Feeding Show Pigs
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It is important to realize several things before discussing nutrition and feed programs related to your swine project. First and foremost, always remember that nutrition, care and genetics play equal roles in the performance and development of a pig's muscle and lean makeup. Your project will not reach its full genetic potential without proper care and nutrition. Likewise, if your pig reaches his potential because of your care but his genetic potential is low, this may not be enough to reach your goals. The bottom line is you need to start with a pig with great potential and give him the daily care and nutrition required to reach that potential.

What are the requirements of a show pig?

**Water** is the most essential nutrient required by a pig. Without water a pig cannot survive and by limiting a pig's water you will also limit his intake of other necessary nutrients. Be sure to always have fresh, clean water for your pigs. This means that you will need to break ice and make sure nipples are working when it's cold. A good practice is to haul warm water to pigs when it's cold and make sure they come out of their house and drink in the morning.

Your water source needs to be quality also. For instance, at the ag farm we use barrels to water our pigs, this water will get stale and cause scouring if not watched closely. By adding chlorine to eliminate bacteria in the water we can eliminate this problem.

**Carbohydrates** are a pig's main source for energy. Such things as Corn, Sorghum and other grains are great sources of carbohydrates. On average, carbohydrates make up about 75 - 80% of what a pig will consume. Energy is required by all animals in order to grow and survive. Without carbohydrates, a pig could not produce the energy needed to eat, sleep, breath and do their everyday functions. These carbohydrates are stored in plants as starches and are very digestible and utilized by pigs.

Other energy sources include **Lipids** such as fats and oils. A pig will either convert these to energy or store them as body fat. These lipids provide a high amount of energy. Fats and oils are found naturally in plants or can be added to the diet in the pure form. Fat is a very important part of the diet and can be used to make a pig fresher by adding fat or reducing the fat when a pig gets over finished.

**Protein** is the essential nutrient required for muscle development. A lack of adequate protein or amino acids in the diet will reduce performance and development. The most limiting amino acid in a pig's diet is lysine. By limiting essential amino acids, you limit protein and cause a shortage in the development of muscle and mass.

Swine require the presence of 10 essential amino acids. This is more important than the amount of protein required or available. Complete rations are balanced with this in mind and provide the amino acids required for development.

A pig starting on feed requires approximately 18% protein to meet his needs. When he reaches approximately 75 lbs. his requirements for protein decreases to about 16%. At about 150 lbs. he will only need about 12-14% protein to reach his full requirements of protein.

How does this effect my show pig?
Today, show pig judges are selecting pigs that are heavy muscled with adequate condition but not too much fat. We need to develop as much muscle as our pig can genetically produce and what his frame and structure can withstand. We need pigs to be lean but not too lean. They must be fresh and full in their appearance during the show.

You must also understand that a pig's metabolism changes from 170 to 190 lbs. This means his body produces less lean and more fat. During this period, the pig's requirements for protein declines.

All this translates into why and how you should feed your pig!!!!

- Since your pig is growing and developing muscle mass up to 170 lbs., you should make sure the protein (amino acid) content meets his requirements. This also means that you should leave your pig on full feed during this period. Limit feeding pigs at lower weights will restrict their development of muscle.
- Clean, Fresh Water is a must and should never be limited except at the show
- Fat and oil content requirements decrease with the decrease in muscle development because the body is producing more fat for energy.

What about limit feeding my pig?

When pigs reach the point in their development that they begin to produce fat at a faster rate than muscle, one option is to limit feed the pigs. Hand feeding pigs is a perfect way to keep your pig from putting on excess fat. The first thing you must do is determine which show to target with your pig and what his ideal weight should be at the show. Use the attached form to graph your pig's development and feed him to the desired weight for that particular show.

After you have determined how much your pig needs to gain per week, you can begin the hand feeding process. For example, if your pig weighs 150 lbs. on November 13 and your goal is to make him a heavy weight at county, you can use the graph to determine what to do. (Example attached). Your pig will need to gain 2 lbs. per day to be a heavy weight at county. You will need to limit his intake enough to just gain 14 lbs. in a week. This will take about 6 lbs. of feed.

Let's say this same pig is targeted as a heavy weight for San Antonio. We will feed this pig up to the 170 - 190 range and then limit his feed where he grows about 1.3 lbs. per day for the last 77 days to San Antonio. You will feed about 4 lbs. of feed to achieve this goal. (Example Attached)

When I limit a pig's feed, I will increase his protein content and increase his fat intake. The protein is to maintain leanness and the fat is to provide energy for the pig. We will also provide the pig with a mineral or vitamin supplement such as ShowBloom or Winners Edge, etc. because he is being limited on these also. Eggs, Ensure, etc. are also good sources of energy and protein. This also helps with the maintenance of hair and skin.

We never feed less than 4 lbs. of feed per day. If we have to gain at a slow rate, we use groats or hold em in the diet as filler.

What about holding a pig?
I don’t like to ever just sit on a pig and gain nothing. Always keep a pig growing, even if it’s a 1/4 pound per day. The reason for this is that we need pigs fresh and full when we show and we also need them to look youthful. It is hard to do this when we hold for a very long period of time. If you have to hold a pig do it with high protein and fat as mentioned above and us something with bulk in your diet like groats, beet pulp or hold em. NEVER feed less than 4 lbs. of feed per day. Good planning will help you avoid having to be in this position.

**How does Paylean effect this program?**

Paylean is made to add muscle and maintain leanness. If your pig needs more muscle or is too fat, paylean is an option. Remember, if your pig is lean and heavy muscled, don’t use paylean. It will cause more problems than it is worth. We never feed paylean for more than 3-4 weeks. The benefits of paylean are achieved in this time span and if you feed it longer we begin to see sore pads, tightness and joint problems.

The other thing to realize is that paylean will make a pig gain weight at a faster rate. Feeding 5 lbs. of feed with 18 grams of Paylean will result in your pig growing at a rate of 2.5 to 3 lbs. per day. If you plan to use Paylean, you should plan on this gain at the end. (Example Attached)

Paylean is a tool that can be used to help develop your project but is most often abused and causes more problems than good.

**What is the best feed?**

There are several feeds that work well and I would encourage you to find the feed that you are comfortable in using. The biggest difference you will find in feeds is the cost. Feed costs will range from 10-20 dollars per bag. If you are feeding 1 pig you probably will never notice the difference. If you are feeding 6 pigs, it can make a big difference.

The feeds that I have had personal experience with feeding are; Sunglo, Mormans, Lickliders, Muscle Pig, Suthers, Acco, Hi Pro, Farmland and Lindners. I personally like the Lindners and Mormans feed and have had good experience with Sunglo and Suthers in the past. Acco and Hi Pro have new feeds out that should be comparable to the others. Lickliders, Muscle Pig and Farmland are not locally available.

Pick a feed and learn how to feed it. Remember that the importance of the type of feeds is over rated and the requirements of the pig can be met with almost any of the above.

If you remember anything from this presentation, remember that nutrition along with genetics and care give you a chance for success. One without the other will leave you short of your goals.