, only 17 percent of the veal and calf, 37 percent of the lamb and mutton and about half of all commercially slaughtered beef in the United States is federally graded.

Little attention was given to the problem of classifying and grading livestock until the first decade of the Twentieth Century. The USDA then initiated work in developing grade standards for livestock and meats in 1916.

Official grading and stamping of beef began in May 1927 and was on a continuous basis by July 1928. To be federally graded, the meat must have been federally or state inspected.

Each grade name is associated with a degree of quality, conformation and maturity. Consumer research studies show more general acceptability of loin steaks from a Choice grade carcass than from a Good carcass.

The present federal grade stamp on meat is easily identified and represents a federal grader's quality classification.



Grading is performed by the Meat Grading Service of the USDA

Grade designation.

The Federal Grade Stamp

Since a large proportion of beef and lamb is federally graded, the livestock and meat industry relies heavily on such grades in the tradings of these meats. Consequently, beef grade standards have been changed three times since their initiation to conform with up-to-date needs.

In 1950, for example, the old Commercial grade was divided into a Good grade and a new Commercial grade. The top quality of younger cattle of the former Commercial grade was changed to Good. Again in 1956 the Commercial grade was separated even further. All younger cattle remained in the Commercial grade after the 1950 revisions were changed to Standard.

U. S. FEDERAL MEAT GRADES

Meat	1st	2nd	3rd	4th	5th	6th	7th	8th
Beef	Prime	Choice	Good	Standard	Commercial	Utility	Cutter	Canner
Calf	Prime	Choice	Good	Standard	Utility	Cull		
Veal	Prime	Choice	Good	Standard	Utility	Cull		
Lamb	Prime	Choice	Good	Utility	Cull			

CHANGES IN OFFICIAL U. S. GRADES FOR BEEF CARCASSES*

1939-50	1950-56	1956-present
Prime	Prime	Prime
Choice		
Good	Choice	Choice
	Good ¹	Good
Commercial	Commercial	Standard ²
		Commercial
Utility	Utility	Utility
Cutter	Cutter	Cutter
Canner	Canner	Canner

¹Top quality of younger cattle became Good.

²All younger cattle in 1950-56 Commercial Grade became Standard.

Grade changes also have occurred in other species in an attempt to conform to the industry's needs. Since 1940, both the calf and lamb grading classifications have been revised twice as illustrated on the grade charts.

CHANGES IN OFFICIAL GRADES FOR VEAL AND CALF CARCASSES*

1940-1951	1951-56	1956-present
Prime	Prime	Prime
Choice		
Good	Choice	Choice
	Good	Good
Commercial	Commercial	Standard
Utility	Utility	Utility
Cull	Cull	Cull

Distribution of beef carcasses among the different federal grades varies considerably in each region of the country. In Los Angeles, for example, a strong dependence on chain stores for beef distribution has affected the type of cattle slaughtered. Seventy percent of the cattle slaughtered yield carcasses that grade Choice or Good, while the nation's average shows only 51 percent in these grades.

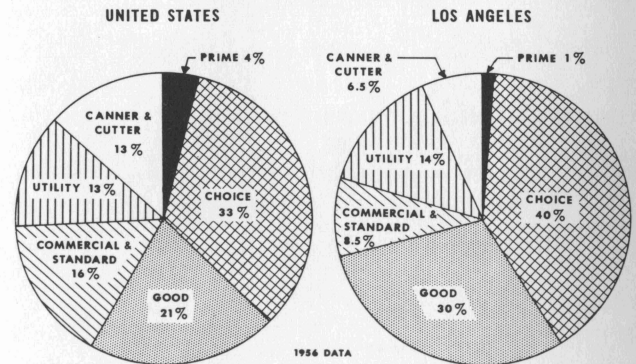
CHANGES IN OFFICIAL GRADES FOR LAMB, YEARLING MUTTON AND MUTTON CARCASSES*

1940-51	1951-60	1960-present ¹
Prime	Prime	Prime
Choice		
Good	Choice ²	Choice
Commercial	Good	Good
Utility	Utility	Utility
Cull	Cull	Cull

¹Changes in standards for young lambs only.

²Highest grade for mutton older than yearling.

*Sizes of grade blocks are not necessarily related to the "widths" of the various grades in terms of factors considered in the grade standards.



Grades of Commercial Cattle Slaughtered

Estimates show that about 40 to 60 percent of beef carcasses sold in the wholesale trade carries the private brand name of a packer or retailer. Many retailers put a brand name on meat for retail sales, but purchase according to the federal grades.

Americans can have confidence in the meat they buy. It is wholesome and has a reliable indicator of quality differences through the grading system.

Dual Grades for Beef

On July 1, 1962, and for a 1-year trial period, the USDA made available through its Meat Inspection Service a dual grading system for beef. The service is available to members of the trade who wish to use and pay for it. The current federal meat grading system also continues to be offered.

The dual grading system provides separate grades for the following two main factors which affect the value of a beef carcass:

1. The quality or palatability of the meat.
2. "Cutability" or "yield" — the amount of trimmed retail cuts yielded by the carcass.

USDA scientists have learned through studies that the differences in yield can be predicted accurately by using only four physical indicators. These are: thickness of fat over the rib eye; size of rib eye muscle; amount of kidney and pelvic fat; and carcass weight.

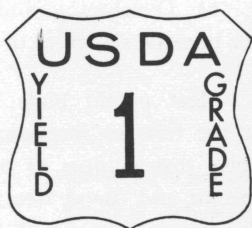
These factors are considered in determining the yield or cutability grade. Such yield grades will run 1 through 6 with the smaller numbers indicating a higher degree of cutability.

Quality grades are now identified by a ribbon-type imprint of the quality name in a shield. The yield grade is stamped on each quarter of the carcass. Both marks appear in red ink. Since the yield grade, however, is of principal interest only to the trade, it does not necessarily show up on retail cuts as do the quality grades.

Dual Grades for Beef Carcasses



Quality grade



Yield grade

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