

Table S1. Composition and nutrient levels of the basal diet (as fed-basis).

Item	Content, %
Ingredients	
Corn (CP ¹ 8.70%)	55.94
Wheat	5.50
Whey, dried	5.70
Soybean meal	10.82
Soybean protein (CP ¹ 65.00%)	12.65
Soybean oil	1.60
Fishmeal	3.50
L-Lysine-HCl	0.12
DL-Methionine	0.11
L-Threonine	0.05
Sugar	1.50
Limestone	0.80
Salt	0.26
Dicalcium phosphate	0.55
Vitamin premix ²	0.40
Trace mineral premix ³	0.60
Total	100.00
Energy and nutrient composition ⁴	
ME ⁵ , kcal/kg	3,420
CP ⁴ , %	22.80
Crude fat, %	4.40
Lys, %	1.42
Met, %	0.52
Met + Cys, %	0.85

¹Vitamins were provided in the following amounts per kilogram of the diet: vitamin A, 10,000 IU; vitamin D₃, 1,500 IU; vitamin E, 50 IU; vitamin K₃, 2.50 mg; vitamin B₁₂, 60 µg; vitamin B₁, 4.50 mg; vitamin B₂, 12 mg; niacin, 60 mg; pantothenic acid, 36 mg; folic acid, 1 mg; vitamin B₆, 10 mg; biotin, 0.50 mg; and vitamin C, 200 mg.

²Trace minerals were provided in the following amounts per kilogram of the diet: Fe, 100 mg; Cu, 6 mg; Mn, 4 mg; Zn, 100 mg; I, 0.30 mg; Co, 0.14 mg; and Se, 0.30 mg.

³Calculated values unless indicated otherwise.

⁴CP=Crude protein.

⁵ME= Metabolizable energy.

Table S2. Sequences from the samples of all groups tested.

Sample ID	Valid Sequences	3 % distance				
		Average-length h	Observed OTUs	Shannon index	Simpson index	Coverage e
A1	29,012	330.43	1529	5.02	0.06	98.83%
A2	32,477	330.58	1269	4.45	0.05	99.27%
A3	33,083	331.17	1135	4.69	0.04	98.90%
A4	31,504	333.62	1272	4.48	0.04	98.51%
B1	36,688	336.45	1189	3.86	0.07	98.85%
B2	34,723	334.56	1007	4.26	0.06	98.34%
B3	35,087	336.22	1499	3.33	0.07	98.34%
B5	39,460	337.62	1210	4.61	0.04	98.31%
C1	41,953	332.70	1478	4.80	0.05	99.25%
C2	38,245	334.91	1420	4.84	0.03	98.62%
C3	46,176	334.83	1696	5.03	0.08	99.33%
C4	42,849	335.64	1639	4.75	0.04	98.39%
D1	40,582	334.39	1746	5.03	0.08	98.51%
D2	37,149	335.42	1535	4.82	0.07	98.52%
D3	37,900	335.00	1533	4.78	0.03	98.54%
D4	36,628	335.40	1539	4.66	0.03	98.50%
E1	41,459	335.78	1289	4.10	0.03	98.33%
E2	38,676	336.14	997	4.05	0.07	98.41%
E3	39,905	335.46	1299	3.97	0.07	98.36%
E4	36,406	331.32	1410	4.27	0.04	98.22%

Table S3. Relative abundances of the top five predominant phyla, classes, and families of fecal microbiota of weaned-piglets (means \pm SEM, n=4).

	Day 0		Day 28		
		Control	EV-SC	GLP2-SC	rh-GLP2
Phylum	Firmicutes(27.44 \pm 1.22)	Firmicutes(75.15 \pm 1.47)	Firmicutes(91.76 \pm 1.20)	Firmicutes(90.84 \pm 1.13)	Firmicutes(77.92 \pm 1.22)
	Bacteroidetes(62.11 \pm 1.69)	Bacteroidetes(18.61 \pm 1.27)	Bacteroidetes(4.82 \pm 0.80)	Bacteroidetes(5.13 \pm 1.21)	Bacteroidetes(13.89 \pm 1.02)
	Proteobacteria(5.23 \pm 0.95)	Actinobacteria(1.74 \pm 0.64)	Actinobacteria(1.70 \pm 1.45)	Actinobacteria(1.75 \pm 0.51)	Actinobacteria(1.44 \pm 0.29)
	Spirochaetes(3.64 \pm 0.90)	Tenericutes(2.44 \pm 0.65)	Tenericutes(2.04 \pm 0.87)	Tenericutes(1.91 \pm 0.25)	Tenericutes(2.31 \pm 0.84)
	Fibrobacteres(0.41 \pm 0.31)	Proteobacteria(2.03 \pm 0.06)	Proteobacteria(0.43 \pm 0.39)	Proteobacteria(0.27 \pm 0.25)	Proteobacteria(3.38 \pm 1.29)
Class	Clostridia(25.66 \pm 1.27)	Clostridia(64.48 \pm 1.51)	Clostridia(63.52 \pm 2.06)	Clostridia(65.85 \pm 1.10)	Clostridia(61.61 \pm 1.11)
	Bacteroidia(62.11 \pm 1.69)	Bacteroidia(18.61 \pm 1.27)	Bacteroidia(4.82 \pm 0.65)	Bacteroidia(5.13 \pm 1.21)	Bacteroidia(13.89 \pm 1.02)
	Betaproteobacteria(1.28 \pm 0.43)	Erysipelotrichi(7.04 \pm 1.15)	Erysipelotrichi(22.69 \pm 1.85)	Erysipelotrichi(21.34 \pm 1.32)	Erysipelotrichi(8.05 \pm 0.83)
	Spirochaetes(3.64 \pm 0.90)	Bacilli(9.63 \pm 1.28)	Bacilli(4.55 \pm 0.90)	Bacilli(3.65 \pm 0.58)	Bacilli(9.26 \pm 0.99)
	Gammaproteobacteria(3.14 \pm 0.83)	Coriobacteriia(1.68 \pm 0.64)	Coriobacteriia(1.62 \pm 1.45)	Coriobacteriia(1.91 \pm 0.25)	Coriobacteriia(1.38 \pm 0.28)
Family	Ruminococcaceae(7.04 \pm 0.50)	Ruminococcaceae(17.84 \pm 1.65)	Ruminococcaceae(28.05 \pm 1.56)	Ruminococcaceae(27.28 \pm 0.95)	Ruminococcaceae(20.33 \pm 0.65)
	Clostridiales_norank(10.90 \pm 1.14)	Clostridiales_norank(24.27 \pm 1.05)	Clostridiales_norank(12.94 \pm 1.22)	Clostridiales_norank(11.98 \pm 0.81)	Clostridiales_norank(20.67 \pm 1.10)
	Prevotellaceae(26.09 \pm 1.51)	Lachnospiraceae(20.40 \pm 1.30)	Lachnospiraceae(14.32 \pm 1.41)	Lachnospiraceae(11.17 \pm 1.02)	Lachnospiraceae(22.33 \pm 0.84)
	Bacteroidales_norank(12.47 \pm 0.89)	Erysipelotrichaceae(7.04 \pm 1.15)	Erysipelotrichaceae(22.69 \pm 1.85)	Erysipelotrichaceae(21.34 \pm 1.32)	Erysipelotrichaceae(8.05 \pm 0.83)
	S24-7(8.14 \pm 1.04)	Lactobacillaceae(9.53 \pm 1.28)	Lactobacillaceae(9.81 \pm 0.72)	Lactobacillaceae(9.53 \pm 0.58)	Lactobacillaceae(9.34 \pm 0.82)

Table S4. Relative abundances of fecal microbiotas (at genus level) of weaned-piglets (means \pm SEM, n=4).

	Day 0	Control	EV-SC	GLP2-SC	rh-GLP2
<i>Ruminococcaceae_norank</i>	4.74 \pm 0.47	16.85 \pm 0.63	23.19 \pm 2.10	25.17 \pm 1.85	18.09 \pm 0.36
<i>Clostridiale_norank</i>	10.90 \pm 1.16	19.27 \pm 2.23	13.69 \pm 0.80	11.98 \pm 1.31	20.67 \pm 2.40
<i>Prevotella</i>	23.54 \pm 2.21	1.91 \pm 0.26	2.23 \pm 0.82	1.19 \pm 0.35	2.34 \pm 0.42
<i>Lachnospiraceae_norank</i>	1.33 \pm 0.29	20.12 \pm 1.00	13.67 \pm 0.96	10.80 \pm 0.64	17.38 \pm 1.22
<i>Catenibacterium</i>	0.11 \pm 0.03	2.92 \pm 1.16	1.10 \pm 0.37	2.88 \pm 0.73	4.19 \pm 0.29
<i>Clostridiaceae_norank</i>	0.97 \pm 0.58	4.17 \pm 1.64	4.21 \pm 0.93	2.34 \pm 0.57	3.60 \pm 0.48
<i>Lactobacillus</i>	0.50 \pm 0.15	9.53 \pm 0.74	9.72 \pm 0.35	9.53 \pm 1.14	9.24 \pm 0.71
<i>Bacteroidales_norank</i>	12.47 \pm 1.59	2.54 \pm 1.08	0.83 \pm 0.35	0.83 \pm 0.27	2.03 \pm 0.88
<i>Erysipelotrichaceae_norank</i>	0.25 \pm 0.11	6.98 \pm 0.64	14.78 \pm 1.54	14.94 \pm 1.92	2.09 \pm 0.40
<i>Dorea</i>	0.39 \pm 0.14	3.10 \pm 0.57	1.05 \pm 0.32	2.99 \pm 0.09	1.67 \pm 0.32
<i>Eubacterium</i>	0.28 \pm 0.22	0.58 \pm 0.13	1.60 \pm 0.50	1.83 \pm 0.67	1.58 \pm 0.69
<i>S24-7_norank</i>	8.14 \pm 2.15	1.60 \pm 0.34	0.45 \pm 0.13	0.51 \pm 0.25	1.86 \pm 0.35
<i>RF39_norank</i>	0.16 \pm 0.07	1.44 \pm 0.85	1.79 \pm 1.33	0.70 \pm 0.35	2.71 \pm 1.41
<i>Blautia</i>	2.64 \pm 2.46	0.68 \pm 0.19	0.96 \pm 0.42	0.83 \pm 0.26	0.82 \pm 0.42
<i>Coriobacteriaceae_norank</i>	0.02 \pm 0.01	0.50 \pm 0.20	1.24 \pm 0.24	1.08 \pm 0.30	1.05 \pm 0.09
<i>Ruminococcus</i>	0.54 \pm 0.10	0.66 \pm 0.13	0.36 \pm 0.13	0.90 \pm 0.09	0.53 \pm 0.03
<i>Coprococcus</i>	0.22 \pm 0.10	0.88 \pm 0.12	1.74 \pm 0.56	1.40 \pm 1.21	1.20 \pm 0.28
<i>Oscillospira</i>	1.60 \pm 0.09	1.13 \pm 0.53	0.26 \pm 0.08	0.87 \pm 0.23	1.53 \pm 0.46
<i>Ruminococcus</i>	1.56 \pm 1.49	1.16 \pm 0.34	0.53 \pm 0.15	1.92 \pm 0.15	1.01 \pm 0.14
<i>Paraprevotellaceae_CF231</i>	3.95 \pm 1.59	0.14 \pm 0.10	0.19 \pm 0.10	0.50 \pm 0.35	0.28 \pm 0.06
<i>Prevotella_noank</i>	2.49 \pm 0.73	0.05 \pm 0.01	0.07 \pm 0.03	0.30 \pm 0.21	0.32 \pm 0.14
Others	23.19 \pm 5.08	5.06 \pm 1.21	6.38 \pm 0.65	6.49 \pm 1.19	5.83 \pm 0.56