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Feeding the Brood Sow

Abstract

The brood sows represent in a large measure the backbone of the swine herd, hence their correct nutrition and handling are of dollars and cents importance.

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FEEDING THE BROOD SOW

By John M. Evvard and C. C. Culbertson.

The brood sows represent in a large measure the backbone of the swine herd, hence their correct nutrition and handling are of dollars and cents importance.

The brood sows that are to raise the litters, demand, and must have good feeds, good care and good management if the sows are to breed properly and if the resulting pigs at farrowing are to be of sufficient size, strong, well-boned and healthy.

That the feed allowed the breeding sow determines in very large degree the weight, size, vigor, coat, condition, bone development and general health of the newly farrowed pig has been experimentally proven time and time over.

To better illustrate the bad and good effects of inferior versus superior rations, some experimental findings may be presented here:

CORN ALONE IS A POOR RATION FOR SOWS AND LITTERS

Young sows, carrying their first litters, were fed ear corn only during the breeding and gestation period. Enough corn was offered to keep these gilts in good weight and they roamed over approximately an acre of winter rape field aftermath from late fall to farrowing time. Naturally, in central Iowa no green feed was available, the rape leaves having withered and browned in the early blasts of winter along in late November.

And what were the results of the exclusive ear corn feeding?

The sows ate 3.65 pounds of corn grain from the cob and gained practically a third of a pound a day, not enough it is true, but they would not eat enough corn to make the requisite daily addition of flesh and bone for themselves and their developing offspring. The pigs that came weighed a paltry 1.74 pounds on the average and were largely weaklings. Only 68 percent could possibly be classed as "strong", whereas 16 percent were "medium" and 16 percent "weak" in vigor. All were alive, but a good many in a little while sought the age-honored hunting ground. The litter weight was 13.20 pounds. These "corn alone" gilt pigs were an outstanding disappointment, a profitless bunch.

CORN WITH PROTEIN ADDED MAKES THRIFTY SOWS AND LITTERS

Now contrast these "corn" sows with similar young sows, sisters in blood, fed on the same kind of corn, but given in addition approximately two-fifths of a pound of 60 percent protein meat meal tankage daily along with the ear corn. They were a thriftier group, much more

so, and they ate less corn, or 2.75 pounds daily per animal, and also gained about twice as much a day, or .625 pound per gilt. They gained more on less feed and looked fine, being sleek and vigorous and gentle, as contrasted to the dry, rather harsh appearance and irritable disposition of the gilts getting the corn grain only. The pigs that found these gilts as mothers weighed 2.23 pounds, or over a half pound more than their kin across the fence, and were the strong, vigorous, stalwart kind, 93 percent of them being in the "strong" class, with only five percent "medium" and just two rather accidental ones in the "weak" division. The litter weight average was 19.62 pounds, as contrasted with the "corned litters" of 13.20 pounds. Here is a golden lesson worth many dollars to him who appreciates and learns to practice the better way.

OTHER GOOD BALANCERS OF CORN

Now alfalfa hay in this practical pregnant gilt test showed up very well as a balancer of corn. The pigs at farrow weighed 2.29 pounds, the litters 17.41 pounds on the average, and the strength was good, there being 89 percent "strong", with eight percent "medium", and no "weak". The alfalfa consumption and wastage was a little over a pound to the gilt.

Fish meal is a good tankage substitute. Skim or buttermilk is fine stuff. As corn balancers for the sows in pig, milk products, meat products and alfalfa, stand out as premier protective feeds for winter and summer use. Their liberal inclusion in the ration is an insurance against physiological failure.

OIL MEALS ARE INADEQUATE AS BALANCERS

Linseed oil meal, or corn oil cake meal, or wheat middlings, or soybean meal, when fed as a lone protein supplement to the standard basal feeds, are inadequate and not to be advised. However, incorporated with the tankage or fish meal, or milk products, or suitable leguminous pastures, they are worthy of inclusion, giving very good and commendable results as partial supplements. However, much depends on the relative price as regards the proportionate allowances for the various supplements.

Of course, in the summer time the good pastures are splendid corn balancers, pastures such as alfalfa, red clover, alsike clover and dwarf essex rape standing out supreme. Nice tender succulent bluegrass is also splendid, but when it turns brown and hard it makes a better bed than a pasture.

Beware of the hard, brown, dried up pastures of any sort, the kinds that lose their nice plump, juicy, green leaves, leaving only the bare brazen stalks. The leaves are the precious parts of the pasture and the fresher and more succulent they are, the greater the efficiency in supplying the deficiencies of corn, barley, wheat, rye, sorghum and other basal grains that furnish the economical foundation of swine rations in pork producing America.

MAIN FEEDING ESSENTIALS

Some of the main feeding essentials to be emphasized in the feeding and management of the brood sow are herein below enumerated:—

Provide suitable feeds in proper proportion.

Emphasize the proteins, the minerals, the vitamins, and perhaps some bulk in the supplement that is used to balance the grains.

Feed enough, but not too much.

Some bulk, in the form of oats, alfalfa, clover sweepings, and maybe bran, tends to distend and develop the digestive tract, so that there is probably more internal capacity for concentrated feeds during the strenuous suckling period, when bulky fibrous feeds are to be diligently tabooed, excepting in the case of sows that give too much milk to their sucklings, and which are rather rare on the whole.

SOME SUCCESSFUL RATIONS FOR SOWS

Some successful rations for sows of all ages are as herein below given:—

At breeding time it is well to flush the sows, feed them up and get them to gaining well a couple of weeks before the boar is ushered in; this to encourage production of the greater number of ova for later fertilization. Our Iowa experiments have demonstrated that the sureness of breeding and the number of offspring is thereby increased, the good results being most surprising in many cases, particularly when the ration fed prior to the opening of the breeding season has been of poor quality, and meagre.

After allowing the protective supplement (and a good protein supplement is protective in that it assures sufficient protein for the development of strong, vigorous pigs), it is fine to feed what ear corn, or shelled corn, or ground corn (our test with sows shows the meal to be less efficient, pound per pound, than the ear or whole grain), or ground barley, or ground wheat, or ground sorghum grains, or other good basal feed is necessary to keep the sows in the condition of flesh desired.

To balance the basal grain used, good protective supplement allowances are one-third to one-half pound of meat meal tankage or fish meal, purchasable at not over five percent greater price than tankage; it is practically interchangeable with tankage; or six to ten pounds of skim or buttermilk; or three-fourths to one and one-half pounds of ground alfalfa, or alfalfa hay from rack (the hay, whole or ground, is profitably allowed with a meat meal or fish meal; if the sows eat less than a half pound of the alfalfa, as they sometimes do from the rack, then other supplements should be provided, or the alfalfa ground and forced thru feeding in a grain mixture); or one-half to one pound of a mixture of (a) tankage 50 and corn oil cake meal 50 parts; (b) tankage 50 and linseed oil meal 50 parts; (c) tankage 50 and wheat middlings 50 parts; (d) tankage 50, linseed oil meal 25, and corn oil cake meal 25 parts; (e) tankage 50 and alfalfa meal 50 parts.

Ground oats or wheat bran may be fed as partial substitutes for the basal corn or other grain used, which means in addition to the protective supplements as recommended, allowing same in amounts up to a pound, usually, or even more if the oats sell for less than 80 per cent of the corn pound price. The oats or bran allowed will decrease the corn or other basal feed required. Oats or bran must not be depended upon to supply the necessary proteins, vitamins, and minerals to supplement the corn. The protective supplements suggested do that, and they cannot be substituted with profit with low protein, low vitamin, low mineral feeds.

On low protein pastures the ration allowances as above suggested are

suitable, but on high protein pastures, as alfalfa, the clovers, and rape, the protective supplements may be cut out after flushing the sows until a few weeks before farrowing, when they may be allowed in about one-third to a half the dry lot amounts.

MINERAL MIXTURES

A good mineral mixture is an insurance and should be allowed before the sows at all times. This one is good: Common salt 20 parts; finely ground bone meal, or spent bone black, or bone ash, 40 parts; finely ground high calcium limestone, or wood ashes, or air-slaked lime, 40 parts; all thoroughly mixed, and to which is added from one-half to an ounce of potassium iodide to the 100 pounds. If the inclusion of ingredients used in practice, such as sulfur, a little copperas, epsom salts, and others, are wished, this fairly complete mineral mixture is suggested:—

Salt, common, flake form.....	30.0 pounds
Spent bone black, or bone meal, finely ground, or bone flour	25.0 pounds
Commercial kainit, or potassium chloride, or wood ashes..	12.0 pounds
Sulfur, flowers of.....	10.0 pounds
Air-slaked lime, or limestone, finely ground.....	10.0 pounds
Glauber's salt or sodium sulfate.....	6.0 pounds
Epsom salt or magnesium sulfate.....	5.0 pounds
Copperas or iron sulfate.....	2.0 pounds

Total.....100.0 pounds

To the above 100 pounds add one-half to an ounce of potassium iodide.

About a pound of the mineral mixture per sow per month is an approximate allowance.

OTHER ESSENTIALS

Good feeding is but one of the main essentials of successful brood sow management. In addition to correct feeding it is in order to emphasize other considerations:—

Supply sufficient water, self-watering being preferable; self-icing is bad. Furnish suitable shelter which provides warmth, dryness, ventilation, shade and sunlight and quietness. Avoid damp floors and slippery, cold pens. In summer, shade, preferably of trees, is in order. The clean hog wallow of concrete is also commendable. Get the sows out in the sunshine, especially in the winter when not too cold, as it is invigorating. Direct sunshine is an essential to robust health. Sunshine at farrowing time is better than many medicines. Keep the sows free from parasites, routing the worms and the lice. Do not overfatten. Practice gentleness in handling. It pays. Encourage exercise by providing the means and the stimulus, but do not overexercise. Promote laxativeness by good feeding and proper management. Do not chill the sows in cold weather by forcing into the open in below zero weather. Do not overcrowd. Avoid high door sills—and practice sanitation.

Do the job of sow-keeping well, and good fortune will smile all the more broadly. To be a sow's friend, one must be friendly in thought, word, deed and action.