

FOR RELEASE  
OCT. 3, P. M.

# THE Livestock and Meat SITUATION

BUREAU OF AGRICULTURAL ECONOMICS  
UNITED STATES DEPARTMENT OF AGRICULTURE

LMS-7



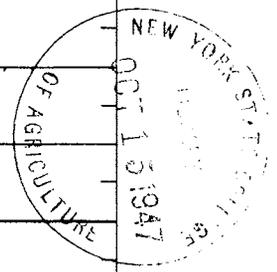
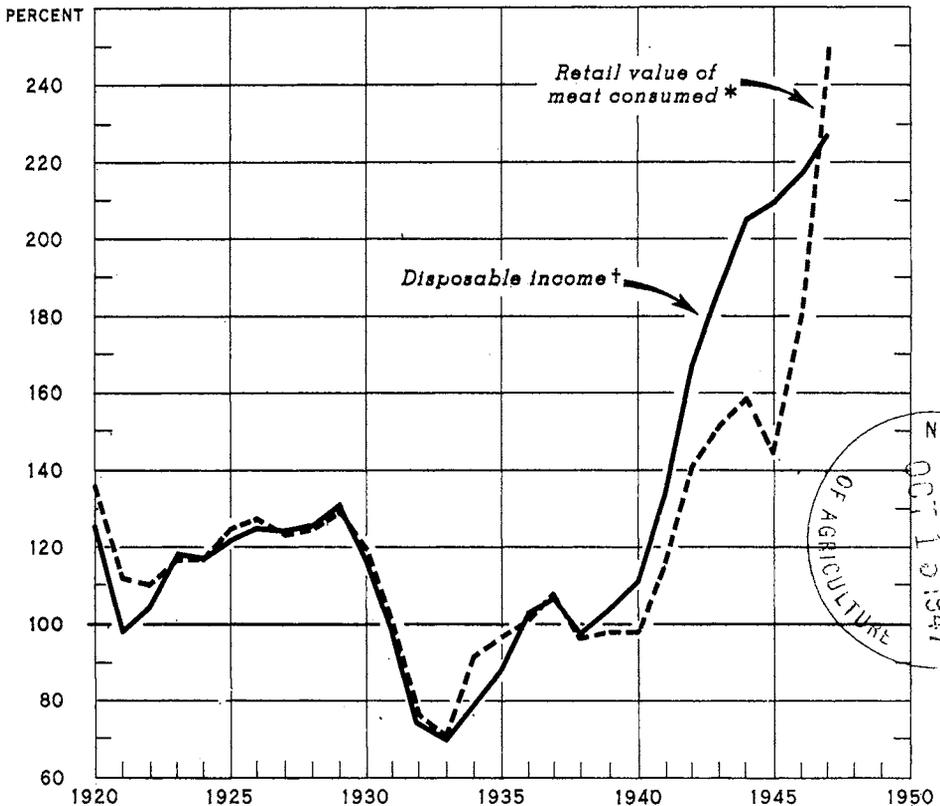
AUGUST-SEPTEMBER 1947

In this issue:  
RELATIONSHIP OF EXPENDITURES FOR MEAT  
TO CONSUMER INCOMES.

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RETAIL VALUE OF MEAT CONSUMED AND DISPOSABLE  
INCOME, PER PERSON, UNITED STATES, 1920-47  
INDEX NUMBERS (1935-39=100)

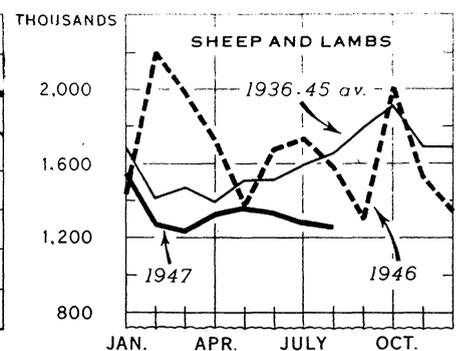
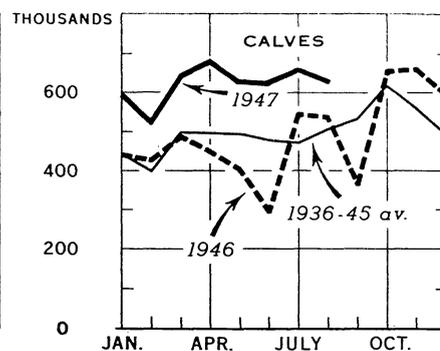
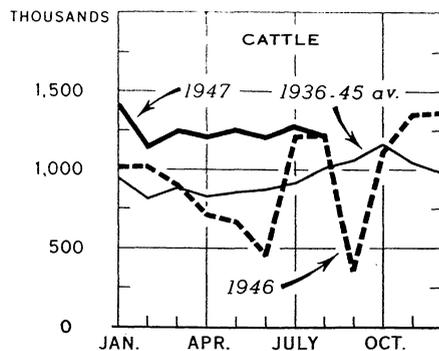
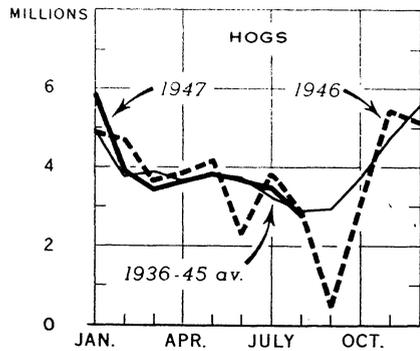


\*CALCULATED FROM TOTAL CONSUMPTION (CIVILIAN AND MILITARY) AND AVERAGE RETAIL PRICES  
†DEPARTMENT OF COMMERCE DATA 1929-46; FOR EARLIER YEARS, ESTIMATED  
DATA FOR 1947 ARE TENTATIVE INDICATIONS

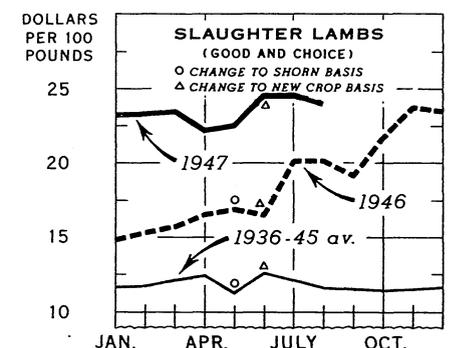
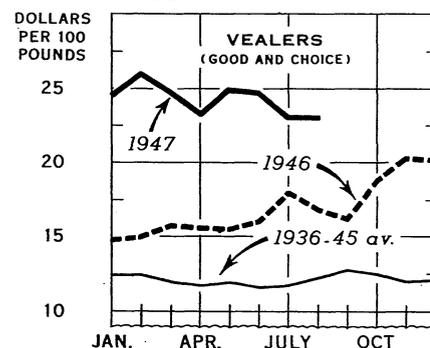
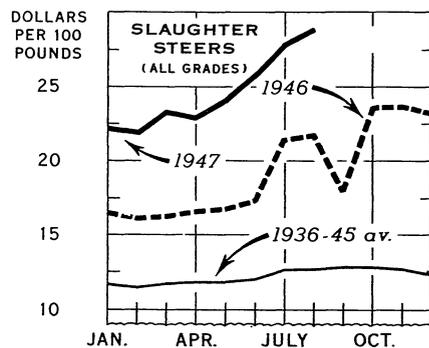
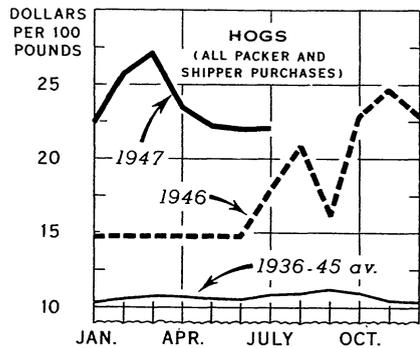
The value of meat consumed (quantity consumed times its retail value) has been closely related to consumer incomes except during and immediately following the war when prices were held down by price controls. Even though meat supplies per person in 1947 have been large, meat prices have pushed to new peaks by the strong demand resulting chiefly from record high consumer incomes. Expenditures for meat this year apparently are even greater than usual relative to consumer incomes.

# LIVESTOCK AND MEAT SITUATION

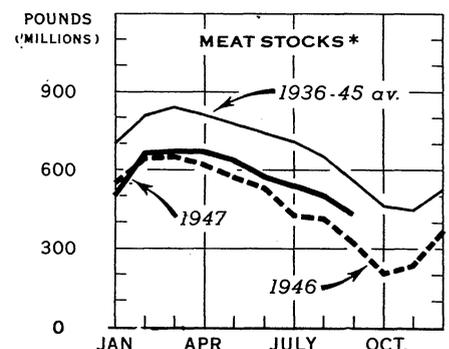
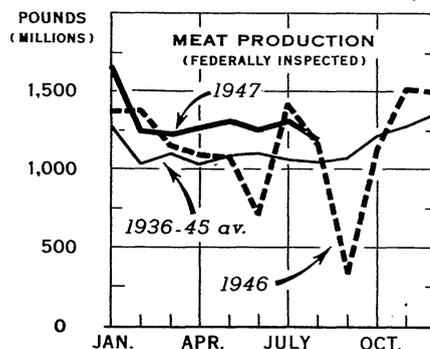
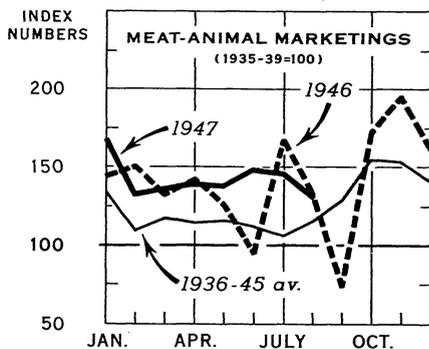
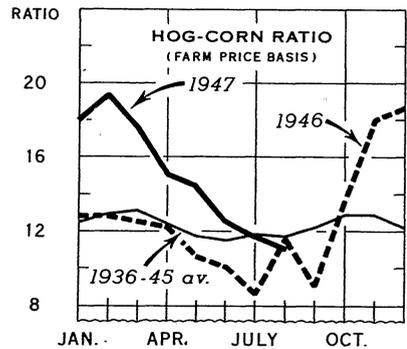
## FEDERALLY INSPECTED SLAUGHTER, UNITED STATES



## MARKET PRICES, CHICAGO



## HOG-CORN RATIO, MEAT ANIMAL MARKETINGS, MEAT PRODUCTION, AND STOCKS, UNITED STATES



\*BEEF, LAMB AND MUTTON, PORK, AND MISCELLANEOUS MEATS IN MEAT PACKING PLANTS AND COMMERCIAL COLD STORAGE HOUSES, BEGINNING OF MONTH

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THE LIVESTOCK AND MEAT SITUATION  
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Approved by the Outlook and Situation Board September 25, 1947

## SUMMARY

Despite large meat output for the month, meat and meat animal prices set new records in September. New high levels of consumer incomes are holding demand for meat unusually strong.

The value of the meat consumed in this country depends almost wholly on the amount of money people have to spend. People want to buy more meat and will spend more for meat as their incomes increase. This is shown by studies of the pre-war relation between disposable income per person--the amount of money left for spending and saving after personal taxes are deducted--and the value of meat consumed. This year, it is estimated that both disposable income and the estimated retail value of meat consumed per person will set new records.

Price changes in meat and meat animals during the next few months will chiefly reflect seasonal changes in slaughter supplies and meat output.

A moderate seasonal decline in hog prices through fall and early winter is expected as 1947 spring pigs are marketed in greatest volume. Little, if any, decline in prices of fed cattle are expected during the next few months in view of the small marketings in prospect. Prices of grass-fat cattle may decline moderately although they will be supported by a strong demand for slaughter. Prices of lambs are likely to increase again after the seasonal marketing peak, usually in October, is passed.

Meat production this fall and early winter is expected to be about equal to the large output a year earlier. Slaughter of cattle probably will continue large, although the number of fed cattle for slaughter will be relatively small because of the small number of cattle now on feed and this year's reduced grain harvest. More hogs may be slaughtered this fall and early winter than a year earlier, reflecting earlier marketings of the slightly larger number of pigs saved in the spring of 1947 than in 1946. But hogs may not be fed to as heavy weights as last fall and pork output may be smaller. The 1947 lamb crop was 9 percent less than last year and lamb slaughter this fall and winter will continue under that of a year earlier.

Total meat production this year probably will be about the same as last year (23 billion pounds dressed meat basis), and about a third greater than in 1937-41. Beef production will be considerably greater than last year and probably will be a new record. Hog slaughter for the year may total 2 to 3 million head less than last year's total. Sheep and lamb slaughter will be considerably under 1946 and will be the smallest since 1929.

(For release October 3, p.m.)

## OUTLOOK

Meat-Animal Prices Set New Highes; Seasonal  
Decline in Hog Prices in Prospect

Livestock prices reached new records in August and early September. Prices received by farmers for all meat animals in mid-August averaged slightly higher than the previous record of last March, almost 19 percent higher than in August 1946 just before price controls were reimposed, and 52 percent higher than in May 1919, the peak reached after World War I. Prices were even higher in mid-September.

Farmers' prices for beef cattle averaged a record \$20.20 per hundred pounds in mid-September. Cattle prices have been rising almost steadily for nearly 2 years and continued to advance in late August and early September. The increase from January to September this year was greater than from June 1946, when price controls were in effect, to November 1946, the peak after they had been removed.

Exceptionally strong demand for slaughter cattle in mid-September held prices of stockers and feeders high, especially the heavy, well-fleshed kinds. Because of a continued strong demand for beef, prices of the better grades of fed cattle are likely to decline less than seasonally as cattle marketings increase this fall. The supply of grain-fed cattle for market this fall and early winter probably will be one of the smallest in several years. If an unusually large proportion of soft and wet corn is harvested this fall as in 1945, demand for feeding stock may be increased. But with the reduced supply of feed grains for the next feeding year, feeders are likely to purchase heavier cattle than usual and feed them for a shorter period. With reduced feed supplies, they may also reduce the number fed as well.

A moderate seasonal decline in hog prices is in prospect which may last through December. Last year, prices of barrows and gilts at Chicago declined \$2.62 per hundred pounds from the high in November to the low in the third week in December. This was about the average decline for that season. This year's spring pig crop was slightly greater than last year. Because of the short corn crop, marketings are expected to be earlier with a larger proportion marketed in October-December than in that quarter a year ago. However, reduced market weights are in prospect and pork output this fall may be less than a year earlier.

In mid-September, prices of barrows and gilts and sows at Chicago were higher than in either March 1947 or in late 1946. Average prices of butcher hogs at Chicago advanced around \$6.40 per hundred pounds from May to mid-September this year. The increase in sow prices was slightly greater.

Prices of good and choice slaughter lambs at Chicago set a new record of \$25.75 per hundred pounds during the week ending July 19. In early September, prices were almost as high as the July peak. Prices in early September were considerably above those being received for fed lambs last January-March, and above those in late 1946, after price controls ended. Stocker and feeder lamb prices in early September were the highest of record.

Prices of lambs are likely to increase again after the peak in slaughter has been reached this fall. Fewer lambs are on hand for feeding or slaughter in the remainder of 1947 and in early 1948 than a year earlier. Demand for feeding lambs will depend in part upon winter wheat pasture conditions in the Great Plains.

1947 Beef Output Greatest on Record;  
Fall Hog Slaughter to be  
Greater Than in 1946

Meat production this year probably will total around 23 billion pounds, dressed meat basis, about the same as in 1946, and almost a third greater than the average for 1937-41. Cattle slaughter this year is setting a new high record. Beef production is likely to exceed the previous record of 10.3 billion pounds in 1945, and will be substantially greater than the 1946 production of 9.4 billion pounds. Calf slaughter will be greater than in 1946, but probably will not come up to that of either 1944 or 1945, the two largest years on record. On the other hand, hog slaughter this year will be perhaps 2 to 3 million head below 1946. Pork output will probably be the smallest since 1941. Lamb and mutton production for the year probably will be around 200 million pounds less than the 970 million pounds produced in 1946, and the smallest since 1929.

Total meat production in the first quarter of 1947 apparently was less than a year earlier. But in the second and third quarters output substantially exceeded the same periods of 1946. Cattle slaughter under Federal Inspection during July was a record for the month. In August, however, slaughter was 2 percent below August 1946 and the smallest for the month since 1943. The small number of cattle on grain feed and the delayed movement of grass cattle accounted for the relatively small slaughter in August. A record number of calves were killed under Federal inspection in July. In August, calf slaughter was exceeded only in 1944. Last year, slaughter of cattle was large during July and August when price controls were temporarily removed.

It now appears that total meat output in the final quarter of 1947 will be moderately less than a year earlier and the smallest since 1942. The number of hogs slaughtered probably will be at least as large as a year earlier. Pork production is expected to be less, however, because hogs will be marketed at lighter weights because of the reduced corn crop. Sheep and lamb slaughter probably will continue less than a year earlier, chiefly because fewer lambs were raised this year. But calf slaughter in October-December may exceed the large slaughter of late 1946. Slaughter of beef-type calves is expected to continue unusually large. Current trends in cattle slaughter suggest that beef production in the fourth quarter this year may also be greater than in that period of 1946.

Fed Cattle Marketings to be Small

Because of reduced feed supplies and the smaller number of cattle on feed for market, there will be a relatively small number of fed cattle slaughtered during 1948. The decrease from a year earlier in marketings of these cattle will be most pronounced during the summer and early fall.

January-June shipments of stocker and feeder cattle to 8 Corn Belt States were 19 percent greater than a year earlier. July shipments, however, were 11 percent less than the large shipments of July 1946, but were greater than for any other July of record. Shipments of stocker and feeder cattle to 8 Corn Belt States in August were 39 percent less than a year earlier.

Table 1.- Meat animal prices per 100 pounds, World Wars I and II  
(Monthly averages)

Commodity	Peak	Beginning	End	After removal:		September
	World War I period	World War II September 1939	World War II August 1945	of price controls November 1946 1/	Recrod high prices	1947, average 3 weeks
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
<u>Chicago:</u>						
Corn Belt Beef Steers:						
Choice and Prime		10.85	17.25	32.40	32.40 (Nov. 1946)	32.76
Good		10.20	15.98	25.63	28.27 (Aug. 1947)	29.49
Medium		9.00	13.38	19.63	24.30 (July 1947)	22.73
Common		7.22	11.23	15.30	20.13 (June 1947)	18.11
All grades		10.23	16.42	23.64	28.84 (Aug. 1947)	29.65
All purchases of hogs	21.85 (July 1919)	7.44	14.51	24.07	27.10 (Mar. 1947)	26.45
Barrows and gilts, all grades		7.77	14.75	24.19	27.36 (Mar. 1947)	28.21
Sows, all grades		6.93	14.00	23.23	24.45 (Mar. 1947)	24.59
Slaughter lambs, good & choice	19.37 (Feb. 1920)	9.73	14.32	23.67	24.46 (July 1947)	25.01
<u>Kansas City:</u>						
Stocker and Feeder Steers						
Average of all grades		8.02	13.08	16.30	21.91 (July 1947)	22.06
<u>Omaha:</u>						
Feeding Lambs, good & choice	2/17.03 (Feb. 1920)	8.33	14.53	17.77	21.31 (Aug. 1947)	22.86
<u>U. S. Price received by Farmers</u>						
Beef cattle	11.38 (Apr. 1919)	7.36	12.40	16.20	20.20 (Sept. 1947)	3/ 20.20
Veal calves	13.38 (Aug. 1919)	8.81	13.30	16.70	21.70 (Sept. 1947)	3/ 21.70
Hogs	20.12 (July 1919)	6.88	14.00	23.00	27.20 (Sept. 1947)	3/ 27.20
Sheep	12.25 (May 1918)	3.84	6.39	7.70	8.78 (May 1947)	3/ 8.62
Lambs	15.60 (Apr. 1918)	7.84	12.90	18.50	21.60 (Sept. 1947)	3/ 21.60

1/ Final decontrol of prices on October 15. 2/ Medium and choice. 3/ Price September 15.

Marketings of grass cattle this fall and winter apparently will be large. Slaughter of steers has been very large throughout this year. Cow and heifer slaughter under Federal inspection in January-July was the largest proportion of total cattle slaughter for the season since 1938. The large slaughter of all classes of cattle indicates that cattlemen are sharply reducing cattle numbers this year.

Hog-corn Price Ratio Below Average  
Sow Marketings Large

The hog-corn price ratio in early September was below the long-time average for the third month after having been unusually high from November 1946 to May 1947. The drop resulted from higher corn prices which have been at record levels, reflecting prospects for a small crop and strong demand.

The total supply of feed concentrates for the 1947-48 feeding season (October-September), according to September 1 crop conditions will be 141 million tons. This would be 13 percent less than the large 1946-47 supply and smaller than in other recent years, but slightly larger than the 1937-41 average. With fewer livestock to be fed than in recent years, the prospective supply per animal unit is moderately below the average for the past few years and equal to the 1937-41 average.

It is expected that the average slaughter weight of hogs will be lighter in the next 12 months than in the past year. However, slaughter weights may not reach the low pre-war levels. The average live weight of hogs slaughtered under Federal inspection was 230 pounds in 1936-40, 241 pounds in 1941, and reached a record of 265 pounds in 1945. In the first week of September this year the average weight of all hogs slaughtered under Federal inspection was 277 pounds, 22 pounds greater than the average of a year earlier. Part of the increased average weight this year is due to a larger-than-usual proportion of sows slaughtered.

The number of sows marketed during July and August apparently was the largest, relative to March-April farrowings, since at least 1943. In most years, peak farrowings of spring pigs occur in April with March being second high. Peak marketings and slaughter of sows usually occur in July or August. The number of sows sold at 7 markets in July this year was the greatest for any month since August 1943. Sow sales made up 41 percent of total hog sales at 7 markets in July compared with the 1938-42 average of 30 percent for that month. Through August and early September the number of sows marketed also continued large.

1947 Lamb Crop Smallest in 22 Years

The 1947 lamb crop totaled 22.4 million head, 2.3 million head less than the 1946 crop, 10.2 million less than the record 1941 crop, and the smallest in 22 years. Next year's lamb crop promises to be even smaller because of a further reduction this year in the number of ewes of breeding age.

Federally inspected sheep and lamb slaughter in the first 8 months of 1947 totaled 23 percent less than a year earlier. There were 20 percent fewer lambs and yearlings slaughtered and 46 percent fewer mature sheep slaughtered in January-July than a year earlier.

It now seems probable that fewer lambs will be fed this fall and winter than a year earlier. Most of the reduction in this year's lamb crop was in the Western Sheep States, the source of most of the lambs for feeding. In general, lambs in the Western States have made good gains this year and a larger-than-usual part of the crop will be in slaughter condition.

Shorn wool production in 1947 is estimated at 256 million pounds, 8 percent less than in 1946, and the smallest since 1925. Domestic output of wool this year will be less than one third of United States mill consumption of apparel wool. However, dealers and the Commodity Credit Corporation at the beginning of the present shearing season had enough domestic and foreign wool on hand in this country for about 9 month's consumption at the current rate.

Since 1942 domestic wool prices have been fairly stable as the CCC has purchased most of the United States production. The average price received by farmers for wool in August was 40 cents per pound. Wool prices in each of the past 6 years have been the highest since 1925.

#### RELATIONSHIP OF EXPENDITURES FOR MEAT TO CONSUMER INCOMES

By Grover J. Sims

The size and distribution of consumer incomes plays a very important part in the dollar value of meat purchased. With a given supply of meat the consumer demand for that meat--and thus its price--is determined largely by how much money people have and who has it. Consumers in the United States will spend the largest amount of money on record for meat in 1947. Individual and family incomes this year are by far the greatest on record. This has, in spite of large supplies, pushed meat prices steadily higher. Meat consumption per person has been at a near-record rate and promises to continue high through the remainder of 1947.

##### Incomes and the Retail Value of Meat Consumed

Consumer purchase studies show that as consumer incomes rise demand for meat increases. More so than for most other foods. Studies of the relationship between the estimated total retail value of meat consumed and disposable incomes in 1920-41 indicate that for each 1 percent increase or decrease in total disposable income there was an increase or decrease of .7 percent, at the mean, in the retail value of meat consumed. 1/ Similar results are obtained in analysis

1/ The coefficient of simple correlation between the retail value of meat consumed ( $X_1$ ) and disposable income for 1920-41 ( $X_2$ ) is .92. The regression equation based on this analysis--all data in billions of dollars--is:

$$X_1 = 1.026 + .042 X_2$$

The standard error of estimate is .206 billion dollars (equal to 5 percent at the mean value of  $X_1$  of 3.85 billion dollars).

of the relationship of the retail value of meat consumed per person to disposable income per person during that period. An increase or decrease of 1 percent in disposable income per person was associated with a change of .8 percent in the same direction in the retail value of meat consumed per person. 1/

Since annual data are not available for total retail meat purchases, estimates were made of the retail value of meat consumed. This was done by using data on total meat consumption (civilian and military) wholesale dressed meat basis converted to a retail weight basis by multiplying with the following factors: Beef, .79; veal, .91; lamb and mutton, .89; and pork, .93. 2/ The value of these quantities was then obtained by using the retail prices reported in USDA Misc. Publ, No. 576. 3/ Because there are no separate price series for veal or mutton, the quantity of veal consumed was valued at beef prices and mutton was valued at lamb prices. Meat consumed on farms where produced was valued at average retail prices as was meat consumed in restaurants and other eating places. The prices reported for the later war years probably do not make adequate allowance for all of the meat purchased at above ceiling prices. Despite the limitations of the data used, the calculated value of meat consumed at retail probably is reasonably close to the total expenditure for red meat in the years shown, except for some downward bias in the later war years.

In most years from 1920 through 1939, the calculated retail value of meat consumed was 5 to 6 percent of total disposable income. After 1940, however, disposable incomes increased at a much more rapid rate than the retail value of meat consumed. Meat prices were held down by controls during and immediately after the war. The quantity of meat for civilians was limited by rationing and by very large exports. As a result, the value of meat consumed in 1945 was only 3 to 4 percent of total disposable income. After the end of price controls in 1946, the proportion of incomes spent for meat increased sharply, and in 1947 consumers apparently are spending a much larger percentage of their incomes for meat than during any year since at least 1934.

1/ The coefficient of simple correlation between the retail value of meat consumed per person ( $X_1$ ) and disposable income per person for 1920-41 ( $X_2$ ) also is .92. The regression equation based on this analysis--all data in dollars--is:

$$X_1 = 5.107 + .048 X_2$$

The standard error of estimate is \$2.00 (equal to 6 percent of the mean value of  $X_1$  of \$31.54).

2/ Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products, U.S.D.A., Production and Marketing Administration, Washington, D. C., 1947, page 20.

3/ Price Spreads Between Farmers and Consumers for Food Products, Washington, D. C., 1945, current prices are reported in the Marketing and Transportation Situation.

Table 2.- Total disposable income and estimated retail value of meat consumed, United States, 1920-47

Year	Disposable income		Retail value of meat consumed 1/							
	2/		Amount					Index numbers (1935-39=100)		
	Index numbers (1935-39=100)		Beef and veal	Lamb and mutton	Pork and lard	Total	Beef and veal	Lamb and mutton	Pork and lard	Total
	Bil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.				
1920	69.2	103.9	1,908	199	2,133	4,240	100	96	130	113
1921	55.0	82.6	1,571	192	1,773	3,536	82	93	108	94
1922	59.1	88.7	1,598	179	1,755	3,532	84	86	107	94
1923	68.3	102.6	1,710	189	1,912	3,811	90	91	116	101
1924	69.1	103.8	1,793	192	1,928	3,913	94	93	117	104
1925	73.1	109.8	1,897	202	2,126	4,225	99	97	129	112
1926	75.8	113.8	1,977	216	2,166	4,359	104	104	132	116
1927	76.1	114.3	1,888	215	2,169	4,272	99	104	132	114
1928	78.1	117.3	1,948	229	2,203	4,380	102	110	134	116
1929	82.5	123.9	2,092	242	2,243	4,577	110	117	136	122
1930	73.7	110.7	1,929	248	2,102	4,279	101	120	128	114
1931	63.0	94.6	1,609	222	1,796	3,627	84	107	109	96
1932	47.8	71.8	1,296	170	1,338	2,804	68	82	81	74
1933	45.2	67.9	1,238	148	1,213	2,599	65	71	74	69
1934	51.6	77.5	1,735	171	1,451	3,357	91	82	88	89
1935	58.0	87.1	1,863	202	1,520	3,585	97	97	92	95
1936	68.3	102.5	1,907	204	1,671	3,782	100	98	102	101
1937	71.1	106.7	2,093	217	1,749	4,059	110	105	106	108
1938	65.5	98.3	1,808	210	1,633	3,651	95	102	99	97
1939	70.2	105.4	1,876	204	1,655	3,735	98	98	101	99
1940	75.7	113.7	1,903	203	1,660	3,766	100	98	101	100
1941	92.0	138.1	2,281	227	1,979	4,487	119	109	120	119
1942	116.2	174.5	2,784	289	2,468	5,541	146	139	150	147
1943	131.6	197.6	2,727	304	3,007	6,038	143	147	183	161
1944	146.0	219.2	2,991	301	3,087	6,379	157	145	188	170
1945	150.7	226.3	3,026	325	2,533	5,884	159	157	154	156
1946	158.4	237.8	3,522	357	3,546	7,425	184	172	215	197
1947 3/	168.0	252.3	5,559	387	4,881	10,827	291	187	296	288

1/ Consumption (civilian and military) of different types of meat converted to a retail weight and multiplied by retail price of each type to obtain retail value.  
 2/ 1920-28 Bureau of Agricultural Economics estimates based on national income data published by the Department of Commerce; 1929 to date, published estimates of the Department of Commerce.  
 3/ Partly forecast.

Table 3.- Disposable income per person and estimated retail value of meat consumed per person, United States, 1920-47

Year	Disposable income		Retail value of meat consumed per person 1/							
	2/		Amount per person				Index numbers (1935-39=100)			
	Per person	Index numbers (1935-39 = 100)	Beef and veal	Lamb and mutton	Pork and lard	Total	Beef and veal	Lamb and mutton	Pork and lard	Total
	Dol.		Dol.	Dol.	Dol.	Dol.				
1920	645	125.7	17.8	1.8	19.9	39.5	121	112	157	136
1921	503	98.1	14.4	1.8	16.2	32.4	98	112	128	112
1922	533	103.9	14.4	1.6	15.9	31.9	98	100	125	110
1923	606	118.1	15.2	1.7	16.9	33.8	104	106	133	117
1924	601	117.2	15.6	1.7	16.8	34.1	106	106	132	118
1925	627	122.2	16.3	1.7	18.2	36.2	111	106	143	125
1926	642	125.1	16.7	1.8	18.4	36.9	114	112	145	127
1927	635	123.8	16.8	1.8	18.1	35.7	108	112	142	123
1928	644	125.5	16.0	1.9	18.2	36.1	109	119	143	125
1929	673	131.2	17.1	2.0	18.3	37.4	116	125	144	129
1930	595	116.0	15.6	2.0	17.0	34.6	106	125	134	119
1931	505	98.4	12.9	1.8	14.4	29.1	88	112	113	100
1932	381	74.3	10.3	1.3	10.7	22.3	70	81	84	77
1933	358	69.8	9.8	1.2	9.6	20.6	67	75	76	71
1934	406	79.1	13.7	1.3	11.4	26.4	93	81	90	91
1935	453	88.3	14.5	1.6	11.9	28.0	99	100	94	97
1936	530	103.3	14.8	1.5	13.0	29.3	101	94	103	101
1937	549	107.0	16.1	1.7	13.5	31.3	110	106	106	108
1938	501	97.6	13.8	1.6	12.5	27.9	94	100	98	96
1939	533	103.8	14.2	1.6	12.6	28.4	96	100	99	98
1940	570	111.1	14.4	1.5	12.5	28.4	98	94	98	98
1941	686	133.7	17.0	1.7	14.8	33.5	116	106	116	116
1942	858	167.3	20.6	2.1	18.2	40.9	140	131	143	141
1943	958	186.7	19.8	2.2	21.9	43.9	135	138	172	152
1944	1,051	204.9	21.5	2.2	22.2	45.9	146	138	175	158
1945	1,073	209.2	21.6	2.3	18.0	41.9	147	144	142	145
1946	1,115	217.3	24.8	2.5	25.0	52.3	169	156	197	180
1947 3/	1,165	227.1	38.6	2.7	33.8	75.1	263	169	266	259

1/ Consumption (civilian and military) of different types of meat converted to a retail weight and multiplied by retail price of each type to obtain retail value.

2/ 1920-28 Bureau of Agricultural Economics estimates based on national income data published by the Department of Commerce; 1929 to date, published estimates of the Department of Commerce.

3/ Partly forecast.

The total value of meat consumed in 1947 will exceed that of 1946 by a wide margin, and will be the highest of record. Retail meat prices are higher in 1947 than the previous record in 1946. Meat consumption (civilian and military) in 1947 is expected to average around 135 pounds per person, retail weight, which would be the lowest for any year since 1942 but higher than any year from 1920 through 1942.

The estimated value of meat consumed varies more with changes in prices than with changes in quantities consumed. Most of the variations in meat prices result from changes in consumer incomes and spending. Consumption depends principally on the quantity produced which, over the short run, is relatively stable. The extreme range in annual meat consumption, retail basis, from 1920 through 1946 was 12.6 to 21.0 billion pounds. The extreme range in the average price of meat consumed during that period was 17.5 to 38.5 cents per pound. Moreover, in many of the years when meat consumption was above average, especially since 1941, the average retail price of meat also was above average.

Table 4.- Weighted average retail price per pound of meat consumed and total quantity of meat consumed, United States, 1929-47

Year	Average retail price		Consumption	
	Per pound	Index	Retail weight	Index
		numbers		numbers
: (1935-39 = 100) :		: (1935-39 = 100) :		
	Cents		Mil. lb.	
1920	33.8	126	12,553	88
1921	28.0	105	12,636	90
1922	26.9	101	13,151	93
1923	26.5	99	14,361	102
1924	26.7	100	14,638	104
1925	30.0	112	14,077	100
1926	31.1	116	14,028	99
1927	30.6	114	13,975	99
1928	31.5	118	13,888	98
1929	32.8	123	13,975	99
1930	30.8	115	13,881	98
1931	25.6	96	14,183	101
1932	19.5	73	14,347	102
1933	17.5	65	14,858	105
1934	20.9	78	16,049	114
1935	28.0	105	12,797	91
1936	26.7	100	14,176	100
1937	28.9	108	14,069	100
1938	25.5	95	14,302	101
1939	24.6	92	15,213	108
1940	22.9	86	16,431	116
1941	26.9	101	16,695	118
1942	31.4	117	17,664	125
1943	32.0	120	18,851	134
1944	30.3	114	21,037	149
1945	30.3	113	19,408	138
1946	38.5	144	19,296	137
1947 <sup>1/</sup>	55.5	208	19,510	138

<sup>1/</sup> Partly forecast.

Consumer Purchase Studies Show Demand for  
Meat Increases as Incomes Increase

Consumer purchase studies have indicated that meat purchases and consumption increase as family incomes increase. 1/ The most recent comprehensive study of this type, was conducted in the spring of 1942 before rationing and price controls went into effect. 2/ Data on meat consumption from this survey are summarized in tables 6 and 7. Urban families with incomes ranging from \$500 to \$999 consumed 1.81 pounds of meat per person per week, valued at 54 cents. Those with incomes of \$2,000 to \$2,499 consumed 2.45 pounds of meat per person in a week, valued at 87 cents. Those with incomes of \$5,000 to \$9,999 consumed an average of 2.68 pounds per person per week, which was valued at \$1.02.

If these income-consumption relationships hold, the present unusually strong demand for meat is understandable when present incomes are compared with those of 1942. Disposable income per person was estimated to be \$858 in 1942 and \$1,115 in 1946. Disposable income this year will be close to \$1,165 per person. Almost one-third of the families in the United States in the spring of 1942 had family incomes of less than \$1,000, 48 percent had incomes of \$1,000 to \$3,000, and 19 percent had incomes of \$3,000 or more. Data on the distribution of family incomes in 1946 indicate that 15 percent of all families had annual incomes of less than \$1,000 42 percent had incomes of \$1,000 to \$3,000 and 43 percent had incomes of \$3,000 or more.

(Concluded on back page.)

Table 5. - Distribution of family incomes United States,  
Spring 1942 and 1945-46

Annual net money income class	Spring 1942	1945	1946
	Percent	Percent	Percent
Under \$1,000	33	18	15
\$1,000 to \$1,999	27	22	20
\$2,000 to \$2,999	21	22	22
\$3,000 to \$3,999	--	17	18
\$4,000 to \$4,999	--	9	10
\$5,000 to \$7,499	--	8	9
\$7,500 and over	--	4	6
\$3,000 or over	19	--	--

Source: 1942, Family Food Consumption in the United States, U. S. Dept. of Agriculture Miscellaneous Pub. No. 550, page 3.

1945 and 1946, Survey of Consumer Finances, Part II. Consumer Incomes and Liquid Asset Holdings, Federal Reserve Bulletin, July 1947, page. 791.

1/ Within Limits, of course; families in the highest income classes probably do not increase meat purchases with increases in incomes.

2/ Family Food Consumption in the United States. U. S. Dept. of Agriculture Misc. Publication No. 550, Washington, D. C., 1944.

Table 6.- Meat: Average money value of meat consumed by kinds, per person per week by type of community and annual net money income class, housekeeping families and single persons, United States, Spring 1942

Type of community and annual net money: income class	Average value of meat consumed per person per week					
	All	Beef	Veal	Pork, includ- ing bacon	Lamb	Other <sup>1/</sup>
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
<u>Urban</u>						
All classes	.815	.335	.045	.278	.061	.096
0-499	.453	.130	.006	.260	.023	.034
500-999	.539	.216	.021	.208	.037	.057
1,000-1,499	.637	.251	.030	.234	.037	.085
1,500-1,999	.713	.300	.050	.247	.030	.086
2,000-2,999	.894	.378	.046	.288	.072	.109
2,000-2,499	.868	.377	.043	.288	.049	.111
2,500-2,999	.930	.379	.051	.288	.106	.106
3,000 or over <sup>2/</sup>	.964	.393	.060	.312	.089	.109
3,000-4,999	.942	.370	.058	.314	.092	.108
5,000-9,999	1.024	.458	.065	.308	.080	.113
<u>Rural non-farm</u>						
All classes	.500	.179	.009	.221	.020	.071
0-499	.307	.086	.004	.165	.004	.048
500-999	.399	.134	.005	.198	.008	.054
1,000-1,499	.460	.167	.005	.207	.024	.057
1,500-1,999	.583	.201	.013	.243	.018	.108
2,000-2,999	.645	.226	.017	.277	.027	.098
3,000 or over	.795	.371	.029	.278	.039	.078
<u>Rural farm</u>						
All classes	.489	.125	.005	.279	.009	.071
0-499	.342	.076	.007	.200	.002	.057
500-999	.463	.100	.002	.285	.005	.071
1,000-1,499	.583	.145	.000	.361	.005	.072
1,500-1,999	.726	.223	.005	.385	.029	.084
2,000-2,999	.711	.189	.018	.402	.014	.088
3,000 or over	.736	.296	.015	.271	.038	.116

<sup>1/</sup> Includes ground meat mixtures and special meat products as tripe, tongue, kidney, and other organs when it was not known whether they were beef, veal, pork or lamb.

<sup>2/</sup> Includes families with incomes of \$10,000 or over.

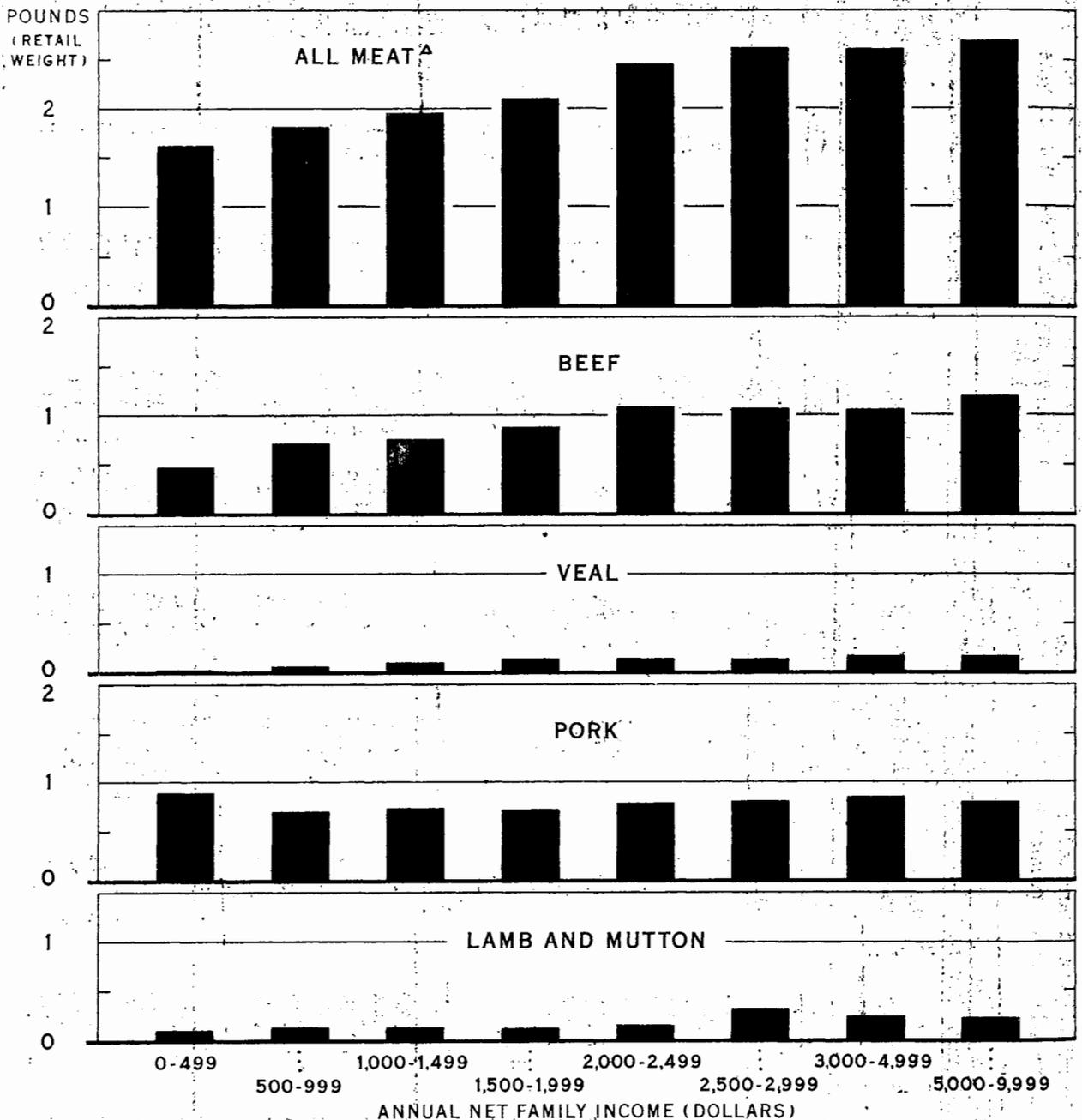
Source: Family Food Consumption in the United States, USDA Misc. Pub. No. 550, 1944

Table 7.- Meat: Average quantity consumed per person per week, and percentage distribution by type of community and annual net money income class, housekeeping families and single persons in the United States, spring 1942

Type of community and annual net money income class	Average quantity of meat consumed per person per week :							Percentage distribution				
	All	Beef	Veal	Pork, including bacon and salt sides	Lamb	Other <sup>1/</sup>	Total	Beef	Veal	Pork, including bacon and salt sides	Lamb	Other <sup>1/</sup>
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	pct.	pct.	pct.	pct.	pct.	pct.
<u>Urban</u>												
All Classes <sup>2/</sup>	2.33	0.97	0.12	0.78	0.19	0.27	100.0	42	5	33	8	12
0-499 <sup>2/</sup>	1.61	.46	.02	.89	.10	.14	100	29	1	55	6	9
500-999	1.81	.72	.06	.70	.13	.20	100	40	3	39	7	11
1,000-1,499	1.96	.76	.09	.73	.13	.25	100	39	4	37	7	13
1,500-1,999	2.10	.88	.14	.72	.12	.24	100	42	7	34	6	11
2,000-2,999	2.52	1.07	.13	.80	.22	.30	100	42	5	32	9	12
2,000-2,499	2.46	1.09	.14	.79	.15	.29	100	44	6	32	6	12
2,500-2,999	2.62	1.07	.13	.81	.31	.30	100	41	5	31	12	11
3,000 or over	2.64	1.13	.15	.83	.24	.29	100	43	6	31	9	11
3,000-4,999	2.60	1.06	.16	.85	.24	.29	100	41	6	33	9	11
5,000-9,999	2.68	1.20	.16	.80	.22	.30	100	45	6	30	8	11
<u>Rural, non-farm</u>												
All Classes <sup>2/</sup>	1.65	.59	.03	.73	.06	.24	100	36	2	44	4	14
0-499 <sup>2/</sup>	1.19	.32	.01	.63	.04	.19	100	27	1	53	3	16
500-999	1.41	.46	.02	.72	.03	.18	100	33	1	51	2	13
1,000-1,499	1.54	.54	.01	.68	.09	.22	100	35	1	44	6	14
1,500-1,999	1.90	.68	.04	.74	.06	.38	100	36	2	39	3	20
2,000-2,999	1.99	.70	.05	.86	.07	.31	100	35	2	43	4	16
3,000 or over	2.27	1.09	.09	.79	.11	.19	100	48	4	35	5	8
<u>Rural, farm</u>												
All Classes <sup>2/</sup>	1.71	.42	.02	1.00	.04	.23	100	25	1	59	2	13
0-499 <sup>2/</sup>	1.36	.27	.02	.84	.01	.22	100	20	1	62	1	16
500-999	1.65	.35	.01	.99	.02	.28	100	21	1	60	1	17
1,000-1,499	1.94	.46	.00	1.22	.02	.24	100	24	0	63	1	12
1,500-1,999	2.27	.76	.01	1.13	.11	.26	100	33	0	50	5	12
2,000-2,999	2.20	.63	.05	1.26	.04	.22	100	29	2	57	2	10
3,000 or over	2.28	.92	.04	.87	.11	.34	100	40	2	38	5	15

<sup>1/</sup> Includes ground meat mixtures and special meat products as tripe, tongue, kidney, and other organs where it was not known whether they were beef, veal, pork, or lamb. <sup>2/</sup> Includes families with negative incomes, not shown separately.

**AVERAGE QUANTITY OF MEAT CONSUMED PER PERSON PER WEEK BY CITY FAMILIES, BY INCOME CLASSES, UNITED STATES, SPRING 1942\***



SOURCE: FAMILY FOOD CONSUMPTION IN THE UNITED STATES, U. S. D. A. MISC. PUB. NO. 550, 1944

\*HOUSEKEEPING FAMILIES AND SINGLE PERSONS    ^INCLUDES EDIBLE OFFALS

Meat consumption per person increases as incomes increase. In early 1942, more beef and veal was purchased per person by families with moderately high incomes than those with lower incomes. Pork consumption showed much less tendency to increase as average incomes increased.

Livestock prices per 100 pounds (except where noted), marketings and slaughter statistics, by species,

PRICES

Item	Annual		January-August		1946		1947	
	Av. 1937-41	1946	1947	July	August	June	July	August
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
<b>Cattle and calves</b>								
Beef steers sold out of first hands, Chicago:								
Choice and prime	12.01	19.02	27.82	22.65	24.63	27.38	30.25	31.91
Good	10.52	17.48	25.13	19.86	20.73	25.72	27.64	28.27
Medium	8.94	15.65	22.00	17.09	16.60	23.40	24.30	21.96
Common	7.59	13.21	17.74	14.73	13.65	20.13	19.49	16.89
All grades	10.47	17.82	24.62	21.36	21.71	25.87	27.85	28.84
Good grade cows, Chicago	7.38	14.44	17.85	15.35	14.50	19.73	19.04	18.87
Vealers: Gd. and Ch., Chicago	10.34	15.90	24.28	17.97	16.83	24.68	23.07	23.08
Stocker and feeder steers								
Kansas City	8.36	15.24	20.28	15.53	15.51	21.11	21.91	21.22
Av. price received by farmers:								
Beef cattle	7.41	13.78	18.66	15.70	15.70	19.50	19.80	20.00
Veal calves	8.72	14.58	19.94	16.30	15.90	20.80	20.80	20.80
<b>Hogs</b>								
Av. market price, Chicago:								
Barrows and gilts	-	16.14	24.65	18.12	21.93	23.32	24.74	26.31
Sows	-	15.27	20.51	17.67	19.98	18.28	19.67	22.13
All purchases	7.97	15.93	23.61	17.94	20.84	22.06	22.11	23.74
Av. price received by farmers:								
Hogs	7.59	15.41	23.81	17.20	20.80	23.30	23.60	24.40
Corn, cents per bushel	62.9	138.0	217.6	196.0	180.0	185.0	201.0	219.0
Hog-corn price ratio, U. S. 1/	12.8	11.4	15.0	8.6	11.6	12.6	11.7	11.1
<b>Sheep and lambs</b>								
Lambs, gd. and ch., Chicago	9.82	16.98	23.44	20.07	20.06	24.40	24.46	23.88
Feeding lambs, gd. and ch., Omaha	8.70	2/ 15.43	2/ 20.34	3/ 16.33	16.53	-	-	21.31
Ewes, gd. and ch., Chicago	4.43	8.06	9.09	9.15	7.09	7.44	8.22	9.05
Av. price received by farmers:								
Sheep	4.20	7.05	8.31	8.14	7.14	8.40	8.56	8.56
Lambs	8.28	14.34	20.12	15.90	16.40	21.10	21.10	21.00
<b>Meat</b>								
Wholesale, Chicago:								
Steer beef, carcass (good, 500-600 lbs.)	16.09	24.12	39.06	34.23	38.30	40.75	43.46	46.40
Composite hog products	11.07	17.86	28.50	25.01	27.82	27.55	28.56	30.57
Lamb carcasses (good, 30-40 lbs.)	17.11	27.86	42.09	37.88	41.07	-	46.04	45.55
B.L.S. index retail meat prices 4/	100.9	144.3	-	173.7	186.6	216.9	220.2	-
Index income of industrial workers								
1935-39=100	120.4	254.8	-	273.1	289.9	317.8	312.1	-

Livestock Marketing and Slaughter Statistics

Item	Unit	1937-41	1946	1947	July	August	June	July	August
<b>Meat-animal marketings:</b>									
Index numbers (1935-39=100)	--	109	136	142	167	133	148	146	130
<b>Stocker and Feeder shipments to:</b>									
8 Corn Belt States									
Cattle and calves	Thous.	-	1,139	1,119	176	323	120	157	198
Sheep and lambs	Thous.	-	982	1,349	98	338	134	166	283
<b>Slaughter under Federal Inspection:</b>									
Numbers: 5/									
Cattle	Thous.	9,999	7,251	9,938	1,239	1,240	1,207	1,274	1,217
Calves	Thous.	5,371	3,581	4,966	542	534	621	656	628
Sheep and lambs	Thous.	17,609	13,706	10,589	1,738	1,578	1,329	1,280	1,253
Hogs	Thous.	41,225	30,274	30,434	3,863	2,843	3,653	3,455	2,731
<b>Average live-weight:</b>									
Cattle	lb.	933	964	6/ 935	923	917	926	922	6/ 910
Calves	lb.	191	181	6/ 193	232	239	206	222	6/ 228
Sheep and lambs	lb.	86	94	6/ 95	87	90	87	88	6/ 91
Hogs	lb.	234	259	6/ 266	290	263	273	288	6/ 291
<b>Meat Production:</b>									
Beef	Mil. lb.	5,002	3,749	6/ 4,971	606	594	599	622	6/ 594
Veal	Mil. lb.	597	362	6/ 535	69	70	71	81	6/ 83
Lamb and mutton	Mil. lb.	710	588	6/ 418	69	65	55	53	6/ 54
Pork (excluding lard)	Mil. lb.	5,530	4,622	6/ 4,522	668	426	556	551	6/ 465
<b>Storage stocks end of month:</b>									
Beef	Mil. lb.	-	-	-	64	95	106	94	99
Pork	Mil. lb.	-	-	-	300	169	353	332	265
Lamb and mutton	Mil. lb.	-	-	-	9	13	9	8	8
Total meat and meat products	Mil. lb.	-	-	-	440	351	597	549	477
<b>Percent packing sows are of Fed- orally inspected hog slaughter:</b>									
	Percent	-	13	-	31	30	17	33	-

1/ Number of bushels of corn equivalent in value of 100 pounds of live hogs. 2/ Average for prices for January, February, March, April, and August. 3/ Two week average price of feeding lambs. 4/ Meat, poultry and fish: Bureau of Labor Statistics, 1935-39=100. 5/ 1947 slaughter excludes Hawaii and Virgin Islands. 6/ Estimated from weekly data.

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The 1942 study reported greater per capita meat purchases in higher income classes than those having lower incomes. Meat purchases increased from the lowest through the \$5,000-9,999 income class, the highest reported. However, purchases of pork and lamb per person by city people were less for the \$5,000. to \$9,999 class than for the \$3,000 to \$4,999 group but this was more than offset by larger purchases of beef and veal by those in the upper income class.

Not only were the quantities of meat consumed larger among higher income groups, but families with larger incomes also purchased more expensive cuts and meat of higher quality. Dollar expenditures for meat therefore, showed a greater increase than the quantity purchased with each higher income group.

The results of this and other consumer purchase studies may be summarized with few exceptions, as follows. With larger family incomes pork consumption was larger, but tended to become a smaller proportion of all meat consumed. Beef and veal consumption, on the other hand, not only increased as incomes rose but tended to become a larger proportion of all meat consumed.

Consumer purchase studies tend to show that city people consume more meat per person than rural farm and nonfarm people who have the same incomes. Rural nonfarm people consume less than farmers. Within each income class, city families consume more beef and veal per person than either farmers or nonfarm rural people. City people also generally consume much more lamb than rural people who have the same income.

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