



Show Pig Nutrition

Source: Kansas State Show Pig Guide (2019) and used with permission from Dr. Joel DeRouche, Kansas State University

Starting your pig off right

- Allow free access to feed and clean water at all times
- From 50 to 150 pounds a 1.20% to 1.30% total lysine diet is generally fed
- From 150 pounds until show day, a diet from 0.90 to 1.0% total lysine should be more than sufficient to meet the pigs needs for proper development.

Rules of thumb in determining feed costs:

1. The average amount that your pig will grow a day is between 1.7 and 2.0 pounds.
2. The average amount of feed your pig will consume a day is between 5 and 7 pounds per day.

****The amount of feed that it will take to feed a pig from 50 pounds is as follows (Assuming a 3:1 feed conversation; that is, for every three pounds of feed your pig eats, they will gain one pound of weight)

| Ending Weight | Amount of Feed |
|---------------|----------------|
| 240 lbs. | 570 lbs. |
| 250 lbs. | 600 lbs. |
| 260 lbs. | 630 lbs. |
| 270 lbs. | 660 lbs. |
| 280 lbs. | 690 lbs. |

Ideal situation

- Place on full feed from time of purchase or weaning until show day
- Reality is this situation rarely occurs, and an alteration in daily feed intake by the pig is often a necessity to maximize appearance of your pig.

How do I push the pig to gain more weight in a small amount of time?

- Feed the pig 4 to 6 small portions a day
- If your pig has a low appetite, adding a liquid fat (any vegetable oil) or dry fat (sold by all show pig feed dealers) to the diet can help add needed weight as the pig is consuming a higher level of energy that can be used for weight gain.
- **Consequences of this type of feeding program**
 - Increased average daily gain
 - Maximum potential for muscle deposition will occur
 - An increased amount of body fat will develop due to the pig simply putting on more weight in a shorter period of time

- Pigs will generally look very “full” as a larger middle section will develop which may or may not be desirable for your pig
- **When is the best time to push your pig for increased daily gain?**
 - Between 125 to 210 pounds
 - Pigs during this stage are developing muscle in a higher proportion compared to fat in the body

How do I properly lower daily gains to prevent an excessively heavy pig?

- If you determine your pig is going to be too big for your show, allow them to stay on full feed until they reach 130-150 pounds.
 - Now is the time to slow the pigs growth rate
- You must lower the feed intake and hand feed each day
 - However, you must feed enough to meet the maintenance requirement (see chart below)
- Feeding at maintenance level will not stunt growth, simply prevent additional growth and maintain body weight
 - In this situation, you would still want to target a slower growth rate, such as 1 pound/day., rather than feeding a strict maintenance level.

NEVER feed below the maintenance requirement of your pig

Maintenance requirements by body weight

| Weight, lb. | Complete feed required, lb. | Mcal, ME | Lysine requirement, g/d |
|-------------|-----------------------------|----------|-------------------------|
| 150 | 2.1 | 3.21 | 0.9 |
| 160 | 2.2 | 3.34 | 0.9 |
| 170 | 2.3 | 3.46 | 0.9 |
| 180 | 2.4 | 3.58 | 1.0 |
| 190 | 2.5 | 3.70 | 1.0 |
| 200 | 2.5 | 3.81 | 1.1 |
| 210 | 2.6 | 3.93 | 1.1 |
| 220 | 2.7 | 4.04 | 1.1 |
| 230 | 2.8 | 4.15 | 1.2 |
| 240 | 2.8 | 4.26 | 1.2 |
| 250 | 2.9 | 4.36 | 1.3 |
| 260 | 3.0 | 4.46 | 1.3 |
| 270 | 3.0 | 4.57 | 1.3 |
| 280 | 3.1 | 4.67 | 1.4 |
| 290 | 3.2 | 4.77 | 1.4 |

Lb. of corn = 1.55 Mcal, ME; 1 lb. of SBM = 1.53 Mcal of ME

The amount of feed per day listed in the chart does not seem like very much feed at all, what can I do so the pig is not so hungry all the time?

- Remember, the amount in the chart is for no weight gain, you can increase that amount to grow the pig slowly, which is the recommended practice, not just holding at the same weight.
- You can feed a portion of the ration as rolled oats or a fibrous ingredient such as beet pulp, whole oats, wheat middlings or soybean hulls. This will add bulk and make the pig feel fuller after the meal but only add a small amount of energy.
 - Show feed suppliers offer various holding supplement products or complete rations to help with this issue.
- But... fibrous ingredients themselves do not provide enough protein (amino acids) to meet the body needs... so you must use these in combination with the normal ration to meet the dietary needs. In addition, you may provide a top dress protein additive.
- It is recommended that pigs are weighed a minimum of twice per week to determine progress of the holding period.

Do I need to top dress with additional protein, vitamins or mineral sources when I am holding my pig?

- Generally, no if your pig is 150-200 pounds. However, prolonged restricted feeding longer than 14 days decreases the level of nutrients for a longer period, which may start to make the pig look stale and begin to lose muscle shape.
 - However, show feed suppliers offer supplements that can be used during holding periods to ensure all the proper nutrients are still consumed by your pig.
- When holding your pig above 200 pounds, a supplement or top dress will be needed to prevent your pig from looking stale or to prevent muscle loss.
- Typically, the most economical protein source to top dress with is soybean meal. Other sources that can be used include dried whey, dried egg, and various commercial supplements.
 - Soybean meal is generally the least expensive and matches the pigs needs for daily protein very well
- In addition, restriction of feed intake will lower the amount of vitamins and minerals coming into the body. A maintenance diet will not cause deficiencies...but...we should supply additional vitamins and minerals to the pig to prevent body losses.
- When you are done holding, gradually over three to four days increase the feed amount until they are back on full feed.
- Pigs will compensate for some of the weight restriction by gaining faster the week after they are brought back up on feed, so monitor closely their weight gain.
 - If a pig has been restricted from feed for over 2 weeks, it is not uncommon they will weight 20-30 pounds heavier if given full feed for just one week.

What if I purchase the right size of pig and determine at a weight over 200 pounds that the pig is going to be too big?

- Start to reduce the amount of feed intake as soon as possible
- When holding in this weight range, you should top dress with a protein product/supplement.
- Never feed below the energy maintenance requirement
- Use a fibrous ingredient to help “bulk” the ration to increase the amount of feed fed each day so the pig does not become shallow in appearance.
- Exercise, exercise, exercise
 - Your pig will burn calories when exercised. You should exercise every other day for 20-30 minutes which will help reduce weight gain and keep your pig feeling good during this time.
- Weigh pigs twice weekly at a minimum during this time period to monitor weight adjustments.

It is 2 weeks before the show and my pig is already at the ideal weight, now what?

- Crucial management is now required. This situation is the most unwanted by all pig showmen, and you can do the most harm to the appearance of the pig if you do not pay close attention.
- For one week, feed the pig at or just above maintenance, supply a protein top dress, and exercise daily. Also, add a high fiber ingredient or supplement to keep the pig full and not get a hollow appearance.
- After week one, bring pig back up on feed, continuing to feed a protein top dress to bring back a fresh appearance.
- NEVER use water restriction as a way to reduce body weight.
- Possibly use water electrolytes during these two weeks to help reduce any staleness that may occur.

Make sure as you strategize your feeding plan, utilize a nutritionist with the feed company your using. They may be able to suggest types of products and how to use for optimal results. Make sure to adhere to all label requirements in terms of use, route, stage of development and all other food animal use requirements.