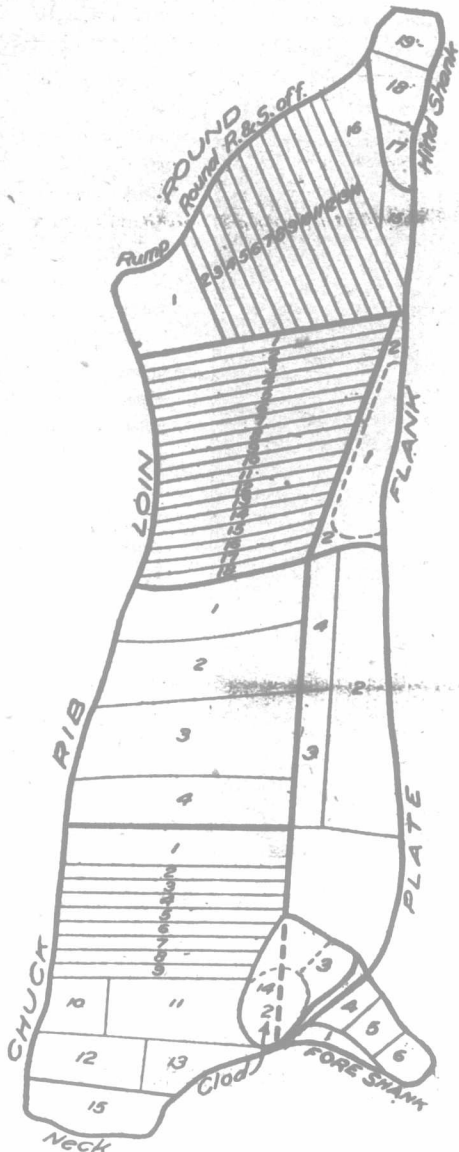


Cost of lean and of total meat in the straight wholesale cuts at market prices:

Straight wholesale cuts.	Wholesale price pound of cut.	Cost per pound of lean in cut.	Cost per pound of total meat in cut.
	Cents.	Cents.	Cents.
Loin	18.5	31.6	20.5
Rib	15.0	27.1	17.5
Round	11.5	17.8	13.9
Chuck	9.5	13.7	10.8
Plate	8.8	15.8	8.7
Flank	8.0	22.0	8.0
Fore shank	5.0	10.5	8.4

The net cost per pound of lean is, in general, greatest in the cuts which command the highest prices, and vice versa. The flank is an exception to this rule, and the chuck is more economical in this respect than the plate. Referring to the last column, it is also observed that the more expensive the cut the greater the cost per pound of visible fat and lean combined, the flank being the only exception. From these figures it is apparent that food values of beef cuts do not correspond to their wholesale market prices, and that the cheaper cuts are by far the most economical sources of both lean and fat meat. On the whole, the different cuts vary more widely in net cost of food ingredients than in market price per pound of gross meat. The following discussion tends to confirm these statements.



Key to illustration.—Hind quarter—1, rump, round rump and shank off; 2, round steak, first cut; 3-13, round steaks; 14, round steak, last cut; 15, knuckle soup bone; 16, pot roast, hind shank. 17, 18, soup bones; 19, hock soup bone. Loin—1, butt and sirloin steak; 2, wedge-bone sirloin steak; 3, 4, round-bone sirloin steak; 5, 6, double bone sirloin steak; 7, hip-bone sirloin steak; 8, hip-bone porterhouse steak; 9-15, regular porterhouse steak; 16-18, club steaks. Flank—1, flank steak; 2, stew. Fore quarter—Rib: 1, 11th and 12th rib roast; 2, 9th and 10th rib roast; 3, 7th and 8th rib roast; 4, 6th rib roast. Chuck: 1, 5th rib roast; 2-9, chuck steaks; 10-13, pot roasts; 14, clod; 15, neck. Plate—1, brisket; 2, navel; 3, 4, rib ends. Fore shank—1, stem; 2, knuckle, soup bone; 3-6, soup bones.

RETAIL CUTS

Loin cuts.—Loin steaks average 59 per cent lean, 32 per cent visible fat, and 9 per cent bone. Sirloin steaks in general contained a greater pro-

portion of lean and smaller proportion of fat than porterhouse and club steaks.

Rib cuts.—Ribs roasts contained, on the average, 55 per cent lean, 30 per cent visible fat, and 15 per cent bone. The greatest percentage of lean was found in the sixth rib roast, and the smallest in the eleventh and twelfth rib cut.

Round cuts.—The various cuts made from the round averaged 65 per cent lean, 18 per cent visible fat, and 17 per cent bone. Round steaks contained 74 to 84 per cent of lean, the rump roast 49 per cent, round pot roast 85 per cent, and soup bones 8 to 66 per cent. The maximum percentage of fat was found in the rump roast, and the maximum percentage of bone in the hock soup bone.

Plate cuts.—The brisket, navel, and rib ends averaged 51 per cent lean, 41 per cent fat, and 8 per cent bone. The brisket and navel were similar in proportions of the different constituents, but the rib ends were slightly higher in percentage of bone and lower in lean.

Flank cuts.—The flank steak contains 83 per cent lean and 16 per cent fat; and the flank stew, 64 per cent lean and 35 per cent fat.

Fore shank cuts.—Soup bones from the fore shank varied from 17 to 69 per cent lean and from 25 to 75 per cent bone. The boneless shank stew contained 83 per cent lean and 17 per cent visible fat.

Retail trimmings.—Trimming the loin steaks reduced their weight 12 per cent, and the trimmings were about four-fifths fat and one-fifth bone. Round and chuck steaks were reduced but 5 per cent in weight by trimming, only fat being taken from the former as a rule and principally bone from the latter. Other cuts were materially affected by cutting off surplus fat and bone, were the rump, shoulder pot roast, and neck.

HOW THE PRICES COMPARE

From the proportions of lean, fat, and bone in the different cuts, their relative economy at retail market prices may be determined. The net cost of lean meat is an approximate index of the relative economy of steaks and roasts, since they are purchased and used primarily for the lean they contain; but in comparing boiling, stewing, and similar meats the cost of gross meat, or fat and lean combined, should be more largely considered, because the fat is more completely utilized, as in the case of meat loaf, hash, Hamburger, and corned beef. Soup bones, being valued for flavoring matter as well as for the nutritive substance they contain, are more difficult to compare with other cuts in respect to relative economy. They vary materially, however, in proportions of edible meat and waste, and should therefore be studied in this connection.

Cost of lean and of total meat in the various retail cuts at market prices:

Retail cuts.	Number in illustration	Retail price per pound of cut.	Cost per pound of lean meat in cut.	Cost per pound of lean and fat meat in cut.
		Cents.	Cents.	Cents.
Steaks:				
Porterhouse, hip bone..	8	25	38.6	28.9
Porterhouse, regular ..	10	25	40.2	27.2
Club steak	18	20	32.1	22.6
Sirloin, butt end	1	20	25.3	20.6
Sirloin, round bone	3	20	28.3	21.1
Sirloin, double bone	5	10	28.7	22.7
Sirloin, hip bone	7	20	32.3	24.2
Flank steak	1	16	19.3	16.0
Round, first cut	2	15	17.0	15.3
Round, middle cut	6	15	17.3	15.6
Round, last cut	14	15	19.3	16.0
Chuck, first cut	2	11	18.3	14.1
Chuck, last cut	9	12	15.7	13.1
Roasts:				
Prime ribs, first cut ..	1	20	40.5	22.9
Prime ribs, last cut ..	4	16	26.1	18.8
Chuck, fifth rib	1	15	22.8	17.3
Rump	1	12	19.4	12.8
Boiling and stewing pieces:				
Round pot roast	16	10	11.6	10.1
Shoulder clod	14	10	12.3	10.5
Shoulder pot roast ..	11	10	14.3	11.6
Rib ends	3	8	16.2	9.2
Brisket	1	8	15.0	8.7
Navel	2	7	12.8	7.7
Flank stew	2	7	10.9	7.1
Fore shank stew	1	7	8.5	7.0
Neck	15	6	8.5	7.0
Soup bones:				
Round, knuckle	2	5	26.3	12.5
Hind shank, middle cut	18	5	7.5	6.3
Hind shank, hock	19	5	62.5	26.6
Fore shank, knuckle ..	2	5	17.2	12.5
Fore shank, middle cut	4	5	12.5	9.4
Fore shank, end	6	5	28.8	20.0

Taking the net cost of the lean meat as a

basis of comparison, we learn from these data that the most expensive steaks at the prices given are the porterhouse cuts, followed by the club, sirloin, flank, round, and chuck steaks. Of the different roasts, the first-cut prime ribs are the most costly in terms of lean meat, and the rump roast is the most economical. The various boiling and stewing pieces furnish lean meat more economically at market prices than either the roasts or steaks, the rib ends and brisket being the dearer cuts of this class, while the neck and shank stews are relatively cheapest. Several of the soup bones are very economical sources of lean meat, particularly the middle cuts of both shanks, and only one of them is extremely expensive even on this basis. In general the wide variation between the various cuts in net cost of lean is remarkable, ranging from 7.5 cents in one of the soup bones to 40.5 cents in a prime rib roast, and up to 62.5 cents in the hock soup bone, the latter, however, being used primarily for its flavoring substance rather than for lean meat. It will be observed, also, that the market prices of the cheaper cuts correspond much more closely to their net cost of lean meat than is true of the higher-priced steaks and roasts.

The net cost per pound of gross meat, or lean and fat combined, varies much less as between the different cuts than does the net cost per pound of lean, because the proportions of total meat are more nearly uniform than the percentages of lean. The various steaks and roasts rank in substantially the same order as to relative economy on this basis as on the basis of lean meat. The rib roasts, however, are considered more economical as compared with the porterhouse and sirloin steaks, when all the edible meat is considered. The rump shows a very low cost per pound of edible meat, due to the large proportion of fat it contains; and a still further difference is noticed in the case of the rib ends, brisket, navel, flank, neck, and several of the soup-bone cuts. The stewing meats are generally the most economical sources of edible meat at these prices, while porterhouse steaks are the most expensive.

On the whole, the data clearly show that the cheaper cuts of beef are by far the most economical sources both of lean and of total edible meat, including fat and lean. No correlation exists between market values and the proportion of flavoring substances contained in various portions of the carcass, and cooking tests indicate that the proportion of waste and shrinkage is not necessarily greater in the cheaper than in the more expensive cuts. It is evident, therefore, that retail prices of beef cuts are determined chiefly by considerations other than their food values, such as tenderness, grain, color, general appearance, and convenience of cooking.

RELATIVE ECONOMY

There seems to be no relation between market prices and the percentages of fat, protein, extractives, and ash. The cheaper cuts appear to be as valuable, and in some cases, actually more so than the higher priced cuts from the standpoint of protein and of energy. These statements do not take into account the factors of tenderness nor the influence the degree of fatness may have upon the palatability of cooked meat. In purchasing meat for protein primarily, the neck, shanks, and clod are the most economical cuts; the plate, chuck, flank and round follow, with the rump, rib, and loin as the most expensive. From the standpoint of fuel value, the flank, plate, neck, and shank cuts are cheapest, while the rib, loin, and round are the most expensive. Considering both factors, protein and fuel values and along with these the adaptability of the meat for general use, the clod, chuck and plate are the most economical cuts at the retail prices given.

This data is not only valuable to consumers, but also to producers. A study of the prices paid for each cut shows distinctly where an animal should be strong and well-developed. Endeavor to feed the steer which the butcher demands.

Our Scottish Letter.

The chief topic here at present is the advent of the milking Shorthorn and the milking Ayrshire. No doubt there sounds something anomalous in writing of Shorthorns and Ayrshires, as if milking properties were rather unique qualifications in their case—but there is relevancy in the description, for milking had almost been forgotten by showyard patrons of both breeds. The necessities of the case, however, demanded recognition of the elementary fact that a Shorthorn cow which could not raise her own calf, was rather out of it, and that an Ayrshire cow which could not fill the pail, had rather failed in her mission to humanity. The boom in milking records has set in with a vengeance, and in both breeds, high figures are being paid for cows which yield over the 800 gallons, or, as you would put it, 8,000 lbs. of milk during a normal lactation period. At Lord Rothschild's sale a few days ago, 200 guineas apiece were paid for two two-