

INCREASING GROWTH RATE IN SHOWPIGS

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At times it is imperative to increase the rate of growth in pigs intended for show. The factors influencing growth are many. It is important to identify the factors that influence growth, and pinpoint reasons for poor performance.

POOR FEED INTAKE is the primary cause for low growth rate. Poor feed intake itself may be caused by many reasons. It is important to diagnose exactly what is causing the problem.

- *Genetic programming* of the pig could cause low feed intake and subsequent poor daily gain. Usually, as pigs get leaner and more heavily muscled, lower feed intake and poorer growth follows. Increasing the concentration of nutrients in the diet will help improve growth rate. Feed supplements such as the High Octane® show supplements are valuable at optimizing energy, essential amino acids, and other ingredients that can influence the amount a pig eats per day.
- *Immune status* of the pig is a very strong determining factor of feed intake and subsequent growth rate. Pigs that are sick will have very low feed intakes. Pigs that are mounting an immune response divert critical nutrients away from maintenance and growth to fighting infection. So, not only do they not eat well, what they do eat usually is used toward fighting the infection and not for growth. To find out for sure, take the pig's temperature with a rectal thermometer; it should be about 102.5 degrees F. If the pig's temperature is above normal a treatment of antibiotics is warranted. Contact your local veterinarian for the best course of treatment.
- *Environmental conditions* can dictate what the pig will eat. In short, the better the environment (penning, facilities, temperature, concrete vs dirt, etc...) the better the pig will eat and perform. The answer here is to have good environmental living conditions for your showpig. In short, the better the facilities and environment, the better your pig will eat and the better your pig will appear physically.
- *Water intake* is the number one determining factor on feed intake. Feed intake is directly related to water intake. Anything that limits water intake will limit feed intake and the physical appearance of the pig. Make sure that the pig's water is clean, fresh, cool and abundant ALL the time. If the pig's water is anything but clean and fresh you can expect the pig to grow slowly.
- *Injuries or operations* like castration will have a negative impact on feed intake. Immediately after castration for a day or two, you can expect the pig to eat less daily feed. If the pig has sustained an injury, you can expect a dramatic reduction in feed intake until the pig physically feels better.

- *Weather conditions* greatly impact feed intake. High temperatures affect feed intake. However, it is really the effective ambient temperature that affects feed consumption. (Effective ambient temperature factors in humidity and wind speed.) For example, pigs living in regions of the country that are hot during the summer, for example in excess of 95 degrees F daily with low humidity will eat more total daily feed than a pig living in similar temperatures with high humidity levels. Moving water and or air across the pig during peak temperature periods will help improve feed intake and subsequent growth. **As you wet the pig down, heat transfers from the surface of the pig to the water droplets, and as the pig is rinsed the heat is removed with the water.** Rinsing the pig several times per day and having a fan moving air across the pig will greatly influence feed intake in a positive manner. Very cold conditions will also depress feed intake. However, usually as temperatures dip pigs eat more because their maintenance requirements increase. A thermoneutral zone exists between about 60 and 75 degrees F. This is what is considered ideal for feed intake and growth performance.
- *Energy density* of the pig's diet is a huge determining factor upon feed intake. Pigs eat to meet their energy requirements. So, feeds that are higher in metabolizable energy (ME) will produce lower feed intakes, because the pig doesn't need to consume as much to meet its daily nutrient requirements. It is not as simple as reading the crude fat guarantee on the feed tag. You must also consider the crude fiber. As fiber increases in the feed, usually energy (ME) is diluted. So, when comparing two feeds with 18% crude protein and 6% crude fat below, crude fiber is the difference.

	Feed A	Feed B
Crude protein, %	18.0	18.0
Crude fat, %	6.0	6.0
Crude fiber, %	3.5	5.0
ME, kcal/lb	1530	1490

The pig may eat more of Feed B, but that is because it *HAS* to, in order to meet it's daily energy requirements.

INCREASING FEED INTAKE

- *Palatability enhancers* are effective at getting the pig to eat more. The trick is finding one that truly works. Land O'Lakes® Ultra Fresh® Lamb Milk Replacer does a great job at getting the pig to eat more feed. Pigs like the taste and do well on it. You can feed it dry mixed into the regular feed, or add water and "slop" with the milk. Feed 8 oz per day per pig to help stimulate appetite.
- *Water* added to the feed also helps improve appetite and feed intake. The feed is softer and usually more palatable. Slopping with water to make a watery solution can encourage pigs to eat. This can also be a mess, and flies can be a problem. Adding enough water to make a moist paste is an effective alternative.

- Adding steam rolled oat (groats) to the pig's daily diet can prevent digestive upsets and ulcers thus leading to better intakes and growth performance. 4 to 8 oz per day per pig is sufficient for improving gut health.

INCREASING GROWTH RATE

- *Concentrating nutrients* is effective in meeting the pig's daily requirements during low feed intake periods. Whatever the pig will eat, concentrate the diet so that faster growth can be achieved.

The High Octane® supplements are very useful for this purpose:

Power Fuel™ supplement supplies energy. It contains 31% crude fat and much more. It will also help during periods of stress and immune challenge due to the ingredients.

Champion Drive™ Topdress™ is high protein and supplies high quality protein sources and amino acids.

Fitter 35™ topdress is also high protein, but it is low in energy and may divert energy away from growth and into fulfilling maintenance requirements if supplemental energy is not added (Power Fuel™ supplement).

For pigs under 150 lbs in bodyweight use ½ to 1 lbs per day. For pigs weighing more than 150 lbs, add 1 to 1 ½ lbs per day of each High Octane® supplement.

- *Paylean®* supplement can greatly optimize growth. The labeled claim for Paylean® supplement (ractopamine HCl) is for the final 45 to 90 lbs of weight gain from 150 lbs in bodyweight and up at a 4.5 to 9 grams/ton dietary concentration. So, pigs need to be at least 150 lbs. Paylean® supplement has been shown to increase growth dramatically for the first 14 days on it, and then quickly subsides to pre-Paylean® supplement growth levels by day 26 or so.
- *Deworming* regularly every 30 days will help prevent internal parasites from diverting valuable nutrients needed for growth. There are several dewormers on the market; Safe-Guard®, Atgard®, and Ivomec® are effective dewormers. Safe-Guard® must be delivered over at least a 3 consecutive day period. It is a very slow kill, and administering on only 1 day, may only kill 75% of the worms. Atgard® is a one feeding product. It can be delivered in one morning or one evening feeding once per month. Care needs to be given to deliver an accurate dose based on bodyweight when administering Atgard®. Both Safe-Guard® and Atgard® are effective against the same parasitic organisms and their larval stages. These two dewormers are also very effective against Whip worms. Ivomec must be injected and is not labeled for some larval stages of round worms and whip worms that Safe-Guard® and Atgard® control.

OTHER IMPORTANT FACTORS

- The *EASIEST* and *BEST* thing you can do is have two pigs instead of just one. Pigs have natural competition, especially at the feeder. Having two pigs encourages better feed intakes and subsequent growth. Two pigs always do better than just one.
- Vitamin B12 when injected may have a positive effect on feed intake during periods of low feed intake, stress, disease, or other conditions resulting in poor feed intake.
- Fresh FEED and fresh WATER is still the gold standard for pig growth and performance. If you purchase feed that contains insect damage, mold, has an off or unpleasant odor return it to your local dealer for fresh feed.
- CHECK the water daily to ensure it is working, fresh, cool, available, and abundant to the pig.

Sometimes just making the pig more comfortable in the surroundings and environment encourages feed intake and subsequent growth. Bedding with wood shavings and/or straw can greatly improve the pig's comfort level and positively impact feed intake.

Removing stale or old feed and always offering fresh feed will help encourage feed intake. If you are using a self-feeder, this could simply mean removing the feed in the pan or bottom of the feeder and re-dumping into the top of the feeder on a daily basis.

Anything that you can do to make the pig more comfortable in terms of effective ambient temperature, environment, and improving physical surroundings will have a positive impact on feed intake and subsequent growth rate.