

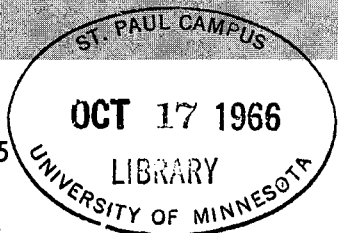
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FACT SHEET

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AGRICULTURAL ECONOMICS NO. 5

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U. S. LAMB CONSUMPTION PATTERNS

This fact sheet describes some important consumption and price patterns in the U. S. sheep industry. Only by knowing such information can Minnesota lamb producers and feeders effectively plan for the future of their industry.

CONSUMPTION AND COMPETITIVE POSITION

Despite great effort by sheep producers and the meat industry, lamb consumption on a per person basis declined over the past 16 years-- from an annual average rate of 4.3 pounds in 1950-55 to just 3.7 pounds in 1965. This consumption decrease represents approximately a 14-percent reduction (see table 1). During the same time, lamb prices changed little but the demand for lamb declined.

Over this 1950-65 period, the per capita consumption rate for all red meats and poultry increased 17 percent, mainly because beef consumption increased by 41 percent and poultry consumption by 52 percent. Per capita lamb consumption declined at a faster rate than pork consumption.

Although the future decline in lamb consumption may be slower than in the past, the current situation is cause for concern. Lamb and mutton consumption has lost ground to other meats. Lamb consumption, as a percentage of total meat consumption in 1965, was the lowest of the four red meats and poultry (table 1). While the competitive positions of veal and pork also declined, the positions of beef and poultry increased.

CONSUMPTION AND SLAUGHTER PATTERNS

Lamb has rather distinct areas of production and consumption, as do many agricultural products. And as is often the case, important slaughter areas are not major consumption areas. So some regions are deficit and others are surplus in lamb production.

By dividing the country into seven areas, a relative picture of both production and consumption patterns can be seen (table 2). Minnesota is in the West North Central area along with Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

Although the consumption data in the table are from 1954, the relative positions of these areas probably are still the same.

The two important lamb consumption regions are on the Atlantic and Pacific coasts. These two areas combined accounted for almost 75 percent of the total U. S. lamb consumption in 1954. This figure rises to 90 percent if the five states just west of the Atlantic seaboard also are included.

The variation in lamb consumption by areas as a percentage of the total can be explained both by variations in population and in per capita consumption. The bulk of the U. S. population is located on the two coasts, where per capita consumption also tends to be high.

Consumption in the West North Central region

Table 1. Average annual per capita consumption of meats, total and by classes, United States, 1950-65*

| Year | Veal | | Lamb | | Beef | | Pork | | Poultry | | Total |
|---------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|--------|-----------------------|---------|-----------------------|-------|
| | Pounds | Percent of total meat | Pounds | Percent of total meat | Pounds | Percent of total meat | Pounds | Percent of total meat | Pounds | Percent of total meat | |
| 1950-55 . . . | 8.5 | 5 | 4.3 | 2.4 | 70.2 | 40 | 67.3 | 38 | 26.5 | 15 | 176.8 |
| 1956-61 . . . | 7.1 | 4 | 4.6 | 2.3 | 84.2 | 44 | 63.9 | 33 | 33.7 | 17 | 193.5 |
| 1962 | 5.5 | 3 | 5.2 | 2.5 | 89.1 | 44 | 63.8 | 32 | 37.0 | 18 | 200.6 |
| 1963 | 4.9 | 2 | 4.9 | 2.3 | 94.5 | 46 | 65.5 | 32 | 37.5 | 18 | 207.3 |
| 1964 | 5.2 | 2 | 4.2 | 1.9 | 100.7 | 47 | 65.3 | 31 | 38.4 | 18 | 213.8 |
| 1965 | 5.2 | 3 | 3.7 | 1.5 | 99.3 | 48 | 58.9 | 28 | 40.3 | 19 | 207.4 |

*Data from Livestock and Meat Statistics, USDA, 1955, 1960, 1965.

Table 2. Distribution of consumption and commercial slaughter of sheep and lambs by geographic area, 1954 and 1964

| Area | Percentage of total | | |
|-------------------------------------|----------------------|-----------------------|-------------|
| | Consumption 1954* | Commercial slaughter+ | |
| | | 1954 | 1964 |
| Northeast | 50 | 16 | 13.6 |
| East North Central | 15 | 13 | 10.0 |
| <i>West North Central</i> | <i>3</i> | <i>30</i> | <i>28.0</i> |
| South | 3 | | 2.0 |
| West South Central | 2 | 8 | 11.5 |
| Mountain | 4 | 14 | 17.7 |
| Pacific | 23 | 19 | 17.2 |

*Data from Food Consumption Survey, USDA, 1955.
+Data from Livestock and Meat Statistics, USDA, 1955, 1960, 1965.

represented only 3 percent of the 1954 total. This situation, coupled with a sizable capacity for sheep and lamb slaughter in the region, makes the area a surplus producer.

Most of the sheep and lambs produced in the United States are slaughtered in the West North Central region (table 2). Therefore, a large percentage of the lambs slaughtered must be transported rather long distances in carcass form for consumption.

SEASONAL VARIATION IN CONSUMPTION

Production and slaughter of lamb vary markedly by seasons. And since little lamb is stored, a similar pattern of lamb consumption also exists.

The highest percentage of sheep and lambs are slaughtered during fall when lambs come from pasture in a finished condition (see table 3). Another peak occurs in January when finished lambs move out of Corn Belt feedlots.

Slaughter in Minnesota exhibits a more pronounced seasonal pattern than is the case nationally. Peak slaughter occurs in fall and early winter; a rather marked seasonal decline occurs during the summer months.

The variation in the seasonal index nationally means that availability of lamb for consumption varies by season. Variation in the index on a state basis means that supplies must move in or out of the state, depending on the season, in order to maintain a rather stable seasonal consumption pattern.

SEASONALITY IN LAMB PRICES

Sheep and lamb prices show some seasonal variation (see table 4). Based on the monthly index calculated for 1959-60, the peak price months are March and June. Prices usually are lowest from October through January.

The seasonal price variation tends to be less pronounced now than it was during the 1950's. Price peaks occurring in the spring months have been reduced, partly because of the increased sale

Table 3. Average seasonal index of commercial sheep and lamb slaughter, Minnesota and United States, 1960-64*

| Month | Index | |
|---------------------|-----------------------|------------------|
| | Minnesota seasonal | U.S. seasonal |
| January | 137 | 110 |
| February | 110 | 91 |
| March | 101 | 99 |
| April | 73 | 97 |
| May | 64 | 84 |
| June | 59 | 96 |
| July | 64 | 100 |
| August | 75 | 105 |
| September | 100 | 108 |
| October | 155 | 118 |
| November | 139 | 98 |
| December | 123 | 94 |
| Average | 100 | 100 |

*Data from Livestock and Meat Statistics, USDA, 1955, 1960, 1965.

Table 4. Seasonal index of slaughter lamb prices, United States, 1953-58 and 1959-64*

| Month | Index | |
|---------------------|---------|---------|
| | 1953-58 | 1959-64 |
| January | 101.6 | 85.0 |
| February | 104.0 | 102.3 |
| March | 108.0 | 105.9 |
| April | 106.6 | 104.7 |
| May | 104.0 | 104.1 |
| June | 101.1 | 106.9 |
| July | 101.5 | 104.7 |
| August | 97.9 | 102.5 |
| September | 94.8 | 101.2 |
| October | 91.9 | 98.4 |
| November | 93.8 | 86.0 |
| December | 94.0 | 98.0 |
| Average | 100.0 | 100.0 |

*Data from Livestock and Meat Statistics, USDA, 1955, 1960, 1965.

of lambs as spring lambs and increased feeding. These conditions spread out marketings over the year, eliminating part of the seasonal gluts and scarcities in supplies coming to market.

In Summary: The U. S. and Minnesota lamb industries display many geographic trends and seasonal patterns that characterize other agricultural commodities. Causing the most concern in the lamb industry is the low and declining per capita consumption of lamb by the U. S. population, particularly in the midwest. A separate study reported in Agricultural Economics Fact Sheet 6 points out some reasons for this trend in Minnesota.

Although a rather marked seasonal trend in prices used to exist, it has been fairly well evened out.