

Feeding for Profitable Pork

Sow Rations

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One third of all pigs farrowed never reach market. An average of only 6-1/2 pigs are raised per sow. Three of every litter of 9 or 10 pigs die, usually before weaning.

One of the major causes of this high death loss is poor nutrition, particularly of the pregnant sow. Because the sow is improperly fed, the pig is born weak. The result is the little pig dies or is laid on because he does not have enough "pep" to get out of the way.

PASTURE

Whenever possible, keep your sows and gilts on good, clean pasture. They will produce healthier, heavier pigs the following spring. This is the result of a "carry-over" effect of the pasture.

Alfalfa is one of the best pastures for hogs in North Dakota. Oats and rape, sudan or other temporary pastures can also be used to good advantage. Native grass pastures or Brome grass pastures are far superior to no pasture at all. The cheapest gains are usually made on pasture.

DO NOT forget to rotate pastures to assist in controlling parasites and diseases.

FLUSHING

Flushing refers to the practice of having the sows gaining rapidly before and during the breeding season. This is accomplished by feeding extra amounts of feed for a few days before breeding and to the end of the breeding season.

Thin sows and small, light gilts benefit much more than thrifty sows in good condition. Flushing may result in more regular heat periods, better conception rate and possibly larger litters.

FEEDING THE BRED SOW

Bred gilts should gain about 3/4 pound per day during pregnancy. Mature sows should gain about 1/2 pound daily. On the average, 6 pounds of a good ration will accomplish this.

Gilts require up to 2 pounds of feed per 100 pounds live-weight per day, whereas a mature sow needs about 1-1/2 pounds of feed per 100 pounds live weight.

These amounts of feed can be varied to allow for conditions under which the sows and gilts are kept, especially the age and flesh of the females and the feeds which are available. Little is gained from overfeeding which results in an overfat, lazy, clumsy sow at farrowing time. Much better success is obtained from an active sow in moderate flesh.

Self-fed pregnant sows and gilts are likely to eat more than necessary for proper flesh. You can control this by bulking up the rations, preferably with good quality ground alfalfa. Where this is not possible, use ground corn cobs or other ground roughage.

FEEDING DURING FARROWING

A few days before farrowing, reduce the feed intake. Replacing part of the ration with wheat bran or linseed meal will keep the sow's digestive tract in good condition.

Feed nothing the day before farrowing or the day of farrowing, but provide plenty of clean, warm water. If the sow is extremely nervous, feed a double handful of the bulky ration.

Overfeeding during and just after farrowing often results in a too heavy milk flow before the baby pigs are able to take it. Caked udders and feverish sows result. Start the sows on the lactating rations slowly. By the seventh to tenth day the little pigs are able to take the milk so sows may be full-fed.

All sows suckling six or more pigs may be self-fed. It pays to provide ample feed for maximum milk flow.

LACTATION RATIONS

The requirements for lactating sows and gilts are similar to the gestation rations, except that the need for energy is much greater for lactation.

Limit the bulky part of the ration, alfalfa, to 10 or 12 percent of the ration and increase high energy grains such as corn, barley or millet.

Full-feeding of all sows suckling 6 or more pigs is practical. The sows and gilts will need 12 to 14 pounds of feed per day. Self-feeding a balanced ration at this time is recommended.

RATIONS FOR SOWS

There is no one "best" ration. Many feeds and ingredients can be used with success if care is used in balancing the ration

and in supplementing with the necessary nutrients.

PROTEIN

Quality of protein (the level and balance of the essential amino acids) is of more importance than the actual amount of protein.

Additions of proteins, such as linseed, meal, alone, to cereal grains will build up the percentage of protein but will not improve the quality very much. Until more is known of the amino acid requirement, it is good insurance to include proteins of animal origin, such as meat scraps, tankage or milk and its by-products in the gestation ration.

These proteins should be included in amounts to provide 15 to 20 percent of the total protein of the ration. Other proteins, such as soybean oilmeal, can be used to make up the additional protein necessary. Gestation rations should contain 14 to 15 percent for gilts and 12 to 13 percent for mature sows. Lactating rations should have 15 percent protein. These levels can be reduced 2 or 3 percent when the pigs are on pasture.

ENERGY

Most cereal grains can be used to provide the energy requirements. However, damage grains, especially spoiled or damaged barley or ergoty rye, should not be used. Oats are especially good in gestating rations.

Ground alfalfa can be included in gestation rations in levels from 15 to 50 percent depending on age, flesh of the sows and the other ingredients of the ration. Usually, thin sows and gilts should have from 15 to 25 percent alfalfa and the fat, mature sows the higher levels.

Alfalfa used should be of the best quality available. Not only does alfalfa provide bulk but provides vitamins and minerals. It also improves the quality of protein. Because it reduces the energy content, alfalfa should be limited to 10 to 12 percent in lactation rations fed to sows suckling 6 or more pigs.

MINERALS

Minerals which need special attention in sow rations are salt and calcium. None of the feeds commonly fed to sows contains enough of these minerals.

In iodine-deficient areas, use iodized salt, or trace mineral salt to prevent the farrowing of hairless pigs. The requirements for other trace minerals are not well known but it is likely trace mineral salt will supply most of the needs for the trace minerals. Inclusion of 1/2 percent trace mineral salt in the ration is ample.

Calcium can be best supplied as pulverized limestone at a level of 1/2 to 1 percent of the ration. Phosphorus is a lesser problem because the cereal grains and protein supplements are good sources but inclusion of 1/2 percent of bonemeal or its equivalent helps balance out the mineral content.

A 40-40-20 mixture of bonemeal, limestone and trace mineral salt is a good mineral to feed free choice. Commercial mixtures can also be used but do not use the high phosphorus beef cattle range minerals in swine rations.

VITAMINS

When sows and gilts are on pasture most of the vitamin requirements are met. Under dry lot conditions the lack of vitamins is often critical.

Vitamins A and D should always be added either as cod liver oil or in the dry form. About the only natural feeds which have vitamin A actively are yellow corn and alfalfa and these can not always be depended upon to supply enough. The problem with vitamin D is even greater because the only feed containing any amount is sun-cured alfalfa and this feed rarely supplies enough. Even gilts and sows in dry lot rarely spend enough time in the sunlight to get adequate vitamin D from that source.

Some of the B-complex vitamins are often lacking. Vitamins B₁₂, riboflavin, and pantothenic acid are usually on the borderline or lacking in usual swine rations. Sometimes choline and niacin are also lacking. Therefore, it is good insurance to add a commercial vitamin supplement to supply these.

WATER

Too often a good, clean source of water is overlooked for swine. Water is the cheapest nutrient and good swine management practices mean water available at all times.

SUGGESTED RATIIONS:

SUGGESTED RATIIONS FOR SELF-FEEDING BRED SOWS IN DRYLOT: *

(Rations)

Ingredient	1	2	3	4	5	6	7	8	9	10
Corn, ground	31	--	30	45	30	--	23.5	40	--	--
Barley, ground	--	40	--	--	--	50	--	--	--	50
Oats, ground	31	26	30	--	32	20	50	36	77.5	--
Proso millet, ground	--	--	--	--	--	--	--	--	--	20
Alfalfa, ground	31	30	30	45	30	20	15	--	--	20
Meat scraps, tankage	4	3	--	--	3.5	--	--	3.5	--	--
Soybean Oil Meal	2	--	--	--	3	--	--	4	6	--
Alfalfa meal	--	--	--	--	--	--	--	15	15	--
32% Sow supplement	--	--	9	8.5	--	8.5	10	--	--	8.5
Ground limestone	--	--	--	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Steamed Bonemeal	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Trace Mineral Salt	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

*To the above add either dry or oil form of vitamin A and D and a source of vitamin B₁₂ unless provided for in the sows supplement. Additions of riboflavin, pantothenic acid, niacin and choline would usually increase the health and livability of the pigs farrowed. Most sow rations are on the borderline or just slightly deficient in these vitamins.

**For pasture feeding, reduce protein content by 2 or 3 percent.

SUGGESTED LACTATION RATIIONS IN DRYLOT: *

(Rations)

Ingredient	1	2	3	4	5	6
Corn, ground	50	48.5	48.5			
Barley, ground			10	50	40	30
Oats, ground	30	30	20	40	43	10
Proso Millet, ground						43
Alfalfa meal	9	4	5		10	10
Meat scraps, tankage	9.5			5	5.5	5.5
35% Protein Supplement		16	15			
Soybean				3.5		
Ground limestone	.5	.5	.5	.5	.5	.5
Steamed Bonemeal	.5	.5	.5	.5	.5	.5
Trace Mineral Salt	.5	.5	.5	.5	.5	.5

*To the above add either dry or oil form of vitamin A and D and a source of vitamin B₁₂ unless provided for in the sow supplement.

Additions of riboflavin, pantothenic acid, niacin, and choline would usually increase the health and livability of the pigs farrowed. Most sow rations are on the borderline or just slightly deficient in these vitamins.

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