



Growth performance of broiler chicken fed diet with single cell protein

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Supplementary Table 1. Ingredient and chemical composition of the starter diet of broiler chicken

Ingredient	Diet					
	Control	T ₁	T ₂	T ₃	T ₄	T ₅
Maize	59	59	50	59	59	59
Soyabean meal	34	32	30	28	26	24
SCP	-	1.42	2.83	4.25	5.66	7.08
Til cake	2.20	1.80	1.40	1.01	0.67	0.51
Deoiled rice bran	-	0.89	1.82	2.67	3.52	4.18
Oil	1.20	1.29	1.35	1.47	1.55	1.63
Limestone powder	1.80	1.80	1.80	1.80	1.80	1.80
Dicalcium phosphate	1.20	1.20	1.20	1.20	1.20	1.20
Sodium bicarbonate	0.15	0.15	0.15	0.15	0.15	0.15
Salt	0.35	0.35	0.35	0.35	0.35	0.35
Trace mineral mixture ³	0.10	0.10	0.10	0.10	0.10	0.10
Total	100	100	100	100	100	100
<i>Chemical composition, calculated</i>						
Metabolizable energy (kcal/kg) ²	2945.80	2945.55	2945.32	2945.98	2945.13	2945.59
Crude protein ¹	21.67	21.67	21.67	21.67	21.67	21.72
Crude fibre ¹	3.14	3.14	3.13	3.12	3.01	3.09
Calcium ¹	1.05	1.03	1.03	1.02	1.01	1.01
Total phosphorus ¹	0.56	0.56	0.56	0.56	0.56	0.56
Available phosphorus ²	0.37	0.35	0.34	0.34	0.33	0.33
L-Lysine ²	1.34	1.34	1.34	1.34	1.36	1.41
Methionine ²	0.51	0.52	0.53	0.54	0.55	0.57

*Provided premix per kilogram of diet: DL-Methionine (1.60 g), Vitamins (Alvimix Forte) (0.3 g), 1% Maduramycin (0.5 g), Yeast cell (0.4 g), 10% Tylosin phosphate (0.2 g), 15% Chlortetracycline (0.33 g), 60% Choline chloride (0.6 g), Manganese sulphate (0.10 g), Zinc oxide (0.10 g), Toxin Binder (Naturaliv®) (0.25 g), Methionine Recycling Agent (Recymeth®) (0.30 g), Turmeric (0.75 g), Multi Enzyme (BD Zyme®) (0.50 g), Phosphyte® (0.15 g), Acidifier (Rafresh®) (0.25 g), Antioxidant (Oxigon®) (0.10 g). ²Calculated on the basis of standard values applicable under Indian Condition (Singh and Panda 1996). ¹Assayed Value. ³Provided per kilogram of diet: Zn (60 mg), Mn (90 mg), Iron (110 mg), KI (2.5 mg).

Supplementary Table 2. Ingredient and chemical composition (g/kg dry matter) of the finisher diet of broiler chicken

Ingredient	Diet					
	Control	T ₁	T ₂	T ₃	T ₄	T ₅
Maize	64.5	64.5	64.5	64.5	64.5	64.5
Soyabean meal	28.0	26.0	24.0	2.20	20.0	18.0
SCP	-	1.42	2.83	4.25	5.66	7.08
Til cake	2.4	2.01	1.65	1.27	0.86	0.47
Deoiled rice bran	-	0.90	1.72	2.62	3.51	4.38
Oil	1.8	1.87	2.00	2.06	2.17	2.27
Limestone powder	1.8	1.80	1.80	1.8	1.8	1.8
Dicalcium phosphate	1.00	1.00	1.00	0.10	1.00	1.00
Sodium bicarbonate	0.10	0.10	0.10	0.10	0.10	0.10
Salt	0.30	0.30	0.30	0.30	0.30	0.30
Trace mineral mixture ³	0.10	0.10	0.10	0.10	0.10	0.10
Total	100	100	100	100	100	100
<i>Chemical composition, calculated</i>						
ME (kcal/kg) ¹	3030.10	3030.64	3030.17	3030.41	3030.00	3030.43
Crude protein ²	19.45	19.45	19.45	19.45	19.45	19.45
Crude fibre ²	2.97	2.85	2.95	3.05	2.94	2.92
Calcium ²	0.98	0.97	0.97	0.96	0.96	0.94
Total phosphorus ²	0.54	0.54	0.53	0.54	0.54	0.54
Available phosphorus ¹	0.31	0.31	0.30	0.30	0.30	0.30
L-Lysine ¹	1.04	1.04	1.04	1.07	1.20	1.24
Methionine ¹	0.46	0.47	0.48	0.49	0.51	0.52

*Provided premix per kilogram of diet: DL-Methionine (1.60 g), Vitamins (Alvimix Forte) (0.3 g), 1% Maduramycin (0.5 g), Yeast cell (0.4 g), 10% Tylosin phosphate (0.2 g), 15% Chlortetracycline (0.33 g), 60% Choline chloride (0.6 g), Manganese sulphate (0.10 g), Zinc oxide (0.10 g), Toxin Binder (Naturaliv®) (0.25 g), Methionine Recycling Agent (Recymeth®) (0.30 g), Turmeric (0.75 g), Multi Enzyme (BD Zyme®) (0.50 g), Phosphyte® (0.15 g), Acidifier (Rafresh®) (0.25 g), Antioxidant (Oxigon®) (0.10 g). ²Calculated on the basis of standard values applicable under Indian Condition (Singh and Panda 1996). ¹Assayed Value. ³Provided per kilogram of diet: Zn (60 mg), Mn (90 mg), Iron (110 mg), KI (2.5 mg).

Supplementary Table 3. Effect of feeding of SCP on cumulative feed intake (g/bird) of broiler chicken

Attribute	Diet						SEM	P value
	C	T ₁	T ₂	T ₃	T ₄	T ₅		
Wk1	126.66 ^{ab}	128.69 ^{ab}	124.37 ^{ab}	131.49 ^a	122.63 ^{ab}	119.39 ^b	3.179	0.174
Wk2	374.17 ^a	374.23 ^a	365.22 ^a	359.59 ^a	343.58 ^{ab}	321.33 ^b	9.758	0.016
Wk3	1061.73 ^a	1068.01 ^a	1050.04 ^a	1034.60 ^{ab}	988.28 ^{bc}	952.92 ^c	17.236	0.003
Wk4	1786.51 ^a	1785.57 ^a	1702.11 ^{ab}	1680.31 ^{bc}	1602.89 ^{cd}	1535.77 ^d	29.531	0.000
Wk5	2652.46 ^a	2651.68 ^a	2513.08 ^b	2453.10 ^{bc}	2370.94 ^{cd}	2276.63 ^d	34.286	0.000
Wk6	3771.64 ^a	3770.15 ^a	3565.24 ^b	3492.16 ^{bc}	3375.54 ^{cd}	3272.59 ^d	56.047	0.000

^{a,b,c,d}Means followed by different letters in a row differ significantly at P<0.05. SEM, standard error of mean; Wk, week.

Supplementary Table 4. Effect of feeding of SCP on performance index of broiler chicken

Attribute	Diet						SEM	P value
	C	T ₁	T ₂	T ₃	T ₄	T ₅		
Wk1	99.67	100.25	99.69	98.91	100.07	103.31	3.223	0.943
Wk2	171.29 ^a	171.54 ^a	165.84 ^b	161.75 ^c	141.19 ^d	127.42 ^c	1.312	0.000
Wk3	312.58 ^{ab}	315.46 ^a	305.15 ^{bc}	302.95 ^c	275.5 ^d	264.95 ^c	2.438	0.000
Wk4	532.88 ^a	533.18 ^a	484.75 ^b	482.58 ^b	458.37 ^c	436.38 ^d	5.239	0.000
Wk5	764.22 ^a	760.73 ^a	719.43 ^b	681.68 ^c	616.55 ^d	565.20 ^c	10.368	0.000
Wk6	1004.21 ^a	1005.11 ^a	925.23 ^b	892.57 ^{bc}	848.12 ^{cd}	796.32 ^d	20.068	0.000

^{a,b,c,d}Means followed by different letters in a row differ significantly at P<0.05. SEM, standard error of mean; Wk, week.