

APPENDIX C

Table 1. Nutrient Requirements and Allowances for Growing Swine

National Research Council					Missouri Recommended Allowances				
10-25	25-45	45-110	110-230	<i>Live Weight (lbs)</i>	10-25	25-45	45-110	110-230	
.55	1.0	1.54	1.80	<i>Expected Daily Gain (lbs)</i>	.55	1.0	1.54	1.80	
Percent in diet					Percent in diet				
20	18	15	13	Crude Protein	20	18	16	14	
.80	.70	.60	.50	Calcium	.90	.80	.75	.65	
.65	.60	.50	.40	Phosphorus (Total)	.80	.70	.65	.55	
.50	.40	.25	.10	Arginine	.50	.40	.25	.10	
.31	.25	.22	.18	Histidine	.31	.25	.22	.18	
.65	.53	.46	.38	Isoleucine	.65	.53	.46	.38	
.85	.70	.60	.50	Leucine	.85	.70	.60	.50	
1.15	.95	.75	.60	Lysine	1.25	1.10	.80	.65	
.58	.48	.41	.34	Methionine + cystine	.60	.50	.41	.35	
.94	.77	.66	.55	Phenylalanine + tyrosine	.94	.77	.66	.55	
.68	.56	.48	.40	Threonine	.70	.60	.50	.45	
.17	.14	.12	.10	Tryptophan	.20	.18	.15	.13	
.68	.56	.48	.40	Valine	.68	.56	.48	.40	

Missouri Recommended Nutrient Addition Per Ton

Nutrient	Unit	Additions per ton	
		Grower Rations	Finisher Rations
Sodium	lb	5	5
Chlorine		-	-
Iron	g	100	60
Zinc	g	100	60
Manganese	g	16	8
Copper	g	10	6
Iodine	g	.27	.18
Selenium*	g	.27	.27
Vitamin A	Mil.I.U.	5	3
Vitamin D	Thou.I.U.	500	300
Vitamin E	Thou.I.U.	20.0	10
Vitamin K	g	2.0	1.0
Riboflavin	g	4.0	2.0
Niacin	g	30	8
Pantothenic acid	g	16	8
Choline	g	200	100
Vitamin B ₁₂	mg	25	12.5

*Maximum legal limit (.3 ppm)

From *Nutrient Requirements of Swine and Recommendations for Missouri (G2320)*, University Extension, University of Missouri-Columbia

Table 2. Nutrient Requirements of Breeding Swine: Percentage or Amount Per Pound of Diet

National Research Council			Missouri Recommended Allowances		
Bred Gilts & Sows Young & Adult Boars		Lactating Gilts & Sows	Bred Gilts & Sows Young & Adult Boars		Lactating Gilts & Sows
Percent in diet		Nutrients	Percent in diet		
12	13		13	14	
.75	.75	Crude Protein	.90	.90	
.60	.60	Calcium	.80	.80	
—	.4	Phosphorus	—	.4	
.15	.25	Arginine	.15	.25	
.30	.39	Histidine	.30	.39	
.30	.48	Isoleucine	.30	.48	
.43	.60	Leucine	.5	.65	
.23	.36	Lysine	.23	.36	
.45	.70	Methionine + cystine	.45	.70	
.30	.43	Phenylalanine + tyrosine	.35	.45	
.09	.12	Threonine	.11	.13	
.32	.60	Tryptophan	.32	.60	
		Valine			

Missouri Recommended Nutrient Additions Per Ton

Nutrient	Unit	Breeding Stock Ratios
Salt	lb	10
Iron	g	100
Zinc	g	100
Manganese	g	16
Copper	g	10
Iodine	g	.27
Selenium	g	.27
Vitamin A	Mil.I.U.	5.0
Vitamin D	Thou.I.U.	500
Vitamin E	Thou.I.U.	25
Vitamin K	g	2.0
Riboflavin	g	5.0
Niacin	g	30.0
Pantothenic acid	g	18.0
Vitamin B ₁₂	mg	25.0
Biotin	mg	200
Folacin	mg	300