

Supplementary Table 1

Composition and nutrient levels of basal diets for sows (air-dry basis; %).

Items	Pregnant diet	Lactating diet
Ingredients		
Corn	37.50	66.00
Soybean meal	9.50	25.00
Wheat bran	14.00	5.00
Barley	25.00	
Soybean hull	10.00	
Pregnant premix ¹⁾	4.00	
Lactating premix ²⁾		4.00
Total	100.00	100.00
Nutrient levels ³⁾		
Digestible energy (MJ/Kg)	12.55	13.87
Crude protein	12.82	16.30
Crude fiber	4.56	2.87
SID ⁴⁾ Lys	0.48	0.75
SID Met+ Cys	0.43	0.51
SID Thr	0.37	0.53
SID Trp	0.13	0.17
Calcium	0.62	0.65
Phosphorus	0.47	0.50

¹⁾ Pregnant premix provided the following per kg of diet: CaHPO₄·2H₂O 10 g, NaCl 4 g, CuSO₄·5H₂O 80 mg, FeSO₄·H₂O 360 mg, ZnSO₄·H₂O 240 mg, MnSO₄·H₂O 100 mg, MgSO₄·7H₂O 1 g, 1% ICl 50 mg, 1% Na₂SeO₃ 36 mg, 1% CoCl₂ 16 mg, NaHCO₃ 1.4 g, VA 10 000 IU, VD₃ 1 800 IU, VE 20 mg, VK₃ 2.4 mg, VB₁ 1.6 mg, VB₂ 6 mg, VB₆ 1.6 mg, VB₁₂ 0.024 mg, folic acid 1.2 mg, nicotinamide 20 mg, pantothenic acid 12 mg, biotin 0.12 mg, ferrous glycinate 100 mg, choline chloride 1g, phytase 200 mg, fruity 80 mg, limestone 12 g.

²⁾ Lactating premix provided the following per kg of the diet: CaHPO₄·2H₂O 10 g, NaCl 4 g, CuSO₄·5H₂O 80 mg, FeSO₄·H₂O 360 mg, ZnSO₄·H₂O 240 mg, MnSO₄·H₂O 100 mg, 1% ICl 50 mg, 1% Na₂SeO₃ 36 mg, 1% CoCl₂ 16 mg, NaHCO₃ 1.4 g, VA 10 000 IU, VD₃ 1 800 IU, VE 20 mg, VK₃ 2.4 mg, VB₁ 1.6 mg, VB₂ 6 mg, VB₆ 1.6 mg, VB₁₂ 0.024 mg, folic acid 1.2 mg, nicotinamide 20 mg, pantothenic acid 12 mg, biotin 0.12 mg, Lysine 1.5 g, ferrous glycinate 100 mg, choline chloride 1g, phytase 200 mg, fruity 80 mg, limestone 12 g.

³⁾ Nutrient levels were calculated values.

⁴⁾ SID: standard ileum digestible.

Supplementary Table 2

Composition and nutrient levels of basal diets for weaned Bama mini-pigs (air-dry basis; %).

Items	Prophase diet (35–95 days of age)	Anaphase diet (96–125 days of age)
Ingredients		
Corn	54.92	58.00
Soybean meal	22.00	18.35
Wheat bran	10.13	11.35
Rice bran	8.95	8.30
Premix ¹⁾	4.00	4.00
Total	100.00	100.00
Nutrient levels ²⁾		
Digestible energy (MJ/kg)	13.50	13.42
Crude protein	16.13	14.90
Calcium	0.45	0.44
Total Phosphorus	0.49	0.49
Lys	1.40	1.30
Met + Cys	0.69	0.66
Thr	0.78	0.74

¹⁾ Premix provided the following per kilogram of diets: enzyme preparation (including phytase, protease, and lipase) 1.2 g, VA 26 000 IU, VD₃ 10 000 IU, VE 70 IU, VK₃ 10 mg, VB₁ 10 mg, VB₂ 25 mg, VB₆ 10 mg, VB₁₂ 0.075 mg, biotin 0.4 mg, folic acid 5 mg, nicotinamide 100 mg, pantothenic 50 mg, choline 1600 mg, flavoring agent 500 mg, edulcorant 300 mg, acidulating agent 5 g, CuSO₄·5H₂O 898 mg, MnSO₄·H₂O 298 mg, ZnSO₄·H₂O 600 mg, FeSO₄·H₂O 501 mg, Ca(IO₃)₂ 0.9 mg, as Na₂SeO₃ 0.7 mg, CoSO₄·H₂O 1.2 mg, glucose 2.1 g, antioxidants 0.4 g, anti-mildew agent 1 g, Ca (as CaHPO₄ and CaCO₃) 3.42 g, P (as CaHPO₄) 1.155 g.

²⁾ Nutrient levels were calculated values.

31 **Supplementary Table 3**

32 Primers sequences used for real time-PCR

Genes	Sequence (5' to 3')	Size (bp)	GenBank ID
<i>β-actin</i>	F: GGCACCACACCTTCTACAACGAG R: TCATCTTCTCACGGTTGGCTTTGG	102	XM_021086047.1
<i>ACC</i>	F: CAAAGAGGTTCCAGGCACAGTCC R: CGTCAGCATGTCAGAAGGCAGAG	146	NM_001114269.1
<i>FASN</i>	F: TACCTTGTGGATCACTGCATAGA R: GCGGTCTCCTCCAAGTTCTG	113	NM_001099930.1
<i>LIPE</i>	F: GCGTGCTCTCCAAGTGTGTCAG R: CCAGGCGGAGGTCTCGGAAG	135	NM_214315.3
<i>LPL</i>	F: ACACAGTTGAGGACACTTGCCATC R: TCCTGTCACCGTCCAGCCATG	116	NM_214286.1
<i>Myf5</i>	F: GGATCAGCAACTCCGAGCAACC R: GCACATGGTAGATGAGCCTGGAAC	126	NM_001278775.1
<i>Myf6</i>	F: GCTCGTGATGACTGCCAAGGAAG R: CGATGGAAGAAAGGCACCGAAGG	80	NM_001244672.1
<i>MyoG</i>	F: AAACCTACCTGCCCCGTCCACCTC R: GGTCCCCAGCCCCCTTATCTTCC	112	NM_001012406.1
<i>MSTN</i>	F: GCACCAAGCAAACCCAGAGG R: AGCACCCACAGCGATCTACTACC	143	NM_214435.2
<i>MyHC I</i>	F: CTGTCCAAGTTCCGCAAGGT R: CTTTGTTGCGCCCTCAGGAT	176	NM_213855.2
<i>MyHC IIa</i>	F: GGACCCCCTGAATGACACAG R: CGGTCTGGAAGGAAGAACCC	149	NM_214136.1
<i>MyHC IIx</i>	F: TGAGGAAGACCGCAAGAACA R: GGTCACTTTTGAGCATTTGGATG	272	NM_001104951.2
<i>MyHC IIb</i>	F: AGGAGCATCAGCGCCTAATC R: TCGGGATAGCTGAGACACCA	119	NM_001123141.1
<i>SCD</i>	F: ATTGGGAGCTGTGGGTGAG R: AAGTTGATGTGCCAGCGGTA	90	NM_213781.1
<i>SREBP-1</i>	F: GCGACGGTGCCTCTGGTAGT R: CGCAAGACGGCGGATTTA	218	NM_214157.1

33 *ACC*, acetyl-CoA carboxylase; *FASN*, fatty acid synthase; *LIPE*, hormone-sensitive
34 triglyceride lipase; *LPL*, lipoprotein lipase; *Myf5*, myogenic factor 5; *Myf6*, myogenic
35 factor 6; *MyOG*, myogenin; *MSTN*, myostatin; *SCD*, stearyl-CoA desaturase; *SREBP*-
36 1, sterol-regulatory element-binding protein-1.

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