EXTENSION BULLETIN

Pig Feeding Suggestions

BY

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SELECTION OF PIGS

A mere knowledge of proper feeding methods is not the only essential factor in successful hog raising. Proper selection of the animals to be fed is just as important for economical swine production as knowing how and what to feed. Practically all experimental work in feeding and feedlot evidence tends to prove that well-bred pigs, either purebreds, cross-breds or high grades, make more rapid and profitable gains than pigs of inferior breeding. Purebred pigs generally are to be preferred. Altho the initial cost may be a little higher, the pigs will often overbalance the increased cost by making more rapid gains,



particularly when pigs from quick-maturing strains are selected. Also, a wellfinished, purebred breeding animal will bring much more when sold than one of unknown breeding.

The conformation or form of the pigs is of decided importance, for upon the form will depend very largely the feeding qualities of the pigs, and the finish that may be expected at the end of the feeding period. First of all the pigs should be selected, if possible, from the litter of a sow that is known to be a producer of quick-maturing pigs of good quality. The pigs selected need not be those that at weaning time show the most finish, altho smoothness is a thing to be considered. They should have good stretch and plenty of bone

THE OHIO STATE UNIVERSITY, COLUMBUS, OHIO AGRICULTURAL COLLEGE EXTENSION SERVICE H. C. Ramsower, Director

FREE—Cooperative Agricultural Extension Work—Acts of May 8 and June 30, 1914. The Ohio State University, Cooperating with the United States Department of Agriculture, County Farm Bureau, State Superintendent of Public Instruction, County Superintendent of Schools, County Agricultural Society.

1919-20

of good quality. The head should be broad and free from wrinkles; the neck, short and thick, well blended into snugly set-in shoulders; the back, broad and slightly arched; the loin, broad; the rump, long and straight; the hams, round, deep, and plump. The sides should be deep and free from wrinkles. As an evidence of good constitution, the pigs should show plenty of depth and width just back of the shoulders, and be particularly wide between the fore legs. The pigs should stand on short, straight legs that are especially short and straight in the pasterns.

FEEDS TO USE

When the pigs have been selected, the next things of importance are what feeds are available, and how best to use them to get proper results. Where all feeds are to be bought, it is a comparatively easy matter to get those feeds which will produce economical gains, but where it is necessary to use feeds already on hand, it is well to know what proportions will give the best results.

The life of a market hog may be divided into two periods; from birth to about 5 months of age may be know. as the growing period. From 5 months until ready for market may be classed as the fattening period. The pig during the growing period will require a different class and kinds of feed than those expected to produce the best results during the fattening period. Early in the life of the pig, feeds which will produce a large proportion of muscle and bone are desirable, while during the later period, those feeds that will add fat are to be preferred. The digestible portion of various feeds is usually divided into two groups. The one group is known as the tissue-building materials, which are used largely to build framework of the body and to produce the lean meat. This group is composed very largely of proteins. The other group is known as the heat- and energy-producing group, which is made up of feeds rich in carbohydrates and fats, and is used for producing the fat in the animal and in keeping up the energy necessary for the various body processes. During the early life of the pig, the feeds that will produce growth most profitably will be those feeds containing a comparatively large percentage of protein; while during the later period, it will be advisable to feed those containing a large percentage of carbohydrates and fat. Feeds are also classified according to the amount of nutrients contained in a certain bulk. Those which have a large amount of feeding value in a comparatively small bulk are known as concentrates; while those which have considerable bulk in proportion to the feeding value are known as roughages.

CONCENTRATES

The concentrates consist of grain and by-products from the milling of these various grains. Also some animal by-products may be listed in this class. In practically all feeding work it has been found that corn proves the most economical basis in all rations for feeding hogs. When oats, barley, and rye may be purchased at the same price per pound as corn, then those grains may be substituted for the corn with about the same results. However, in order to get the most out of the corn, and at the same time produce a better finished pig, it is necessary to feed some supplement with the corn that is comparatively high in the amount of protein it carries, as corn alone does not have the proper relation between the tissue-building and the fat-, heat-, and energy-producing nutrients. Skimmilk fed in proportions of about 2 or 3 pounds to 1 pound of grain mixture will produce economical and rapid gains, and skimmilk is probably the cheapest supplement that can be found for corn. Digester tankage ranks next to skimmilk as a carrier of protein. This is a by-product of the packing houses, and is entirely an animal product. The better grades contain 60 percent protein, and it is therefore a highly concentrated muscle-building feed, and should be fed in very limited quantities. For small pigs, it may be fed at the rate of about 1 pound to 9 pounds of other feeds, and decreasing the amount of tankage slightly as the pigs grow larger. Old process linseed meal may make a desirable feed when fed in small quantities, but may best be used as a conditioner rather than a mere carrier of protein. Middlings are especially valuable when fed to pigs just after weaning, as they are very palatable, and have a fairly high percentage of protein. While a ration composed of middlings and skimmilk is one that is often fed to small pigs, it is, however, one that contains too high a percentage of protein. Some corn, oats, or barley should be substituted for part of the middlings.

FORAGE CROPS

In the past too little attention has been given to the use of forage or pasture crops for economical swine production. The successful feeder today usually is supplied with plenty of good pasture for his hogs. Some of the crops best suited as forage for hogs are alfalfa, clover, rape, and soybeans. Bluegrass when it is short and tender in the spring also makes a fairly desirable pasture, but after it becomes a little dry is of little or no value as a feed. Where it is impossible to have the pigs running on pasture, it is desirable that any of the above forage crops should be cut and fed to the pigs in the pens. It is possible to get pigs to consume with profit a considerable amount of dry alfalfa or clover. This may be fed either in racks much the same as those used for feeding sheep, or it may be ground and fed with the grain feeds. If fed in racks, it may be necessary to keep other feeds away from the hogs for a little while, in order to get them accustomed to eating the hay, but usually the results will be worth the effort in getting the pigs to eating the dry alfalfa or clover. However, if the most economical gains are expected, hay should not be fed unless green forage is not available.

THE SELF-FEEDER

The use of the self-feeder is becoming popular as a method of feeding hogs for market. The results of experiments have shown that hogs are able to balance their rations more successfully than the average feeder, but the gains to be expected are not out of proportion to those that may be gotten by intelligent hand feeding. It is necessary to keep the self-feeder accessible at all times, and to provide plenty of protein and carbohydrate feeds. If the selffeeder is used, do not let one compartment be empty while there are feeds in some of the others. If the corn division is empty, the pigs are likely to eat more middlings or tankage than is good for them; so always provide enough of all feeds.

CONDIMENTAL FEEDS

Experimental work with hogs tends to prove that so-called stock foods and tonics do not aid materially in digestion, and the price paid for these condimental feeds is rather exorbitant for whatever good they may do. In a bulletin of the Wisconsin Experiment Station the following statement with reference to condimental stock feeds is made: "Feeding experiments, including twentythree different trials conducted at more than a dozen different experiment stations with 992 animals in all, from the evidence presented it was found that only two of twenty-three trials showed the stock feed to possess any merit. The conclusions drawn from the results of the twenty-one trials are to the effect that nothing was gained by including these feeds in the ration fed. In fact, they were shown to be a positive detriment in so far as they rendered the rations more expensive, and increased the cost of the product obtained." However, it is well to provide a certain amount of mineral matter other than may be derived thru the common feeds. This acts as a tonic to some extent, and keeps the hogs in a healthy condition. Such a mixture may be made from the following:

Epsom salts		pounds
Common salt		pounds
Sulphur	1	pound
Charcoal		pounds
Copperas	3	pounds

These ingredients should be mixed well together and kept in a box or self-feeder, so that the hogs may have access to it at all times.

SUGGESTED RATIONS

For the Growing Period:

- 1. Corn 80 pounds, tankage 20 pounds.
- 2. Corn 80 pounds, middlings 10 pounds, tankage 10 pounds.
- 3. Corn 60 pounds, middlings 30 pounds, tankage 8 pounds, oilmeal 2 pounds.

As suggested before, rye or barley may be substituted for the corn if the price is about the same, and if skimmilk or some good pasture is available, the middlings, tankage, or oilmeal may be considerably reduced.

For the Fattening Period:

- 1. Corn 90 pounds, tankage 10 pounds.
- 2. Corn 75 pounds, middlings 15 pounds, tankage 10 pounds.
- 3. Corn 85 pounds, middlings 10 pounds, tankage 4 pounds, oilmeal 1 pound.

If skimmilk is used during the fattening period, not more than 2 to 3 pounds of skimmilk should be allowed for each pound of grain fed. If corn, middlings, and tankage are placed in a self-feeder, the hogs will balance their own ration to good advantage, but care should be taken to see that all compartments of the feeder are kept filled.

PIG POINTS

Get the pigs out on pasture as soon as possible. It will benefit both the pigs and the pasture, provided the pigs are taken off during wet weather.

A bushel of corn fed on some good pasture is worth about one and a half fed in a dry lot.

Red clover, alfalfa, rape, soybeans, and bluegrass all make excellent pasture for pigs. For efficiency they rank in the order given.

Provide some shade in the pasture and some shelter from bad weather. The pigs will show their appreciation in increased returns.

The use of a self-feeder will help in the labor problem, but a self-feeder needs replenishing just the same as the feed bin.

Shell the corn for the self-feeder and have a separate compartment for tankage. If the pigs are quite small, it will be advisable to provide middlings.

With the pigs on some legume pasture, little tankage or middlings is necessary.

Keep the pigs growing, for each day passed without some gain in weight is a loss to the feeder.