

Supplementary Material Table S1: Effects of extruded temperature (Temp.) and vitamin forms (non-microencapsulated or microencapsulated) on concentrations of vitamin in diets (Dry matter basis, Experiment 1) ¹.

Form	NM			M		
	Temp.	100°C	140°C	180°C	100°C	140°C
VA, IU/kg	6330.08	4746.88	4201.84	7775.56	5548.06	5761.72
VD ₃ , IU/kg	2280.51	1638.98	1241.73	2359.25	1771.39	1892.26
VE, mg/kg	15.21	13.56	14.51	15.29	13.40	14.43
VK ₃ , mg/kg	0.22	0.19	0.36	1.53	1.12	1.23
VB ₁ , mg/kg	2.89	2.42	2.39	3.04	2.53	2.52
VB ₂ , mg/kg	6.04	5.37	5.52	6.43	5.58	5.55
VB ₃ , mg/kg	31.20	27.29	26.51	32.34	27.96	27.84
VB ₅ , mg/kg	18.27	15.53	15.75	18.45	16.01	15.45
VB ₆ , mg/kg	2.30	2.42	2.23	3.21	2.91	2.81

¹ VA; vitamin A, VD₃; vitamin D₃, VE; vitamin E, VK₃; vitamin K₃, VB₁; vitamin B₁, VB₂; vitamin B₂, VB₃; vitamin B₃, VB₅; vitamin B₅, VB₆; vitamin B₆. NM, non-microencapsulated; M, microencapsulated.

Supplementary Material Table S2: Effects of pelleting parameters and vitamin forms (non-microencapsulated or microencapsulated) on concentration of vitamins in diets (Dry matter basis, Experiment 2) ¹.

Form	NM				M			
	Processing	LTLR	LTHR	HTLR	HTHR	LTLR	LTHR	HTLR
VA, IU/kg	12880.09	12738.02	12645.14	12098.73	13523.49	13249.19	13298.81	13152.70
VD ₃ , IU/kg	2776.77	2603.74	2708.30	2736.06	2800.70	2854.28	2768.61	2726.87
VE, mg/kg	31.28	30.56	31.33	30.76	30.36	30.25	29.91	29.84
VK ₃ , mg/kg	0.99	0.87	0.93	0.73	1.23	1.05	1.26	0.99
VB ₁ , mg/kg	2.40	2.32	2.51	2.49	2.72	2.71	2.59	2.79
VB ₂ , mg/kg	5.89	5.80	5.90	5.92	5.87	5.88	5.99	5.91
VB ₃ , mg/kg	28.64	28.26	29.44	29.23	29.18	29.05	29.55	29.21
VB ₅ , mg/kg	18.01	17.60	17.91	17.55	17.76	18.05	17.56	17.56
VB ₆ , mg/kg	2.82	3.00	2.99	2.99	2.86	2.83	2.99	3.00

¹ NM, non-microencapsulated; M, microencapsulated; L:D ratio, pellet mill die length-to-diameter ratio; LTLR, low temperature + low L:D ratio; LTHR, low temperature + high L:D ratio; HTLR, high temperature + low L:D ratio; HTHR, high temperature + high L:D ratio. VA; vitamin A, VD₃; vitamin D₃, VE; vitamin E, VK₃; vitamin K₃, VB₁; vitamin B₁, VB₂; vitamin B₂, VB₃; vitamin B₃, VB₅; vitamin B₅, VB₆; vitamin B₆.