

Table S1. Ingredients and centesimal and nutritional composition of the experimental diets: pre-starter I (21 to 35 days of age), pre-starter II (36 to 50 days of age), and starter (51 to 63 days of age)

	Pre-starter I					Pre-starter II					Starter				
	MS0	MS25	MS50	MS75	MS100	MS0	MS25	MS50	MS75	MS100	MS0	MS25	MS50	MS75	MS100
Ingredients, %															
Corn	46.024	47.084	46.683	44.669	43.421	58.615	64.149	63.038	62.333	61.795	68.886	68.599	67.309	67.974	67.638
Corn gluten, 60%	-	-	0.229	1	1	5	4	5	5	5	6	6	6	6	6
Soybean meal, 46%	20	15	10	5	-	10	8	5	2	-	5	4	3	1	-
Micronized soybean	-	5	10	15	20	-	2	5	8	10	-	1	3	4	5
Whole milk powder	25	25	25	25	25	15	15	15	15	15	10	10	10	10	10
Refined soybean oil	1	0.408	-	-	-	2	0.228	-	-	-	-	-	-	-	-
Calcitic limestone	0.5	0.4	0.3	0.2	0.1	0.6	0.6	0.5	0.4	0.4	0.6	0.6	0.5	0.5	0.5
Dicalcium phosphate	1.77	1.835	1.925	2.025	2.125	1.47	1.445	1.5	1.56	1.6	1.665	1.69	1.72	1.745	1.77
Kaolin	3.841	3.353	3.883	5.066	6.249	5.72	2.983	3.327	4.037	4.51	5.894	6.126	6.486	6.781	7.077
Zinc oxide	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.255
Salt	0.25	0.25	0.25	0.25	0.25	0.35	0.35	0.35	0.35	0.35	0.4	0.4	0.4	0.4	0.4
Vitamin pre-mixture ^[1]	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Mineral pre-mixture ^[2]	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Lysine HCl, 99%	0.535	0.565	0.59	0.62	0.655	0.43	0.43	0.45	0.465	0.48	0.615	0.635	0.63	0.635	0.645
DL-methionine, 99%	0.065	0.07	0.08	0.09	0.1	-	-	0.005	0.01	0.015	0.02	0.025	0.025	0.03	0.03
L-threonine, 98.5%	0.31	0.325	0.34	0.355	0.37	0.115	0.115	0.125	0.135	0.14	0.18	0.185	0.19	0.195	0.195
L-tryptophan, 98%	0.02	0.025	0.035	0.04	0.045	0.015	0.015	0.02	0.025	0.025	0.055	0.055	0.055	0.055	0.06
antibiotic ^[3]	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Calculated values															
Crude protein, %	20	20	20	20	20	17	17	17	17	17	15	15	15	15	15
Crude fat, %	9.68	9.72	10.32	11.29	12.27	6.37	6.97	7.35	7.93	8.32	5.23	5.37	5.72	5.96	6.20
Digestible lysine, %	1.35	1.35	1.35	1.35	1.35	1.23	1.23	1.23	1.23	1.23	0.98	0.98	0.98	0.98	0.98
Digestible methionine, %	0.39	0.39	0.39	0.39	0.39	0.36	0.36	0.36	0.36	0.36	0.28	0.28	0.28	0.28	0.28
Digestible tryptophan, %	0.22	0.22	0.22	0.22	0.22	0.20	0.20	0.20	0.20	0.20	0.17	0.17	0.17	0.17	0.17
Digestible threonine, %	0.79	0.79	0.79	0.79	0.79	0.73	0.73	0.73	0.73	0.73	0.59	0.59	0.59	0.59	0.59
Lactose, %	9.42	9.42	9.42	9.42	9.42	5.65	5.65	5.65	5.65	5.65	3.76	3.76	3.76	3.76	3.76
Calcium, %	0.9	0.9	0.9	0.9	0.9	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Available phosphorus, %	0.56	0.57	0.58	0.59	0.61	0.43	0.42	0.43	0.44	0.44	0.42	0.42	0.43	0.43	0.44
Sodium, %	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Metabolizable energy, Mcal/kg	3.4	3.4	3.4	3.4	3.4	3.35	3.35	3.35	3.35	3.35	3.3	3.3	3.3	3.3	3.3

^[1] Vitamin pre-mixture (without growth enhancer): vitamin A – 8,000 IU; vitamin D₃ – 3,000 IU; vitamin K – 8 mg; vitamin B₂ – 6 mg; vitamin B₁₂ – 33 µg; vitamin B₆ – 2 mg; vitamin B₁ – 2 mg; vitamin E – 30 IU; calcium pantothenate – 21 mg; niacin – 0.04 g; folic acid – 1.20 mg; biotin – 0.05 mg; selenium – 0.39 mg; choline – 0.36 g. ^[2] Mineral pre-mixture (without growth enhancer), provided per kilogram of diet: Co – 0.168 mg; Cu – 0.015 g; Fe – 0.025 g; I – 1.42 mg; Mn – 0.04 g; Zn – 0.075 g. ^[3] Colistin – 4%.