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The Soft Pork Problem in Oklahoma

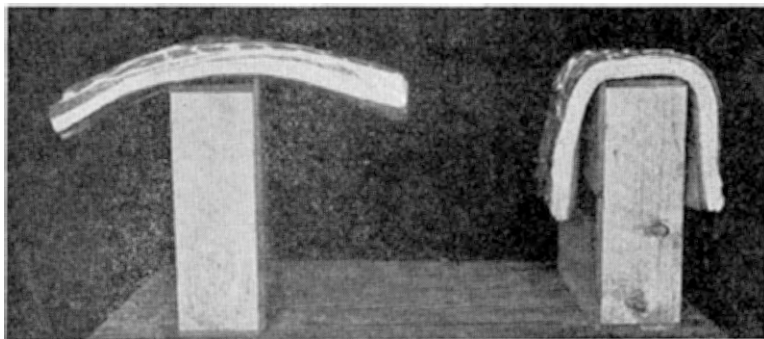
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Comparison of sides produced from a firm carcass (left) and that produced from a soft carcass (right)... These cuts were taken from hogs produced and marketed in Oklahoma. The cut on the right was taken from a hog finished on "softening feeds." Note the difference in the appearance of the two cuts. Which one would you prefer to buy?

THE SOFT PORK PROBLEM IN OKLAHOMA

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The problem of soft pork in Oklahoma is becoming a more perplexing one each year. Annually the producers in this state market a large number of hogs which produce what is commonly termed "soft pork."

Soft pork is caused by a lack of firmness in the fat which may be so pronounced as to produce a soft and even shapeless condition in the products of pork, which render such products unattractive, undesirable, and inconvenient to handle. Oily pork differs from soft pork only in degree of softness. Oily pork is so soft in character that it is greasy or oily in consistency even at normal refrigeration temperatures (33° to 35° Fahrenheit).

THE SOFT PORK PROBLEM CONCERNS MANY PEOPLE

The soft pork problem concerns the producer, processor, retailer, and consumer. The producer is interested in the problem for the reason that hogs producing soft pork must sell at a lower price than those producing firm pork. This difference in price varies a great deal. At most markets the difference will range from \$1 to \$3 per 100 pounds. This decided reduction in the price of hogs producing soft pork materially reduces the chances of making a profit.

The packers are interested in the problem because they must take a lower price for soft pork which they sell, and there is also a greater loss in weight of soft pork during processing. The lower dressing per cent resulting from soft pork also is an important factor from the standpoint of the processor.

According to records of tests made in killing plants in Oklahoma during the season when hogs grown on mast crops are normally marketed, it has been found that from 10 to 30 per cent of the entire kill consisted of soft or oily hogs. This season usually begins around February 1 and extends to June 1.

In certain specific instances, where hogs have been suspected of being produced solely or largely on mast feeds, and such hogs have been slaughtered and their carcasses kept separately in the chill rooms, it has been found that these carcasses were soft or oily. It naturally follows that all hogs from areas in which mast or other softening feeds are fed exclusively will be expected to produce soft or oily pork, with the result that processors will endeavor to buy such hogs on a protected basis.

One of the greatest difficulties in the problem lies in the fact that it is not possible to determine a soft hog on foot. In an attempt to cause the producers of soft hogs to bear the penalty for the low quality of such hogs, a number of meat processors have developed a plan of buying hogs "subject to test." Under this plan, hogs that are suspected of being soft are bought at a certain deduction under regular market prices. Following slaughter, the carcasses are inspected and if satisfactory in every respect, the full market price is paid. Another plan has been to designate certain areas as "soft hog territories," in which case all hogs from such regions are bought at a reduced price. Neither of these plans have been entirely satisfactory and have resulted in misunderstandings between producers and processors.

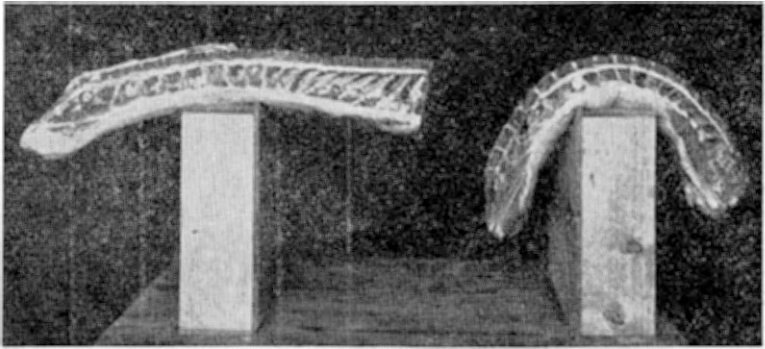
The packers are very much interested in developing a system whereby the producer of firm hogs will not have to suffer for the soft hogs produced by his neighbors, but to date no plan has been developed which appears to be satisfactory to all parties.

Since soft hogs are actually worth less than firm hogs, it is apparent that the producer should expect to receive a lower price when soft hogs are sent to market. Farmers have sometimes felt that the reduction in price for soft hogs has not been justified and has resulted in a greater profit to the processors, but, as a matter of fact, the processors are very much concerned with the soft pork problem and would be very glad to see a system developed whereby only firm hogs would appear at the central markets. In the meantime, however, it should work to the advantage of the producer to keep in mind the interests of both the processors and the consumers.

The retailer is interested in avoiding soft and oily pork products for the reason that they present a greasy, unattractive appearance; because of the difficulty in slicing bacon; and for the reason that there is a greater shrinkage in the case of soft pork products during the time they are being handled by the retail dealer. Lard from soft hogs is usually fluid at ordinary refrigerator temperature. It invariably lacks body and is unattractive in appearance. Sausage from soft pork will not hold its shape properly in retail packages.

The consumer avoids soft pork products because of their unattractive appearance and the great shrinkage or loss during the cooking process.

FIRM VS. SOFT PORK LOINS



Both of these cuts were taken from hogs produced in Oklahoma. The loin on the left was taken from a hog fed on feeds that do not cause soft pork, while the one on the right was taken from a "soft carcass," resulting from the feeding of "softening feeds."

THE CAUSES OF SOFT AND OILY PORK

Soft pork is a problem which involves fat metabolism in the animal body. The quantity of fat in feed suitable for fattening hogs varies widely. The fat which is deposited in the body resembles very closely the original fat in the feed. The softening or hardening quality of feed, together with the quantity of fat in the ration, has a very direct relationship to the softness or firmness of the pork produced.

In Oklahoma such feeds as peanuts, soybeans, and acorns or mast contain a high percentage of fat and account for most of the soft pork produced in the state.

WHAT EXPERIMENTAL DATA SHOWS

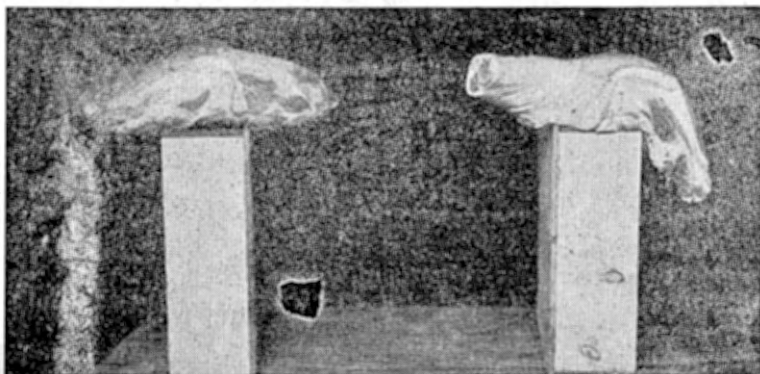
Investigations of the soft pork problem show the following results:

(1) It is impossible to produce hard carcasses by feeding hogs corn and tankage or corn and cottonseed meal for a period of 60 days when such hogs have previously been fed peanuts as the only concentrated feed. Tests show that peanuts grazed or self fed for a period of 60 days, with pigs starting at approximately 100 pounds in weight, produce soft or oily carcasses. Hardening with corn and other non-softening grains proceeds more slowly than softening on peanuts. Results show that pigs starting at approximately 100 pounds initial weight require about three times as much gain on corn and non-softening protein supplements as has previously been

made on peanuts in order to produce pork of a moderate degree of firmness. *Producers cannot expect to produce firm hogs by feeding corn or other such grain for a short period (50 to 60 days) after such hogs have been allowed to gain most of their weight on softening feeds such as peanuts.*

(2) Tests show that soybeans grazed or self-fed through a period of seven to eight weeks to pigs, starting at approximately 100 pounds in weight and making gains of 40 to 50 pounds, produce soft carcasses. Soybeans are not a suitable protein supplement for fattening hogs because they produce less rapid and economical gains than tankage. However, very satisfactory results have been secured through the use of soybeans as a protein supplement for brood sows.

WHICH SHOULDER DO YOU THINK CONSUMERS WOULD PREFER TO BUY?



The one on the left was taken from a carcass that killed "firm," while the one on the right was taken from a "soft" carcass. Both were produced in Oklahoma. The outlet for wholesale cuts of pork from "soft" carcasses is very limited and processors have difficulty in selling such pork products. Retail dealers are faced with the same problem.

Soybean oil meal, from which the excess oil has been extracted, is entirely satisfactory as a protein supplement for fattening hogs. Tests show that it is worth two-thirds to three-fourths as much per pound as tankage.

(3) Although no experimental data is available on the feeding of acorns or mast to hogs, experience of processors clearly indicates that hogs fed on acorns or mast produce either soft or oily carcasses.

HOW SOFT PORK MAY BE AVOIDED

In the light of experimental data, it appears that there is no satisfactory way to avoid soft pork, if softening feeds such as peanuts, acorns, mast and soybeans are used exclusively to fatten market classes of hogs. There are three ways in which soft pork may be avoided:

(1) The producer may utilize such feeds by feeding to mature breeding stock and to pigs weighing up to 50 pounds. It appears that by feeding pigs weighing approximately 50 pounds on non-softening feeds such as corn, barley, or grain sorghums until they reach a market weight of approximately 225 pounds, soft carcasses may be avoided even though the pigs have previously been fed peanuts or other softening feed.

(2) If softening feeds such as peanuts, soybeans, etc., must necessarily be used in finishing market classes of hogs, reasonably satisfactory results may be expected in producing firm pork if the amount of such softening feeds is held to 25 per cent or less of the ration. In such cases, the softening feeds should be used as a protein supplement rather than as the principal fattening constituent of the ration.

(3) If the producer has only softening feeds available, he may produce feeder pigs which can be sold at weaning time or soon thereafter at weights that are light enough to enable these hogs to be finished on nonsoftening feeds such as corn, grain sorghums, barley, wheat, etc., until they attain a marketable weight.

