



Cooperative Extension Service
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Types of Swine Diets¹

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Various classes of swine have particular nutrient requirements. As such, there are various diets on the market or that can be mixed on the farm that are suited for each class of swine.

These diet types usually include the following:

- Prestarter (or baby pig)
- Starter
- Grower
- Finisher
- Gestation
- Lactation
- Farrowing
- Gilt developer

Prestarter diets

Prestarter (or baby pig) diets are very complex and should contain dried milk products (lactose, dried whey, dried skim milk). Prestarter diets should contain at least 1.25% lysine resulting in a 20-22% crude protein diet. These diets are designed to be the first dry feed for pigs weaned at 3 to 4 weeks of age. Pigs are usually self-fed prestarter diets until they are 5 to 6 weeks of age. Although these diets are expensive, little feed is required due to limited intake at this age. Due to their complex nature, it is best that prestarter diets be purchased from commercial companies. Prestarter diets are only necessary for those weaning at 3 to 4 weeks of age.

Starter diets

This diet type should contain approximately 1.10% lysine which will result in a dietary protein level of 18-21%. These diets usually are not as complex as prestarter diets. Starter diets may or may not contain dried milk products, if they do, it is usually dried whey (10 to 20% of diet). These diets are designed to be self-fed to pigs weaned at 5 weeks of age or older, or to be used as the second feed for early weaned pigs after prestarter. Starter diets are fed until the pigs weigh 40 - 60 lbs. These diets can be used as creep feed for young pigs still nursing the sow. As with prestarter, it is usually best to purchase commercial starter diets; however, a starter diet can be mixed on the farm with some commercial supplement programs.

Grower diets

This diet type is usually fed to pigs from 50 - 120 lbs. Grower diets generally contain about 0.75% lysine to provide 15 - 16% crude protein and are self-fed to the pigs. Grower feeds are usually mixed on the farm or can be purchased commercially.

Finisher diets

Finisher diets are usually fed from 120 lbs to market weight. The diets contain 0.60% lysine with 13 - 14% crude protein and are self-fed. Finisher diets, much like

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grower diets, are usually mixed on the farm in most operations, but are also available commercially. Nutrient requirements (as a percent of diet) of finishing pigs are lower than that of growing pigs. Therefore, finisher diets contain lower levels of protein, vitamins and minerals in order to reduce diet costs.

Gestation diets

These diets, as the name implies, are fed to gestating sows. They are also usually fed to breeding boars. They contain 0-60% lysine, resulting in crude protein levels of 13 - 16% and are limit fed (about 4 lbs per head per day). Gestation diets generally contain higher levels of vitamins and minerals than swine grower and finisher diets in order to meet daily requirements under a limit feeding program

Lactation diets

This diet type is fed to lactating sows. Lactation diets contain about 0-60% lysine with 13 - 16% crude protein and have higher levels of vitamins and minerals than finisher diets due to higher requirements for lactating sows. These diets are usually full fed to nursing sows during the entire lactation period. Since they are full fed, vitamin and mineral levels may be lower than in gestation diets. In order to minimize the number of diets mixed on the farm and simplify the feeding program, many producers feed the same diet to both gestating and lactating sows.

Farrowing diets

This optional diet type is designed to be fed to sows a few days before farrowing to a few days after farrowing.

These diets are designed to minimize constipation and other problems that may occur at farrowing time. Farrowing diets are generally mixed by adding bulk (i.e., fibrous feeds like wheat bran, alfalfa meal or ground oats) or mineral laxatives to normal gestation-lactation diets. A separate farrowing diet is optional and is only necessary if constipation or other farrowing problems such as MMA are a problem in your herd.

Gilt developer diets

Some commercial supplement programs and feed companies may recommend this diet type. Diets of this type are fed to replacement gilts from market weight until they are bred. These diets are very similar to gestation diets and gestation diets will work for those producers who don't want to bother with a separate gilt developer diet.

Summary

Several types of swine diets are available to swine producers for various classes of swine. Different diets are necessary in order to meet the varying requirements of each class. In order to simplify the feeding system on swine farms, the number of diets necessary can be minimized by combining certain classes and feeding one diet to each. This can be done for growing and finishing as well as gestating and lactating swine. Therefore, the minimum number of diets for a farrow to finish swine operation would be three (starter, grower-finisher, gestation-lactation). Using one diet for two classes of swine, however, may reduce performance and/or increase feed costs and may result in higher overall production costs.

Table 1. Example composition of swine diets.

Ingredient and Composition	Prestarter (10-20 lb)	Starter (20-50 lb)	Grower (50-120 lb)	Finisher (120-230 lb)	Gestation	Lactation
	-----lbs-----					
Ground corn	795	1332	1595	1705	1668	1635
Soybean meal	500	600	350	250	250	300
Oat groats	200	--	--	--	--	--
Dried whey	400	--	--	--	--	--
Fat	40	--	--	--	--	--
Calcium carbonate	15	20	20	15	20	20
Dicalcium phosphate	30	30	20	20	45	30
Salt	5	6	6	6	10	10
Vitamin and selenium premix ^a	5	5	4	3	5	4
Trace mineral premix ^b	5	5	4	3	5	4
Antibiotic	5	5	4	--	--	--
L-lysine HCL	3	--	--	--	--	--
Total	2000	2000	2000	2000	2000	2000
Composition:						
Protein, %	20.8	20.4	15.5	13.6	13.5	13.5
Lysine, %	1.26	1.11	0.75	0.60	0.60	0.60
Calcium, %	0.90	0.80	0.66	0.56	0.92	0.77
Phosphorus, %	0.73	0.65	0.51	0.50	0.73	0.60
^a Contains per pound of premix: vitamin A, 1000,000 IU; vitamin D3, 160,000 IU; vitamin E, 4000 IU ; vitamin K activity; 600 mg; riboflavin, 800 mg; d-pantothenic acid, 3200 mg; niacin, , 4,000 mg; chloride, 100g; vitamin B12, 4 mg; and selenium, 0.005%.						
^b Contains 20% zinc, 10% iron, 5.5% manganese, 1.1% copper, and o.15% iodine.						