

RECEIVED

FEB 16 1961

EXPERIMENT STATION
LIBRARY

WHAT *Makes* THE PRICE of BEEF —

- FOR YOU THE FARMER?
- FOR YOU THE CONSUMER?

By Zack C. Saufley

CIRCULAR 574
(Filing Code 7)

UNIVERSITY OF KENTUCKY
COOPERATIVE EXTENSION SERVICE
AGRICULTURE AND HOME ECONOMICS

and
and
are

up
ever
cha

mill
type
thes
the
catt
also
with



Fig.
by-p

onor

What Makes The Price of Beef —

- FOR YOU THE FARMER?
- FOR YOU THE CONSUMER?

By Zack C. Saufley*

Like most commodities, the price of beef is determined by supply and demand conditions. Supply is the number of beef cattle raised and sent to market. Demand is the number of dollars consumers are able and willing to spend for beef.

These definitions tend to oversimplify the question of what makes up beef prices. Other complex factors exert some influence; however, the main conditions of supply and demand will explain most changes in beef prices.

Let's look first at supply. Beef cattle are produced on about three million farms and ranches. Each farmer has his own idea of what type of beef cattle to raise and when and where to market. When these individual production decisions are totaled, they give rise to the up-and-down shifts in cattle numbers, commonly known as the beef cattle cycle. Numbers not only change from year to year, but there are also extreme variations in the number of cattle offered for market within a year. These fluctuations of supplies cause many problems in

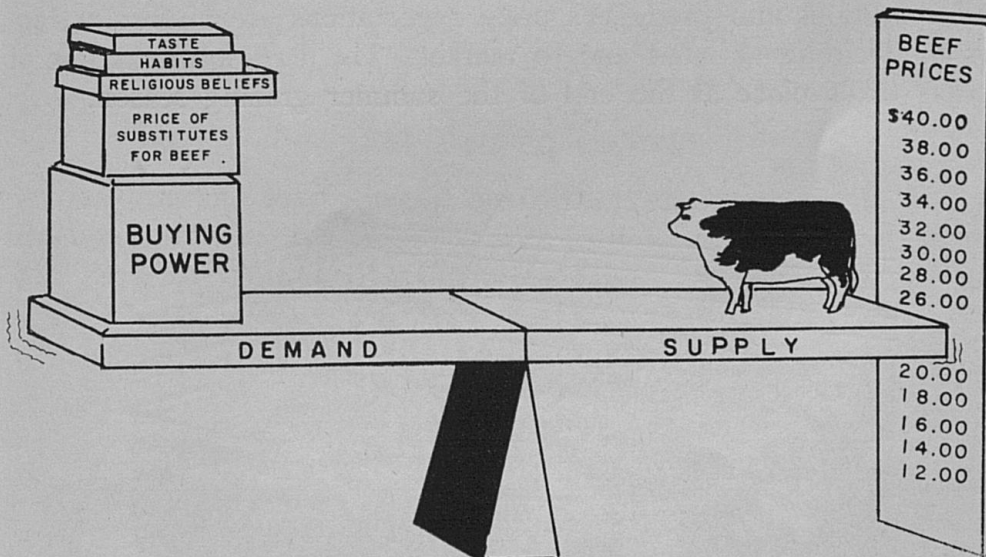


Fig. 1.— A change in beef supplies or a change in the demand for meat and by-products causes the price of beef to vary.

* Extension Specialist in Livestock Marketing, Department of Agricultural Economics

the marketing system. Beef, being a perishable product, must be moved quickly through the marketing channel to the consumer. When a large volume of beef is offered, the price must be lowered in order to move all the beef through the marketing system.

This brings us to demand as it affects the price of beef. The consumer has the final say. Her decision on the quantity and quality of beef she wants makes up the demand for beef. Factors which influence demand are amount of consumer's disposable income, tastes and religious beliefs, and the prices of substitutes for beef such as pork, veal, and chicken. To have an increase or decrease in demand, one or more of these factors must change.

Most consumers are not aware of the many costs that must be included in the retail price of beef. This retail price must cover the following marketing costs: transportation, slaughtering, processing, labor, equipment costs, rent, taxes, and other costs, as well as payment to farmers for the live cattle.

This publication describes the various steps in the production and marketing process in order for both the farmer and consumer to understand better the marketing system through which their beef passes.

FEEDING AND MARKETING OF LIVE CATTLE

Marketing begins when an animal is sold for the first time. This transaction usually involves the sale of feeder livestock. Farmers sell feeder stock as calves, yearlings, or heavy steers. Range and feed conditions and producer's price expectations are important factors in deciding at what age to market. The largest marketing of feeders takes place at the end of the summer grazing season.



Fig. 2.— Beef "on the hoof" must be inspected to determine its price in relation to grade, probable yield and quality.

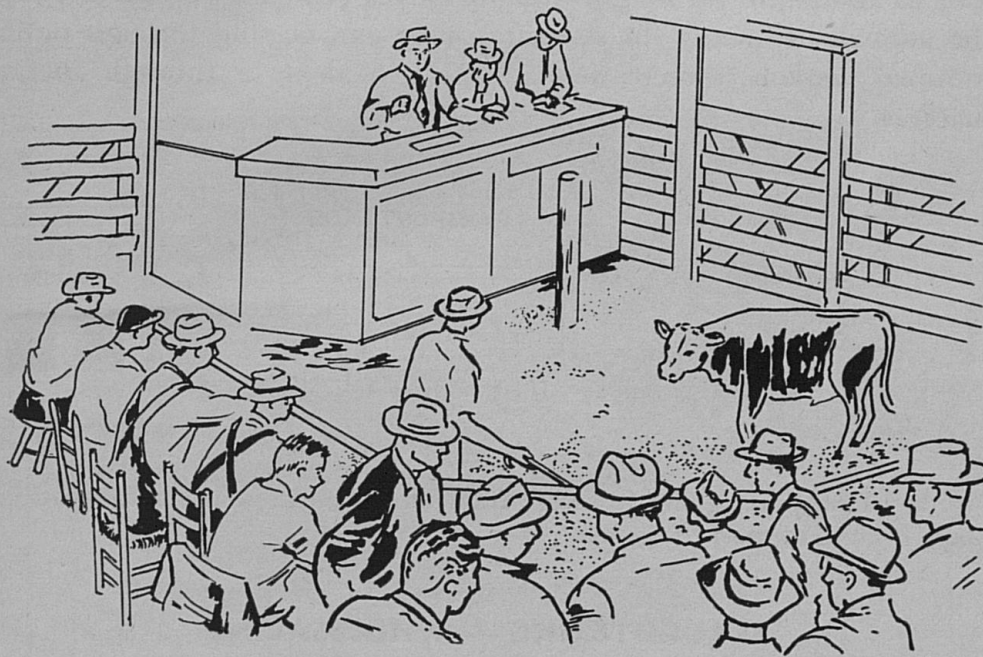


Fig. 3.— The auction method is often used as a first step in the marketing channel.

SALE OF FEEDER CATTLE

A common practice in marketing feeder cattle is to sell at the farm, either to dealers or cattle feeders. Farmers also use terminal and auction markets in selling their feeder cattle. The type of market used depends upon expected prices, expenses of marketing, and nearness of the market.

SALE OF FED CATTLE

Feeding and marketing of fat cattle is the next step in this production and marketing process. The feeding period may range from 120 days for short feeding of heavy calves (800-900 pounds) to as

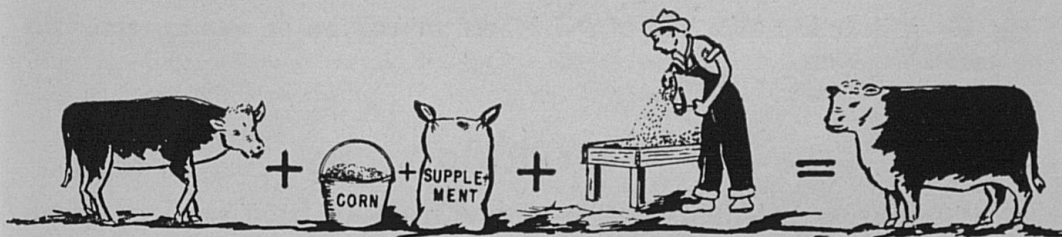


Fig. 4.— A combination of a feeder calf plus feed plus labor equals the finished product—a steer ready for market.

long as 12 months for long feeding of calves (350-500 pounds). When the animals are ready for slaughter, they can be sold through public terminal markets, directly to packers or dealers, or through auction markets.

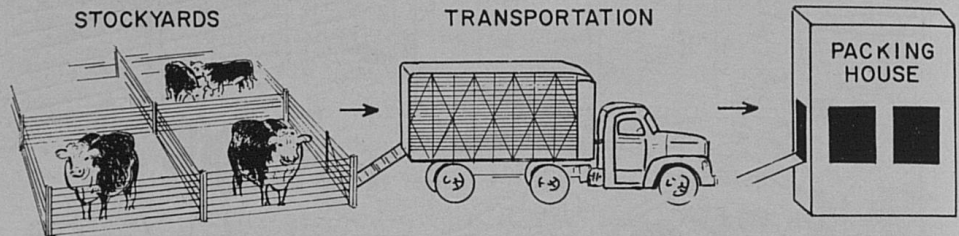


Fig. 5.—Transporting the fed steer from an assembly point to the packing plant is another marketing cost.

SLAUGHTERING — WHOLESALING

Slaughtering the beef animal and wholesaling the carcass compose the next step in marketing. About 59 pounds of carcass beef is obtained from 100 pounds of live animal grading U. S. choice. The value of the wholesale carcass plus the by-products determines the approximate price the meatpacker may be willing to pay for the live animal.

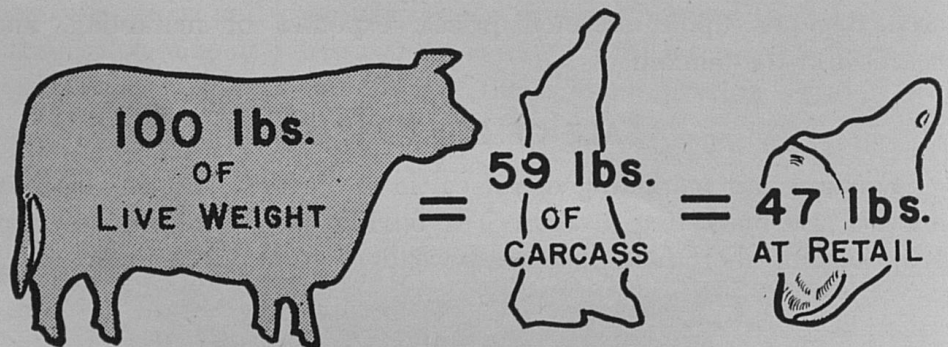


Fig. 6.—A little less than half of a live beef animal can be sold as retail cuts of meat.

RETAILING

Retailing is the final step in marketing beef from farm or ranch to consumer. Retailers buy carcasses and quarters from packers and wholesalers. They process these wholesale cuts into small cuts suit-

RETAIL BEEF CUTS

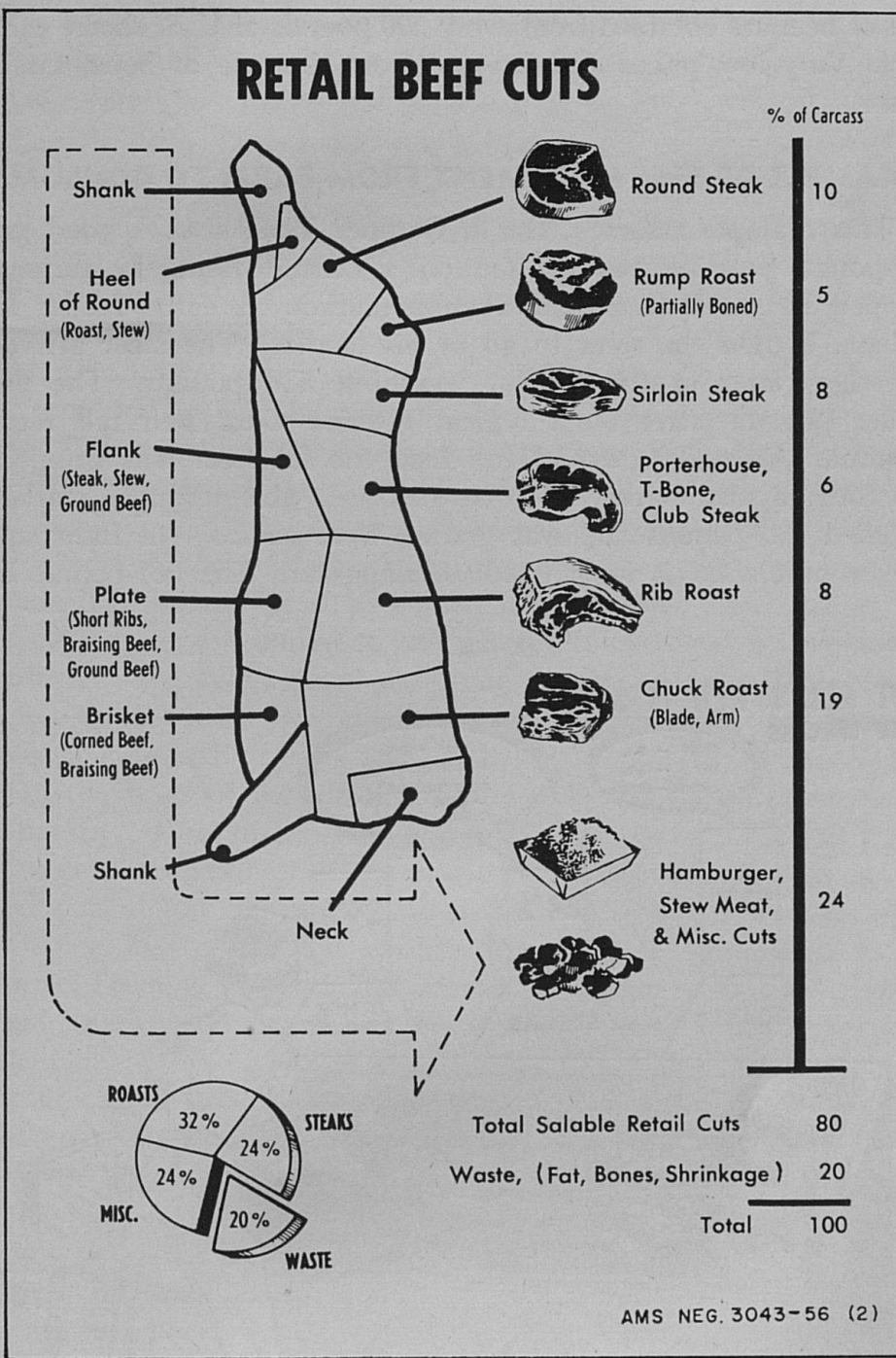


Fig. 7.— This chart of retail beef cuts shows the location from which come the various cuts and the approximate proportion of each cut.

able for the retail trade. Processing involves trimming off excess fat, boning some cuts for roast and stew meats, and grinding parts of the carcass into ground beef. About 80 pounds of salable retail

cuts of beef are obtained from every 100 pounds of U. S. choice carcass beef. Very low prices are received from the sale of bone, fat, and waste.

EXAMPLE OF BEEF MOVEMENT FROM FARM TO CONSUMER

This example assumes that in October 1959, a U. S. good grade 555-pound yearling steer raised on a central Kentucky farm was shipped by truck to a local auction market. A cattle feeder from Indiana bought the steer to go in his feedlot. The steer arrived a few days later at the feedlot weighing 530 pounds. The cattle feeder put the steer on a typical Indiana Corn Belt fall feeding program. After 200 days of full feed the fat steer was shipped to the Indianapolis market in June 1960. At this terminal market it weighed 950 pounds and was graded U. S. choice. An Indianapolis packer purchased it for immediate slaughter. The 561-pound U. S.

NOT ALL STEER IS STEAK

% OF CARCASS

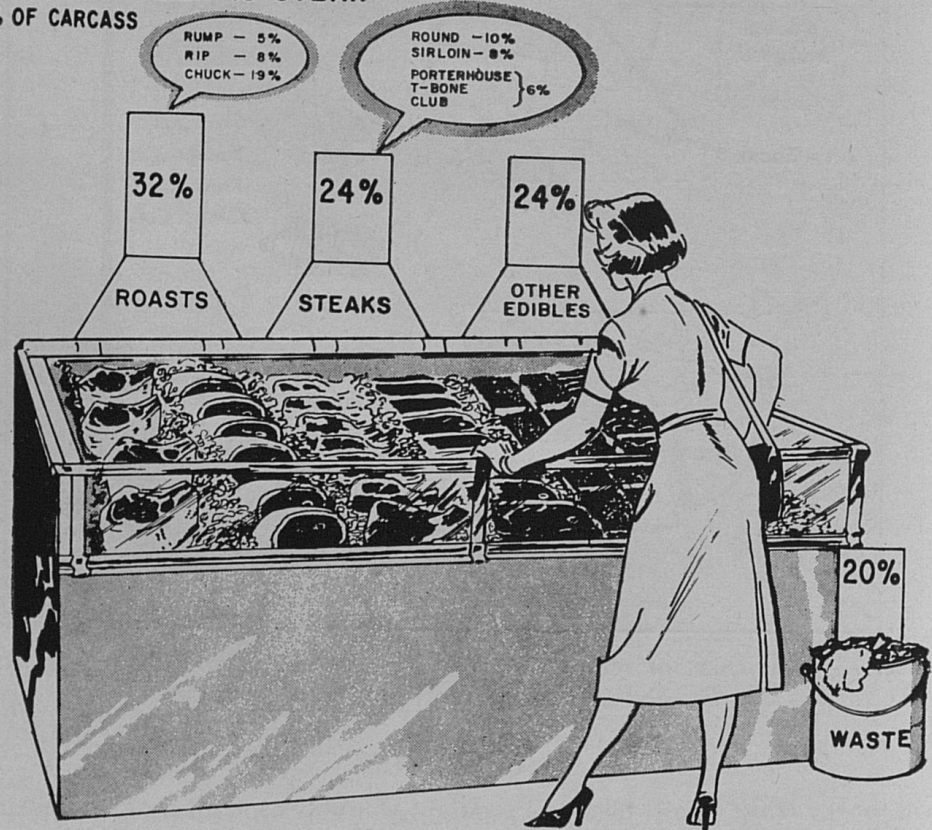


Fig. 8.— Not all of the steer is steak. Such popular cuts constitute only about 24 percent of the dressed beef carcass.

choice beef carcass was sold to a retail food store in New York City. From this carcass 449 pounds of retail cuts were sold to consumers in New York City during the last week in June.

Together, the farmer and the feeder would have received about 70 percent of the amount consumers spent for the 449 pounds of retail cuts, the remaining 30 percent going to marketing agencies.

Although the cattle feeder would have received the largest share of the consumer's dollar for beef (about 38 percent), his gross returns would have barely covered the cost of feeding.

Many different retail cuts of beef are obtained from the carcass, and they sell at widely different prices. The more desirable and higher cuts represent only a small proportion of the total carcass.

Since the carcass averages 59 percent of the live weight, and total salable retail cuts of beef represent 80 percent of the carcass, about 46 or 47 pounds of salable retail cuts are obtained from 100 pounds live weight of U. S. choice grade steer. Thus, before any marketing costs are added to the net return received by the farmer or rancher, the retail price per pound must be more than double the live weight price per pound to equal the price paid the producer for the live animal.

On the basis of carcass price (the price paid by the retailer to the packer), some of the cuts of beef sell at prices per retail pound which are less than half of the prices paid per pound of beef carcass. Other cuts sell at prices that are more than twice the carcass price.

Choice live cattle and choice dressed beef were used in the example because retailers sell almost as much fresh beef grading choice as any other three grades. Even a greater price spread is present in the case of lower beef grades, since the dressing percentages are much lower than top quality cattle; there is less eating meat, more bone, but less fat. (This is especially important: lower grades of beef often sell to the best advantage when made into boneless beef.) Cutting and boning must be done by highly skilled labor. Processing boneless beef into attractive, appetizing products requires more time, labor, equipment, and supplies. These extra costs increase the spread in prices between the live animal and the finished product.

Why do we have \$1.10 steak from 29-cent cattle? There are three main reasons:

1. Only 59 percent of a choice steer is carcass beef.
2. Only a small portion of the carcass is steak.
3. Buying, slaughtering, processing, selling, and delivering costs make the difference in price between beef on the hoof and meat on the table.

About 15 percent of the consumer's dollar, or half of the total farm-to-retail marketing margin, would have gone for retailing. The packer-wholesaler's share was 11 percent, including 5 percent for transportation of the beef carcass. The remaining 4 percent was for livestock marketing costs such as trucking, commissions, and yardage.

ESTIMATED MARKETING AND FEEDING COSTS AND NET RETURNS

Return to Farmer —

Sale value of 545 lb (shrink deducted) U. S. Good Grade steer at Lexington, October 1959, at \$29 per 100 lb	\$152.60
Less marketing expenses:	
Trucking expenses from farm to market	\$0.12 cwt
Expense at auction market, including yardage, etc.	2.16
Total marketing expense to farmer	2.28
Gross return to farmer	\$150.32

Return to Feeder —

Sales value of 950 lb (shrink deducted) U. S. Choice Grade fed steer at Indianapolis, June 1960, at \$28 per 100 lb	\$266.00
Less marketing expense:	
Trucking expense from Indiana feedlot to Indianapolis \$	1.82
Expense at Indianapolis livestock terminal market including commission, yardage, etc.	2.45
Total marketing expense to feeder	4.27
Received by feeder from sale of fed steer	\$261.73
Cost of 545 lb U. S. Choice Grade fed steer at Lexington, October 1959, at \$29 per 100 lb	\$152.60
Expense of shipping feeder steer by truck from Lexington to Indiana feedlot	2.98
Total Cost	\$155.58
Gross return to feeder	\$106.15
Estimated Net Return to Feeder:	
Gross return to feeder	\$106.15
Less feeding cost	\$ 86.20
Miscellaneous (medicine, sprays, veterinarian)	2.00
Labor	2.40
Total Feeding Costs	\$ 90.60
Net return to feeder above feed, labor, misc. costs	5.55

Return to Packer-Wholesaler —

Sales value of 561 lb U. S. Choice Grade beef carcass (950 lb live weight), New York City, June 1960, at \$43.20 per 100 lb	\$242.35
Less expenses of shipping beef carcass from Indianapolis to New York City	14.05
Net received from sale of beef carcass	228.30
Cost of 950 lb U. S. Choice Grade fed steer at Indianapolis, 1960, at \$29.10 per 100 lb	\$266.00
Value of by-products	\$ 29.16
Value of live steer less by-products	\$236.84
Gross return to packer-wholesaler	-8.54

Return to Retailer

Sales value of 443 lb of retail cuts of beef including allowance for the sale of bones, fat, and waste (June 1960) from 561 lb beef carcass	\$272.60
Less cost of 561 lb U. S. Choice Grade beef carcass delivered at New York City	242.35
	\$ 30.25

Estimated Distribution of Consumer's Dollar Spent for Beef

Retailing	Percent	14.9
Wholesaling and meatpacking	Percent	
Transportation	5.4	
Other	5.6	
		11.0
Marketing Livestock		
Expenses at markets	1.6	
Transportation	2.3	
		3.9
Returns to cattle feeder		38.0
Returns to farmer		32.2
		100.0



Cooperative Extension Work in Agriculture and Home Economics: College of Agriculture and Home Economics, University of Kentucky, and the United States Department of Agriculture, cooperating. Frank J. Welch, Director. Issued in furtherance of the Acts of May 8 and June 30, 1914.

20M-9-60



GRC



UNIVER