

*Director's
Digest*



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PLASMA PROTEIN IN HIGH FAT DIETS

COMMENT: Below is an interesting article that appeared in the May, 1992 edition of Swine Practitioner.

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INTRODUCTION

Including porcine plasma protein in starter diets is a relatively new concept. It has to be used correctly or it can come back and "bite" you in terms of cost and reduced performance, says Louis Russell, director of technical services for Feed Specialties Company in Des Moines. Russell, who holds a doctorate in animal science and nutrition from the University of Illinois, has developed the following specifications for complex starter diets. Note the inclusion of porcine plasma for the first two phases of pig growth. If you are using a commercial product with animal plasma in it, but don't know the concentration and how it relates back to the percentages given by Russell in this chart, contact the manufacturer and ask him to translate it for you.

Phase	Characteristics of the pig	Characteristics of the diet
Phase I	<p>A pig weighing less than 15 pounds</p> <p>A pig weaned at 21 days; The first 3 to 4 days after 28-day weaning;</p> <p>A pig experiencing post-weaning lag</p>	<p>Pelleted feed(0.125-inch pellet);</p> <p>Cooked cereal sources;</p> <p>Multiple fat sources;</p> <p>20 percent to 30 percent whey(food grade);</p> <p>5 percent porcine plasma;</p> <p>5 percent fish meal(select menhaden);</p> <p>5 percent to 20 percent extruded soy protein concentrate;</p> <p>No soybean meal;</p> <p>22 percent to 24 percent crude protein;</p> <p><u>8 percent to 10 percent total fat;</u></p> <p>1.65 percent total lysine</p>
Phase II	<p>A pig weighing between 15 and 25 pounds;</p> <p>A weaned pig that has recovered from post-weaning lag;</p> <p>A weaned pig after it is consuming dry feed</p>	<p>Feed can be in either pelleted or meal form;</p> <p>High-quality animal fat;</p> <p>10 to 20 percent whey(food grade);</p> <p>2.5 percent to 5 percent fish meal(select menhaden);</p> <p>1 percent to 2.5 percent porcine plasma;</p> <p>2.5 to 10 percent extruded soy protein concentrate;</p> <p>Maximum of 15 percent soybean meal;</p> <p>20 percent to 22 percent crude protein;</p> <p><u>6 percent to 8 percent total fat;</u></p> <p>1.4 percent total lysine</p>
Phase III	<p>A pig weighing between 25 and 50 pounds;</p> <p>A post-weaning pig readily consuming feed</p>	<p>Feed can be either meal or pellet;</p> <p>5 to 10 percent whey;</p> <p>High-quality fat source;</p> <p>Soybean meal is primary protein source;</p> <p>18 to 20 percent crude protein;</p> <p><u>5 percent to 6 percent total fat;</u></p> <p>1.25 percent lysine</p>