Broiler Performance & Nutrition Supplement

broiler

Cobb**500**™



Introduction

This supplement presents broiler performance and yield targets for your Cobb500 broilers, together with recommendations on nutritional specifications designed to help achieve these targets.

Broiler performance varies from country to country. The growth rates shown are the targets for achieving cost-efficient performance.

The performance objectives in this supplement are displayed in both metric and imperial configurations:

Metric Imperial

Please contact your local Cobb technical representative to help develop a program designed specifically to suit your own local conditions based on the advice and information contained in this supplement and the main Cobb Broiler Management Guide.

Performance objectives - metric

			AS	HATCHED		
Age	Weight	Daily	Average	Cumulative Feed Conversion	Daily Feed	Cumulative Feed
days	for Age (g)	Gain (g)	Daily Gain (g)		Consumption (g)	Consumption (g)
0 1 2 3 4 5 6 7	42 56 72 89 109 131 157 185	0 14 16 17 20 22 26 28	26.4	0.232 0.417 0.573 0.679 0.773 0.841 0.902	13 17 21 23 27 31 35	13 30 51 74 101 132 167
8	215	30	26.9	0.958	39	206
9	247	32	27.4	1.012	44	250
10	283	36	28.3	1.053	48	298
11	321	38	29.2	1.097	54	352
12	364	43	30.3	1.126	58	410
13	412	48	31.7	1.150	64	474
14	465	53	33.2	1.165	68	542
15	524	59	34.9	1.177	75	617
16	586	62	36.6	1.191	81	698
17	651	65	38.3	1.206	87	785
18	719	68	39.9	1.221	93	878
19	790	71	41.6	1.235	98	976
20	865	75	43.3	1.250	105	1081
21	943	78	44.9	1.264	111	1192
22	1023	80	46.4	1.284	117	1309
23	1104	81	47.8	1.303	123	1432
24	1186	82	49.3	1.321	130	1562
25	1269	83	50.8	1.337	134	1696
26	1353	84	52.1	1.356	141	1837
27	1438	85	53.6	1.373	148	1985
28	1524	86	54.4	1.402	152	2137
29 30 31 32 33 34 35	1613 1705 1799 1895 1993 2092 2191	89 92 94 96 98 99	55.6 56.8 58.0 59.2 60.4 61.5 62.6	1.423 1.442 1.460 1.478 1.496 1.512 1.530	158 163 169 174 180 182 189	2295 2458 2627 2801 2981 3163 3352
36	2289	98	63.6	1.549	193	3545
37	2386	97	64.5	1.568	197	3742
38	2482	96	65.3	1.589	201	3943
39	2577	95	66.1	1.610	205	4148
40	2671	94	66.8	1.631	209	4357
41	2764	93	67.4	1.653	213	4570
42	2857	93	68.0	1.675	216	4786
43	2950	93	68.6	1.697	220	5006
44	3043	93	69.2	1.718	222	5228
45	3136	93	69.7	1.739	225	5453
46	3229	93	70.2	1.759	227	5680
47	3322	93	70.7	1.779	231	5911
48	3414	92	71.1	1.800	233	6144
49	3506	92	71.6	1.819	235	6379
50 51 52 53 54 55 56	3596 3685 3773 3859 3944 4028 4111	90 89 88 86 85 84	71.9 72.3 72.6 72.8 73.0 73.2 73.4	1.840 1.860 1.880 1.901 1.922 1.943 1.963	237 239 240 242 243 245 245	6616 6855 7095 7337 7580 7825 8070
57 58 59 60 61 62 63	4192 4272 4350 4427 4502 4576 4649	81 80 78 77 75 74 73	73.5 73.7 73.7 73.8 73.8 73.8 73.8	1.984 2.004 2.024 2.044 2.065 2.085 2.105	245 245 245 245 245 245 245 245	8315 8560 8805 9050 9295 9540 9785

Performance objectives - metric

			F	EMALES		
Age	Weight	Daily	Average	Cumulative Feed Conversion	Daily Feed	Cumulative Feed
days	for Age (g)	Gain (g)	Daily Gain (g)		Consumption (g)	Consumption (g)
0 1 2 3 4 5 6 7	42 56 72 89 109 130 156 184	0 14 16 17 20 21 27 27	26.3	0.232 0.417 0.573 0.679 0.776 0.841 0.908	13 17 21 23 27 31 35	13 30 51 74 101 132 167
8	214	30	26.8	0.953	37	204
9	244	30	27.1	1.016	44	248
10	280	36	28.0	1.053	47	295
11	318	38	28.9	1.098	54	349
12	360	43	30.0	1.127	57	406
13	408	48	31.4	1.150	63	469
14	460	53	32.9	1.166	68	537
15	520	60	34.7	1.173	73	610
16	582	62	36.4	1.184	79	689
17	646	64	38.0	1.197	84	773
18	711	65	39.5	1.212	89	862
19	777	66	40.9	1.228	92	954
20	844	67	42.2	1.246	98	1052
21	914	70	43.5	1.263	103	1155
22	986	72	44.8	1.284	111	1266
23	1060	74	46.1	1.304	116	1382
24	1136	76	47.3	1.326	124	1506
25	1214	78	48.6	1.344	126	1632
26	1294	80	49.8	1.365	134	1766
27	1378	84	51.0	1.385	142	1908
28	1463	85	52.2	1.403	144	2052
29 30 31 32 33 34 35	1549 1636 1724 1813 1903 1993 2083	86 87 88 89 90 90	53.4 54.5 55.6 56.7 57.7 58.6 59.5	1.422 1.441 1.461 1.479 1.496 1.512 1.528	151 155 161 163 165 167 169	2203 2358 2519 2682 2847 3014 3183
36	2172	89	60.3	1.546	175	3358
37	2259	87	61.1	1.566	179	3537
38	2344	85	61.7	1.587	184	3721
39	2428	84	62.3	1.610	189	3910
40	2510	82	62.8	1.635	193	4103
41	2591	81	63.2	1.660	197	4300
42	2671	80	63.6	1.684	199	4499
43 44 45 46 47 48 49	2751 2831 2910 2989 3068 3147 3226	80 80 79 79 79 79	64.0 64.3 64.7 65.0 65.3 65.6 65.8	1.709 1.733 1.756 1.778 1.800 1.820 1.841	203 203 205 204 207 208 209	4702 4905 5110 5314 5521 5729 5938
50	3301	75	66.0	1.862	209	6147
51	3376	75	66.2	1.884	213	6360
52	3451	75	66.4	1.905	215	6575
53	3524	73	66.5	1.928	219	6794
54	3597	73	66.6	1.950	221	7015
55	3670	73	66.7	1.973	225	7240
56	3741	71	66.8	1.995	225	7465
57 58 59 60 61 62 63	3812 3883 3953 4023 4093 4162 4230	71 71 70 70 70 69 68	66.9 66.9 67.0 67.1 67.1 67.1	2.017 2.038 2.059 2.079 2.099 2.118 2.137	225 225 225 225 225 225 225 225	7690 7915 8140 8365 8590 8815 9040

Performance objectives - metric

				MALES		
Age	Weight for Age (g)	Daily	Average	Cumulative Feed	Daily Feed	Cumulative Feed
days		Gain (g)	Daily Gain (g)	Conversion	Consumption (g)	Consumption (g)
0 1 2 3 4 5 6 7	42 56 72 89 109 131 157 186	0 14 16 17 20 22 26 29	26.6	0.232 0.417 0.573 0.679 0.771 0.841 0.898	13 17 21 23 27 31 35	13 30 51 74 101 132 167
8	217	32	27.1	0.949	39	206
9	250	33	27.8	1.000	44	250
10	286	36	28.6	1.046	49	299
11	324	38	29.5	1.089	54	353
12	368	43	30.6	1.121	59	412
13	416	48	32.0	1.144	64	476
14	470	54	33.6	1.162	70	546
15	528	58	35.2	1.180	77	623
16	590	62	36.9	1.197	83	706
17	656	66	38.6	1.213	90	796
18	727	71	40.4	1.228	97	893
19	803	76	42.3	1.242	104	997
20	884	81	44.2	1.255	112	1109
21	971	87	46.2	1.265	119	1228
22	1058	87	48.1	1.278	124	1352
23	1145	87	49.8	1.294	130	1482
24	1233	88	51.4	1.312	136	1618
25	1321	88	52.8	1.332	142	1760
26	1409	88	54.2	1.354	148	1908
27	1497	88	55.4	1.377	154	2062
28	1585	88	56.6	1.402	160	2222
30 31 32 33 34 35	1773 1873 1978 2085 2192 2299	96 100 105 107 107 107	59.1 60.4 61.8 63.2 64.5 65.7	1.443 1.460 1.476 1.492 1.510 1.531	171 177 184 192 200 209	2387 2558 2735 2919 3111 3311 3 520
36	2406	107	66.8	1.551	212	3732
37	2513	107	67.9	1.571	215	3947
38	2620	107	68.9	1.590	218	4165
39	2726	106	69.9	1.609	221	4386
40	2832	106	70.8	1.628	225	4611
41	2938	106	71.7	1.647	229	4840
42	3044	106	72.5	1.667	233	5073
43	3150	106	73.3	1.686	237	5310
44	3256	106	74.0	1.705	241	5551
45	3362	106	74.7	1.724	245	5796
46	3468	106	75.4	1.743	250	6046
47	3574	106	76.0	1.763	255	6301
48	3680	106	76.7	1.784	265	6566
49	3786	106	77.3	1.805	270	6836
50	3891	105	77.8	1.825	265	7101
51	3994	103	78.3	1.844	265	7366
52	4095	101	78.8	1.863	265	7631
53	4194	99	79.1	1.883	265	7896
54	4291	97	79.5	1.902	265	8161
55	4386	95	79.7	1.921	265	8426
56	4481	95	80.0	1.940	265	8691
57	4573	92	80.2	1.958	265	8956
58	4662	89	80.4	1.978	265	9221
59	4748	86	80.5	1.998	265	9486
60	4831	83	80.5	2.018	265	9751
61	4912	81	80.5	2.039	265	10016
62	4990	78	80.5	2.060	265	10281
63	5068	78	80.4	2.081	265	10546

Performance objectives - notes						

Performance objectives - imperial

			AS	HATCHED		
Age days	Weight for Age (lb)	Daily Gain (lb)	Average Daily Gain (lb)	Cumulative Feed Conversion	Daily Feed Consumption (lb)	Cumulative Feed Consumption (lb)
0 1 2 3 4 5 6 7	0.093 0.123 0.159 0.196 0.240 0.288 0.346 0.408	0.000 0.031 0.035 0.037 0.044 0.048 0.058 0.062	0.058	0.232 0.417 0.573 0.679 0.773 0.841 0.902	0.029 0.037 0.046 0.051 0.060 0.068 0.077	0.029 0.066 0.112 0.163 0.223 0.291 0.368
8 9 10 11 12 13 14	0.474 0.545 0.624 0.708 0.803 0.908 1.025	0.066 0.071 0.079 0.084 0.095 0.106 0.117	0.059 0.061 0.062 0.064 0.067 0.070 0.073	0.958 1.012 1.053 1.097 1.126 1.150	0.086 0.097 0.106 0.119 0.128 0.141 0.150	0.454 0.551 0.657 0.776 0.904 1.045 1.195
15 16 17 18 19 20 21	1.155 1.292 1.435 1.585 1.742 1.907 2.079	0.130 0.137 0.143 0.150 0.157 0.165 0.172	0.077 0.081 0.084 0.088 0.092 0.095 0.099	1.177 1.191 1.206 1.221 1.235 1.250	0.165 0.179 0.192 0.205 0.216 0.232 0.245	1.360 1.539 1.731 1.936 2.152 2.384 2.628
22 23 24 25 26 27 28	2.254 2.432 2.613 2.796 2.981 3.171 3.360	0.175 0.179 0.181 0.183 0.185 0.190 0.189	0.102 0.106 0.109 0.112 0.115 0.117 0.120	1.281 1.298 1.318 1.338 1.359 1.380 1.402	0.258 0.271 0.287 0.295 0.311 0.326 0.335	2.886 3.158 3.444 3.740 4.051 4.377 4.712
29 30 31 32 33 34 35	3.557 3.760 3.967 4.178 4.395 4.613 4.831	0.197 0.203 0.207 0.212 0.216 0.218 0.218	0.123 0.125 0.128 0.131 0.133 0.136 0.138	1.423 1.442 1.460 1.478 1.496 1.512 1.530	0.348 0.359 0.373 0.384 0.397 0.401 0.417	5.060 5.420 5.793 6.176 6.573 6.974 7.391
36 37 38 39 40 41 42	5.047 5.261 5.473 5.682 5.890 6.095 6.300	0.216 0.214 0.212 0.209 0.207 0.205 0.205	0.140 0.142 0.144 0.146 0.147 0.149 0.150	1.549 1.568 1.589 1.610 1.631 1.653 1.675	0.426 0.434 0.443 0.452 0.461 0.470 0.476	7.817 8.251 8.694 9.146 9.607 10.077 10.553
43 44 45 46 47 48 49	6.505 6.710 6.915 7.120 7.325 7.528 7.731	0.205 0.205 0.205 0.205 0.205 0.205 0.203 0.203	0.151 0.152 0.154 0.155 0.156 0.157 0.158	1.697 1.718 1.739 1.759 1.779 1.800 1.819	0.485 0.490 0.496 0.501 0.509 0.514 0.518	11.038 11.528 12.024 12.524 13.034 13.548 14.066
50 51 52 53 54 55 56	7.929 8.125 8.319 8.509 8.697 8.882 9.065	0.198 0.196 0.194 0.190 0.187 0.185 0.183	0.159 0.159 0.160 0.161 0.161 0.161	1.840 1.860 1.880 1.901 1.922 1.943 1.963	0.523 0.527 0.529 0.534 0.536 0.540 0.540	14.588 15.115 15.644 16.178 16.714 17.254
57 58 59 60 61 62 63	9.243 9.420 9.592 9.762 9.927 10.090 10.251	0.179 0.176 0.172 0.170 0.165 0.163 0.161	0.162 0.162 0.163 0.163 0.163 0.163 0.163	1.984 2.004 2.024 2.044 2.065 2.085 2.105	0.540 0.540 0.540 0.540 0.540 0.540 0.540	18.335 18.875 19.415 19.955 20.495 21.036 21.576

Performance objectives - imperial

			F	EMALES		
Age days	Weight for Age (lb)	Daily Gain (lb)	Average Daily Gain (lb)	Cumulative Feed Conversion	Daily Feed Consumption (lb)	Cumulative Feed Consumption (lb)
0 1 2 3 4 5 6 7	0.093 0.123 0.159 0.196 0.240 0.287 0.346 0.406	0.000 0.031 0.035 0.037 0.044 0.047 0.059 0.060	0.058	0.232 0.417 0.573 0.679 0.776 0.841 0.908	0.029 0.037 0.046 0.051 0.060 0.068 0.077	0.029 0.066 0.112 0.163 0.223 0.291 0.368
8	0.472	0.066	0.059	0.953	0.082	0.450
9	0.538	0.066	0.060	1.016	0.097	0.547
10	0.618	0.080	0.062	1.053	0.104	0.650
11	0.701	0.083	0.064	1.098	0.119	0.770
12	0.795	0.094	0.066	1.127	0.126	0.895
13	0.899	0.105	0.069	1.150	0.139	1.034
14	1.015	0.116	0.073	1.166	0.150	1.184
15	1.147	0.131	0.073	1.173	0.161	1.345
16	1.283	0.137	0.076	1.184	0.174	1.519
17	1.424	0.141	0.080	1.197	0.185	1.704
18	1.568	0.143	0.084	1.212	0.196	1.901
19	1.713	0.146	0.087	1.228	0.203	2.104
20	1.861	0.148	0.090	1.246	0.216	2.320
21	2.016	0.155	0.093	1.263	0.227	2.547
22	2.174	0.158	0.099	1.284	0.245	2.792
23	2.337	0.163	0.102	1.304	0.256	3.047
24	2.505	0.168	0.104	1.326	0.273	3.321
25	2.677	0.172	0.107	1.344	0.278	3.599
26	2.853	0.176	0.110	1.365	0.295	3.894
27	3.038	0.185	0.113	1.385	0.313	4.207
28	3.226	0.187	0.115	1.403	0.318	4.525
29	3.416	0.190	0.118	1.422	0.333	4.858
30	3.607	0.192	0.120	1.441	0.342	5.199
31	3.801	0.194	0.123	1.461	0.355	5.554
32	3.998	0.196	0.125	1.479	0.359	5.914
33	4.196	0.198	0.127	1.496	0.364	6.278
34	4.395	0.198	0.129	1.512	0.368	6.646
35	4.593	0.198	0.131	1.528	0.373	7.019
36	4.789	0.196	0.133	1.546	0.386	7.404
37	4.981	0.192	0.135	1.566	0.395	7.799
38	5.169	0.187	0.136	1.587	0.406	8.205
39	5.354	0.185	0.137	1.610	0.417	8.622
40	5.535	0.181	0.138	1.635	0.426	9.047
41	5.713	0.179	0.139	1.660	0.434	9.482
42	5.890	0.176	0.140	1.684	0.439	9.920
43	6.066	0.176	0.141	1.709	0.448	10.368
44	6.242	0.176	0.142	1.733	0.448	10.816
45	6.417	0.174	0.143	1.756	0.452	11.268
46	6.591	0.174	0.143	1.778	0.450	11.717
47	6.765	0.174	0.144	1.800	0.456	12.174
48	6.939	0.174	0.145	1.820	0.459	12.632
49	7.112	0.173	0.145	1.841	0.461	13.093
50 51 52 53 54 55 56	7.279 7.444 7.609 7.770 7.931 8.092 8.249	0.166 0.165 0.165 0.161 0.161 0.161 0.157	0.146 0.146 0.147 0.147 0.147 0.147	1.862 1.884 1.905 1.928 1.950 1.973 1.995	0.461 0.470 0.474 0.483 0.487 0.496 0.496	13.554 14.024 14.498 14.981 15.468 15.964 16.460
57	8.405	0.157	0.147	2.017	0.496	16.956
58	8.562	0.157	0.148	2.038	0.496	17.453
59	8.716	0.154	0.148	2.059	0.496	17.949
60	8.871	0.154	0.148	2.079	0.496	18.445
61	9.025	0.154	0.148	2.099	0.496	18.941
62	9.177	0.152	0.148	2.118	0.496	19.437
63	9.327	0.150	0.148	2.137	0.496	19.933

Performance objectives - imperial

				MALES		
Age days	Weight for Age (lb)	Daily Gain (lb)	Average Daily Gain (lb)	Cumulative Feed Conversion	Daily Feed Consumption (lb)	Cumulative Feed Consumption (lb)
0 1 2 3 4 5 6 7	0.093 0.123 0.159 0.196 0.240 0.289 0.346 0.410	0.000 0.031 0.035 0.037 0.044 0.049 0.057 0.064	0.059	0.232 0.417 0.573 0.679 0.771 0.841 0.898	0.029 0.037 0.046 0.051 0.060 0.068 0.077	0.029 0.066 0.112 0.163 0.223 0.291 0.368
8	0.479	0.069	0.060	0.949	0.086	0.454
9	0.551	0.072	0.061	1.000	0.097	0.551
10	0.630	0.079	0.063	1.046	0.108	0.659
11	0.715	0.085	0.065	1.089	0.119	0.778
12	0.811	0.096	0.068	1.121	0.130	0.908
13	0.918	0.107	0.071	1.144	0.141	1.050
14	1.036	0.118	0.074	1.162	0.154	1.204
15	1.164	0.129	0.078	1.180	0.170	1.374
16	1.301	0.137	0.081	1.197	0.183	1.557
17	1.446	0.146	0.085	1.213	0.198	1.755
18	1.603	0.157	0.089	1.228	0.214	1.969
19	1.771	0.168	0.093	1.242	0.229	2.198
20	1.949	0.179	0.097	1.255	0.247	2.445
21	2.141	0.192	0.102	1.265	0.262	2.708
22	2.333	0.192	0.106	1.278	0.273	2.981
23	2.525	0.192	0.110	1.294	0.287	3.268
24	2.719	0.194	0.113	1.312	0.300	3.568
25	2.913	0.194	0.117	1.332	0.313	3.881
26	3.107	0.194	0.119	1.354	0.326	4.207
27	3.301	0.194	0.122	1.377	0.340	4.547
28	3.494	0.194	0.125	1.402	0.353	4.900
29	3.698	0.203	0.128	1.423	0.364	5.263
30	3.909	0.212	0.130	1.443	0.377	5.640
31	4.130	0.220	0.133	1.460	0.390	6.031
32	4.361	0.232	0.136	1.476	0.406	6.436
33	4.597	0.236	0.139	1.492	0.423	6.860
34	4.833	0.236	0.142	1.510	0.441	7.301
35	5.069	0.236	0.145	1.531	0.461	7.762
36	5.305	0.236	0.147	1.551	0.467	8.229
37	5.541	0.236	0.150	1.571	0.474	8.703
38	5.777	0.236	0.152	1.590	0.481	9.184
39	6.011	0.234	0.154	1.609	0.487	9.671
40	6.245	0.234	0.156	1.628	0.496	10.167
41	6.478	0.234	0.158	1.647	0.505	10.672
42	6.712	0.234	0.160	1.667	0.514	11.186
43	6.946	0.234	0.162	1.686	0.523	11.709
44	7.179	0.234	0.163	1.705	0.531	12.240
45	7.413	0.234	0.165	1.724	0.540	12.780
46	7.647	0.234	0.166	1.743	0.551	13.331
47	7.881	0.234	0.168	1.763	0.562	13.894
48	8.114	0.234	0.169	1.784	0.584	14.478
50 51 52 53 54 55 56	8.349 8.580 8.807 9.029 9.248 9.462 9.671 9.881	0.235 0.230 0.227 0.223 0.218 0.214 0.209 0.209	0.170 0.172 0.173 0.174 0.174 0.175 0.176 0.176	1.805 1.825 1.844 1.863 1.883 1.902 1.921 1.940	0.595 0.584 0.584 0.584 0.584 0.584 0.584 0.584	15.073 15.658 16.242 16.826 17.411 17.995 18.579
57 58 59 60 61 62 63	10.083 10.280 10.469 10.652 10.831 11.003	0.203 0.196 0.190 0.183 0.179 0.172 0.172	0.177 0.177 0.177 0.177 0.178 0.178 0.177 0.177	1.958 1.978 1.998 2.018 2.039 2.060 2.081	0.584 0.584 0.584 0.584 0.584 0.584 0.584	19.748 19.748 20.332 20.917 21.501 22.085 22.670 23.254

Broiler Nutrition

Recon	nmend	ed minimu	ım specifi	cations	
		Starter	Grower	Finisher 1	Finisher 2*
FEEDING AMOUNT/bi	rd	250 g 0.55 lb	1000 g 2.20 lb		
FEEDING PERIOD day	rs	0 - 10	11 - 22	23 - 42	43 +
FEED STRUCTURE		Crumb	Pellet	Pellet	Pellet
Crude Protein	%	21-22	19-20	18-19	17-18
Metabolizable energy (AMEn¹)	MJ/kg Kcal/kg Kcal/lb	12.59 3008 1365	12.92 3086 1400	13.26 3167 1438	13.36 3191 1448
Lysine	%	1.32	1.19	1.05	1.00
Digestible Lysine	%	1.18	1.05	0.95	0.90
Methionine	%	0.50	0.48	0.43	0.41
Digestible Methionine	%	0.45	0.42	0.39	0.37
Met + Cys	%	0.98	0.89	0.82	0.78
Digestible Met + Cys	%	0.88	0.80	0.74	0.70
Tryptophan	%	0.20	0.19	0.19	0.18
Digestible Tryptophan	ı %	0.18	0.17	0.17	0.16
Threonine	%	0.86	0.78	0.71	0.68
Digestible Threonine	%	0.77	0.69	0.65	0.61
Arginine	%	1.38	1.25	1.13	1.08
Digestible Arginine	%	1.24	1.10	1.03	0.97
Valine	%	1.00	0.91	0.81	0.77
Digestible Valine	%	0.89	0.80	0.73	0.69
Isoleucine	%	0.88	0.80	0.71	0.68
Digestible Isoleucine	%	0.79	0.70	0.65	0.61
Calcium	%	0.90	0.84	0.76	0.76
Available Phosphorus	%	0.45	0.42	0.38	0.38
Sodium	%	0.16-0.23	0.16-0.23	0.15-0.23	0.15-0.23
Chloride	%	0.17-0.35	0.16-0.35	0.15-0.35	0.15-0.35
Potassium	%	0.60-0.95	0.60-0.85	0.60-0.80	0.60-0.80
Linoleic Acid	%	1.00	1.00	1.00	1.00

[†] The AMEn values are based on the WPSA European table of energy values for Poultry Feedstuffs 3rd Edition 1989.

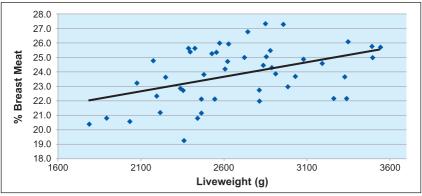
^{*} Should withdrawal feed be required use same finisher specification.

Yield Performance

Meat yield is dependent on many factors, but those that have the most influence are weight, age and nutrition.

Weight

 Carcass and breast meat yield increase as a function of liveweight at any given age.



The graph above is a representative sample of percent breast meat yield (dry yields) for birds from a single flock of as-hatched broilers processed at 48 days.

Feed, Yield, and Economics

- Cobb data have shown that protein and amino acids can be elevated by approximately 8 percent for the purpose of increasing breast meat yield, although higher feed cost per unit of live weight may be a secondary result.
- For the most economical feed per unit of live weight, lower amino acids may be more applicable, although slower growth rate and higher FCR may be a secondary result.
- The exact overall levels of amino acids should be determined by ingredient prices and finished product values (from the processing plant).
- The Cobb 500 is a flexible broiler that can bring good costs from low amino acid density feeds, or will respond with accelerated growth and breast yield using high amino acid levels.
- Cobb Technical Service will gladly assist customers to match specific economic priorities with formulation; however, the recommendations in this supplement represent very sound overall baseline levels.

Yield Performance

Predicted dry yields at given weights (% of live weight)

			AS HAT	CHED		
We g	ight lb	% Carcass	% Boneless Breast	% Whole Thigh	% Whole Drum Stick	% Wing
1600	3.527	71.91	21.25	14.49	9.00	7.51
1800	3.968	72.30	21.65	14.48	9.04	7.51
2000	4.409	72.69	22.05	14.48	9.09	7.51
2200	4.850	73.08	22.45	14.48	9.13	7.52
2400	5.291	73.47	22.85	14.48	9.17	7.52
2600	5.732	73.86	23.25	14.47	9.22	7.53
2800	6.173	74.25	23.65	14.47	9.26	7.53
3000	6.614	74.64	24.05	14.47	9.30	7.53
3200	7.055	75.03	24.45	14.47	9.35	7.54
3400	7.496	75.42	24.85	14.46	9.39	7.54
3600	7.937	75.81	25.25	14.46	9.43	7.55
3800	8.377	76.20	25.65	14.46	9.47	7.55
4000	8.818	76.59	26.04	14.46	9.52	7.55

			FEMAI	LES		
We g	ight Ib	% Carcass	% Boneless Breast	% Whole Thigh	% Whole Drum Stick	% Wing
1600	3.527	71.89	21.83	14.48	8.81	7.53
1800	3.968	72.32	22.36	14.43	8.83	7.51
2000	4.409	72.75	22.88	14.39	8.85	7.49
2200	4.850	73.18	23.40	14.34	8.87	7.47
2400	5.291	73.61	23.92	14.30	8.88	7.45
2600	5.732	74.04	24.44	14.25	8.90	7.43
2800	6.173	74.47	24.96	14.21	8.92	7.41
3000	6.614	74.90	25.48	14.16	8.94	7.39

			MAL	ES		
	eight	%	% Boneless	%	% Whole Drum Stick	% \\\\\
g	lb	Carcass	Breast	Whole Thigh	Drum Suck	Wing
1600	3.527	71.93	20.84	14.46	9.15	7.48
1800	3.968	72.28	21.13	14.49	9.21	7.50
2000	4.409	72.63	21.41	14.53	9.28	7.51
2200	4.850	72.98	21.70	14.56	9.35	7.53
2400	5.291	73.33	21.99	14.60	9.41	7.55
2600	5.732	73.68	22.28	14.63	9.48	7.57
2800	6.173	74.03	22.57	14.67	9.54	7.59
3000	6.614	74.38	22.85	14.70	9.61	7.61
3200	7.055	74.73	23.14	14.74	9.68	7.63
3400	7.496	75.08	23.43	14.77	9.74	7.65
3600	7.937	75.43	23.71	14.81	9.81	7.67
3800	8.377	75.78	24.00	14.84	9.88	7.68
4000	8.818	76.13	24.29	14.88	9.94	7.70
4200	9.259	76.48	24.58	14.91	10.01	7.72
4400	9.700	76.83	24.86	14.95	10.07	7.74
4600	10.141	77.18	25.15	14.98	10.14	7.76
4800	10.582	77.53	25.44	15.02	10.20	7.78

- Eviscerated carcass is calculated with feet and shanks removed from the hock joint.
- % Boneless breast is as a percentage of live weight.

Broiler Nutrition

Balanced digestible amino acid ratios								
Amino Acid	Starter 0-10 days	Grower 11-22 days	Finisher 1 23-42 days	Finisher 2 43- days				
Lysine*	100	100	100	100				
Methionine	38	40	41	41				
Methionine + Cystine	75	76	78	78				
Tryptophan	16	16	18	18				
Threonine	65	66	68	68				
Arginine	105	105	108	108				
Valine	75	76	77	77				
Isoleucine	67	67	68	68				

^{*} In the profile Lysine is always the reference amino acid, and is shown at 100%.

Supplementary levels of vitamins and trace elements (per tonne)				
		Starter	Grower	Finisher 1 and 2
Vitamin A	(MIU)	10-13	10	10
Vitamin D3	(MIU)	5	5	5
Vitamin E	(KIU)	80	50	50
Vitamin K	(g)	3	3	3
Vitamin B1 (thiamine)	(g)	3	2	2
Vitamin B2 (riboflavin)	(g)	9	8	6
Vitamin B6 (pyridoxine)	(g)	4	3	3
Vitamin B12	(mg)	20	15	15
Biotin (Maize Diets)	(mg)	150	120	120
Biotin (Wheat Diets)	(mg)	200	180	180
Choline*	(g)	500	400	350
Folic Acid	(g)	2	2	1.5
Nicotinic Acid	(g)	60	50	50
Pantothenic Acid	(g)	15	12	10
Manganese	(g)	100	100	100
Zinc	(g)	100	100	100
Iron	(g)	40	40	40
Copper	(g)	15	15	15
lodine	(g)	1	1	1
Selenium	(g)	0.35	0.35	0.35

^{*} Preferably Choline is added directly into the mixer rather than via a premix because of its hygroscopic nature. Vitamin and trace mineral levels may vary depending on the source and supplier. The numbers above refers to e.g. usage of inorganic minerals and a vitamin D3 source.

MIU = million international units; KIU = thousand international units; g = grams; mg = milligrams

Supplementary levels of trace elements should always be reviewed to ensure total levels do not exceed those set in local legislation (e.g. EU 1334/2003).

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