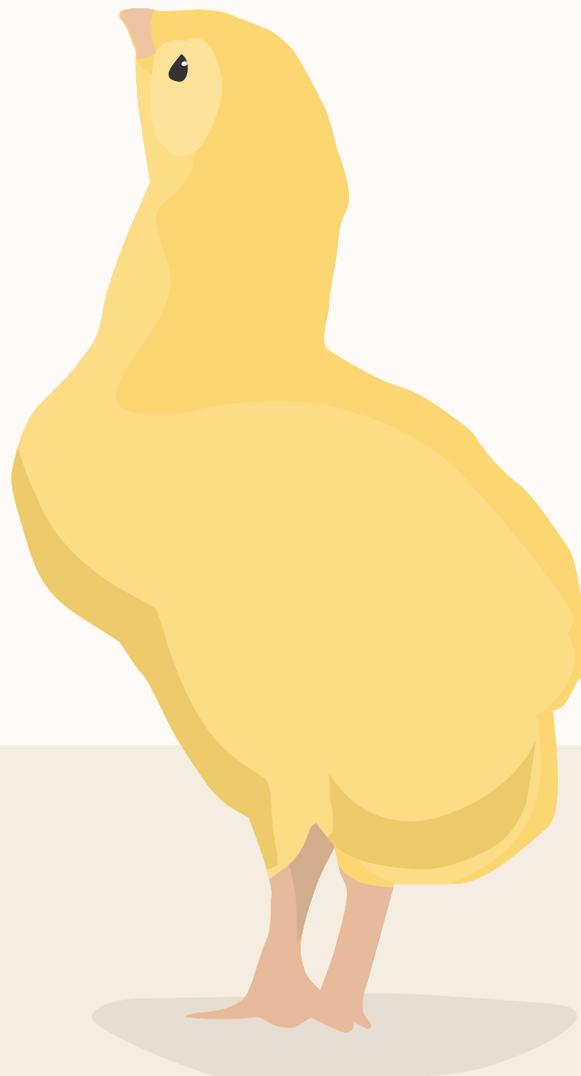




Breeder Supplement

Realising the full potential of the breed



Cobb 500 Breeder Performance

Age at 3 %	Production Weeks	24	
	Days	168	
Peak Production	%	86	
Peak Hatchability	%	90	
Age at Depletion	Weeks	60	65
	Days	420	455
Total Eggs / Hen Housed		166.4	181.3
Hatching Eggs / Hen Housed	50 g minimum	160.3	174.8
Cumulative Hatchability	%	86.2	85.6
Broiler Chicks / Hen Housed		138.2	149.6
Livability from 25 Weeks	%	92.8	92.3

Nutrient Levels for Cobb 500

Nutrient Levels for Cobb 500

Phase Age (Days)	Unit	Starter 0 - 28	Grower 29 - 105	Developer 106 - 1st Egg	Breeder 1 1st Egg - 266	Breeder 2 > 267	Male*
Metabolizable Energy *	MJ/kg	11.92	11.30	11.72	11.72	11.72	11.30
	kcal/k	2850	2700	2800	2800	2800	2700
	kcal/l	1293	1225	1270	1270	1270	1225
Crude Protein	%	19.0	14.5	15.0	15.0	14.5	13.0
Calcium	%	0.95	0.95	1.20	3.00	3.20	0.95
Available Phosphorus	%	0.45	0.42	0.42	0.42	0.38	0.42
Sodium	%	0.16 – 0.18	0.16 – 0.18	0.16 – 0.18	0.16 – 0.18	0.16 – 0.18	0.16 – 0.18
Chloride	%	0.16 – 0.18	0.16 – 0.18	0.16 – 0.18	0.16 – 0.18	0.16 – 0.18	0.16 – 0.18
Potassium	%	0.60	0.60	0.60	0.60	0.60	0.60
Linoleic Acid	%	1.00	1.00	1.00	1.25	1.25	1.00

Digestible Amino Acids

Lysine	%	0.93	0.60	0.63	0.63	0.60	0.50
Methionine	%	0.42	0.31	0.33	0.33	0.31	0.28
M + C	%	0.70	0.51	0.54	0.55	0.52	0.48
Tryptophan	%	0.20	0.13	0.14	0.14	0.13	0.12
Threonine	%	0.65	0.45	0.47	0.47	0.45	0.44
Arginine	%	0.98	0.66	0.69	0.69	0.66	0.55
Valine	%	0.67	0.45	0.47	0.47	0.45	0.38
Isoleucine	%	0.64	0.42	0.44	0.44	0.42	0.40

If the energy level needs to be adjusted for local conditions, then all other nutrients (protein/amino acids) need to be adjusted at the same ratio.

Supplementary Levels of Vitamins and Trace Elements Per Metric Ton

Nutrients	Unit	Starter / Developer / Males	Breeders in Production
Vit. A (Maize Diets)	KIU	10,000	12,000
Vit. A (Wheat Diets)	KIU	11,000	13,000
Vit. D3	KIU	3,500	3,500
Vit. E	KIU	100	100
Vit. K	g	3	6
Thiamine (B1)	g	2.75	3.00
Riboflavin (B2)	g	8	13
Pantothenic Acid	g	15	20
Niacin	g	40	50
Pyridoxine (B6)	g	3	6
Folic Acid	g	2	3
Vit. B12	g	0.025	0.035
Biotin (Maize Diets)	g	0.25	0.30
Biotin (Wheat Diets)	g	0.300	0.375
Choline	g	500	500
Manganese	g	100	120
Zinc	g	100	110
Iron	g	20 - 50	40 - 55
Copper	g	10 - 15	10 - 15
Iodine	g	1.5	2.0
Selenium	g	0.30	0.30

Rearing – Body Weight and Feed Intake – Cobb 500 Female

Week	Days	Body Weight (g)	Feeding Period (days)	Feed (g)
placement	placement	40	placement - 7	Ad lib or 22
1	7	145	8 - 14	29
2	14	270	15 - 21	32
3	21	400	22 - 28	35
4	28	530	29 - 35	38
5	35	640	36 - 42	41
6	42	740	43 - 49	44
7	49	850	50 - 56	47
8	56	950	57 - 63	50
9	63	1060	64 - 70	53
10	70	1160	71 - 77	56
11	77	1270	78 - 84	59
12	84	1370	85 - 91	62
13	91	1480	92 - 98	65
14	98	1580	99 - 105	69
15	105	1690	106 - 112	73
16	112	1810	113 - 119	78
17	119	1940	120 - 126	83
18	126	2080	127 - 133	89
19	133	2230	134 - 140	95
20	140	2390	141 - 147	101

Production – Body Weight and Feed Intake – Cobb 500 Female

Weeks	Days	Body weight (g)	Feeding Period (days)	Feed (g)	Feeding based on production		
					% Hen Day	g/bird/day	Increase
21	147	2650	148 – 154	106			
22	154	2800	155 – 161	110			
23	161	2950	162 – 168	114			
24	168	3100	169 – 175	118	5	120	
25	175	3230	176 – 182		15	122	2
26	182	3360	183 – 189		25	124	2
27	189	3460	190 – 196		35	130	6
28	196	3560	197 – 203	170	45	138	8
29	203	3640	204 – 210	169	55	147	9
30	210	3700	211 – 217	168	65	156	9
31	217	3745	218 – 224	167	75	164	8
32	224	3780	225 – 231	167	80	168	4
33	231	3815	232 – 238	167	85	170	2
34	238	3850	239 – 245	167			
35	245	3880	246 – 252	166			
36	252	3910	253 – 259	166			
37	259	3935	260 – 266	166			
38	266	3960	267 – 273	166			
39	273	3980	274 – 280	165			
40	280	4000	281 – 287	165			
41	287	4020	288 – 294	165			
42	294	4040	295 – 301	165			
43	301	4060	302 – 308	164			
44	308	4080	309 – 315	164			
45	315	4100	316 – 322	164			

If egg production goes over 85% give females +1g for every 2% more egg production.

Weeks	Days	Body weight (g)	Feeding Period (days)	Feed (g)
46	322	4120	323 – 329	164
47	329	4140	330 – 336	164
48	336	4160	337 – 343	164
49	343	4180	344 – 350	164
50	350	4195	351 – 357	164
51	357	4210	358 – 364	164
52	364	4225	365 – 371	164
53	371	4240	372 – 378	164
54	378	4250	379 – 385	164
55	385	4260	386 – 392	164
56	392	4270	393 – 399	164
57	399	4280	400 – 406	164
58	406	4290	407 – 413	164
59	413	4300	414 – 420	164
60	420	4310	421 – 427	164
61	427	4320	428 – 434	164
62	434	4330	435 – 441	164

Breeder Performance

Week	Total Eggs (%HW)	Hatching Eggs (%HW)	Mortality Cum. (%)	% HE Weekly	Total Eggs / HH	Hatching Eggs / HH
24	3.0	1.5	0.25	50.0	0.2	0.1
25	20.0	15.0	0.50	75.0	1.6	1.1
26	50.0	40.0	0.80	80.0	5.1	3.9
27	73.0	67.2	1.30	92.0	10.1	8.6
28	82.0	77.9	1.70	95.0	15.8	13.9
29	85.0	81.6	2.05	96.0	21.6	19.5
30	86.0	83.0	2.35	96.5	27.5	25.2
31	85.8	83.7	2.60	97.5	33.3	30.9
32	84.8	82.7	2.80	97.5	39.1	36.5
33	83.8	81.7	3.00	97.5	44.8	42.1
34	82.8	81.0	3.20	97.8	50.4	47.6
35	81.8	80.0	3.40	97.8	55.9	53.0
36	80.8	79.0	3.60	97.8	61.4	58.3
37	79.8	78.0	3.80	97.8	66.7	63.6
38	78.8	77.1	4.00	97.8	72.0	68.7
39	77.8	76.1	4.20	97.8	77.3	73.8
40	76.7	74.4	4.40	97.0	82.4	78.8
41	75.6	73.3	4.65	97.0	87.4	83.7
42	74.5	72.3	4.90	97.0	92.4	88.5
43	73.3	71.1	5.15	97.0	97.3	93.2
44	72.1	69.9	5.35	97.0	102.0	97.9
45	70.9	68.8	5.50	97.0	106.7	102.4
46	69.7	67.6	5.65	97.0	111.3	106.9

Week	Total Eggs (%HW)	Hatching Eggs (%HW)	Mortality Cum. (%)	% HE Weekly	Total Eggs / HH	Hatching Eggs / HH
47	68.5	66.4	5.80	97.0	115.8	111.3
48	67.3	65.3	5.95	97.0	120.3	115.6
49	66.1	64.1	6.10	97.0	124.6	119.8
50	64.9	63.0	6.25	97.0	128.9	123.9
51	63.6	61.7	6.35	97.0	133.1	128.0
52	62.3	60.4	6.45	97.0	137.1	131.9
53	61.0	59.2	6.55	97.0	141.1	135.8
54	59.6	57.8	6.65	97.0	145.0	139.6
55	58.2	56.5	6.75	97.0	148.8	143.3
56	56.8	55.1	6.85	97.0	152.5	146.8
57	55.4	53.7	6.95	97.0	156.1	150.3
58	54.0	52.4	7.05	97.0	159.6	153.8
59	52.5	50.9	7.15	97.0	163.1	157.1
60	51.0	49.5	7.25	97.0	166.4	160.3
61	49.5	48.0	7.35	97.0	169.6	163.4
62	47.9	46.5	7.45	97.0	172.7	166.4
63	46.3	44.9	7.55	97.0	175.7	169.3
64	44.7	43.4	7.65	97.0	178.6	172.1
65	43.1	41.8	7.74	97.0	181.3	174.8

Hatchability, Fertility, Chick Weight

Week	Hatchability (%)		Fertility (%)		Hatch of Fertile (%)		Chicks / HH		Chick
	Weekly	Cum.w	Weekly	Cum.	Weekly	Cum.	Weekly	Cum.	Weight (g)
24	72.0	72.0	88.0	88.0	81.8	81.8	0.1	0.1	32.7
25	77.2	76.7	90.5	90.3	85.3	85.0	0.8	0.9	33.8
26	80.0	79.0	92.8	92.1	86.2	85.9	2.2	3.1	34.7
27	82.1	80.7	94.0	93.1	87.3	86.7	3.8	6.9	35.8
28	83.8	81.9	95.0	93.8	88.2	87.3	4.5	11.4	36.9
29	85.2	82.8	95.5	94.3	89.2	87.8	4.8	16.2	37.8
30	86.4	83.6	96.0	94.7	90.0	88.3	4.9	21.1	38.6
31	87.5	84.4	96.4	95.0	90.8	88.8	5.0	26.1	39.4
32	88.5	85.0	96.6	95.3	91.6	89.2	5.0	31.0	40.0
33	89.4	85.6	96.7	95.4	92.5	89.7	5.0	36.0	40.5
34	90.0	86.1	96.7	95.6	93.1	90.1	4.9	40.9	41.0
35	90.0	86.5	96.7	95.7	93.1	90.4	4.9	45.8	41.4
36	89.9	86.8	96.7	95.8	93.0	90.6	4.8	50.6	41.9
37	89.7	87.0	96.6	95.9	92.9	90.8	4.7	55.3	42.3
38	89.5	87.2	96.6	95.9	92.7	90.9	4.6	60.0	42.6
39	89.3	87.4	96.6	96.0	92.4	91.0	4.6	64.5	42.9
40	89.0	87.5	96.5	96.0	92.2	91.1	4.4	68.9	43.2
41	88.7	87.5	96.4	96.0	92.0	91.2	4.3	73.3	43.5
42	88.4	87.6	96.3	96.0	91.8	91.2	4.3	77.5	43.8
43	88.1	87.6	96.2	96.0	91.6	91.2	4.2	81.7	44.1
44	87.7	87.6	96.1	96.0	91.3	91.2	4.1	85.8	44.3
45	87.3	87.6	96.1	96.0	90.8	91.2	4.0	89.7	44.6
46	86.9	87.6	96.0	96.0	90.5	91.2	3.9	93.6	44.9

Week	Hatchability (%)		Fertility (%)		Hatch of Fertile (%)		Chicks / HH		Chick
	Weekly	Cum.w	Weekly	Cum.	Weekly	Cum.	Weekly	Cum.	Weight (g)
47	86.5	87.5	96.7	95.7	93.1	90.4	4.9	45.8	41.4
48	86.1	87.5	96.7	95.8	93.0	90.6	4.8	50.6	41.9
49	85.6	87.4	96.6	95.9	92.9	90.8	4.7	55.3	42.3
50	85.1	87.3	96.6	95.9	92.7	90.9	4.6	60.0	42.6
51	84.6	87.2	96.6	96.0	92.4	91.0	4.6	64.5	42.9
52	84.1	87.2	96.5	96.0	92.2	91.1	4.4	68.9	43.2
53	83.6	87.1	96.4	96.0	92.0	91.2	4.3	73.3	43.5
54	83.1	86.9	96.3	96.0	91.8	91.2	4.3	77.5	43.8
55	82.6	86.8	96.2	96.0	91.6	91.2	4.2	81.7	44.1
56	82.0	86.7	96.1	96.0	91.3	91.2	4.1	85.8	44.3
57	81.5	86.6	96.1	96.0	90.8	91.2	4.0	89.7	44.6
58	81.0	86.5	96.0	96.0	90.5	91.2	3.9	93.6	44.9
59	80.6	86.3	95.8	96.0	90.3	91.1	3.8	97.4	45.1
60	80.1	86.2	95.5	96.0	90.2	91.1	3.7	101.1	45.4
61	79.7	86.1	95.3	96.0	89.8	91.1	3.6	104.7	45.6
62	79.2	86.0	95.0	96.0	89.6	91.0	3.5	108.2	45.8
63	78.7	85.8	94.8	95.9	89.2	91.0	3.4	111.6	46.0
64	78.3	85.7	94.5	95.9	89.0	90.9	3.3	115.0	46.2
65	77.8	85.6	94.2	95.8	88.7	90.8	3.2	118.2	46.4

Egg Weight

Week	Egg Weight g
24	48.5
25	50.0
26	51.4
27	53.0
28	54.6
29	56.0
30	57.2
31	58.3
32	59.2
33	60.0
34	60.7
35	61.4
36	62.0
37	62.6
38	63.1
39	63.6
40	64.0
41	64.5
42	64.9
43	65.3
44	65.7

Week	Egg Weight g
45	66.1
46	66.5
47	66.8
48	67.2
49	67.5
50	67.8
51	68.1
52	68.4
53	68.7
54	68.9
55	69.1
56	69.3
57	69.5
58	69.7
59	69.9
60	70.1
61	70.3
62	70.5
63	70.7
64	70.9
65	71.1

Embryo Diagnosis

1/2

Week	Fertility %	Hatchability %	Infertile	Embryo Diagnosis %			HOF %
				Early	Mid	Late	
24	88.0	72.0	12.0	7.3	0.5	8.2	81.8
25	90.5	77.2	9.5	6.0	0.5	6.8	85.3
26	92.8	80.0	7.2	5.7	0.5	6.6	86.2
27	94.0	82.1	6.0	5.4	0.5	6.0	87.3
28	95.0	83.8	5.0	5.0	0.5	5.7	88.2
29	95.5	85.2	4.5	4.4	0.5	5.4	89.2
30	96.0	86.4	4.0	4.2	0.5	4.9	90.0
31	96.4	87.5	3.6	3.9	0.5	4.5	90.8
32	96.6	88.5	3.4	3.5	0.5	4.1	91.6
33	96.7	89.4	3.3	3.3	0.5	3.5	92.5
34	96.7	90.0	3.3	2.8	0.5	3.4	93.1
35	96.7	90.0	3.3	2.8	0.5	3.4	93.1
36	96.7	89.9	3.3	2.9	0.5	3.4	93.0
37	96.6	89.7	3.4	2.9	0.5	3.5	92.9
38	96.6	89.5	3.4	3.0	0.5	3.6	92.7
39	96.6	89.3	3.4	3.1	0.5	3.7	92.4
40	96.5	89.0	3.5	3.2	0.5	3.8	92.2
41	96.4	88.7	3.6	3.3	0.5	3.9	92.0
42	96.3	88.4	3.7	3.4	0.5	4.0	91.8
43	96.2	88.1	3.8	3.5	0.5	4.1	91.6
44	96.1	87.7	3.9	3.6	0.5	4.3	91.3
45	96.1	87.3	3.9	4.0	0.5	4.3	90.8
46	96.0	86.9	4.0	4.0	0.5	4.6	90.5

Embryo Diagnosis

2/2

Week	Fertility %	Hatchability %	Infertile	Embryo Diagnosis %			HOF %
				Early	Mid	Late	
47	95.8	86.5	4.2	4.1	0.5	4.7	90.3
48	95.5	86.1	4.5	4.2	0.5	4.7	90.2
49	95.3	85.6	4.7	4.4	0.5	4.8	89.8
50	95.0	85.1	5.0	4.4	0.5	5.0	89.6
51	94.8	84.6	5.2	4.6	0.5	5.1	89.2
52	94.5	84.1	5.5	4.7	0.5	5.2	89.0
53	94.2	83.6	5.8	4.7	0.5	5.4	88.7
54	93.8	83.1	6.2	4.7	0.5	5.5	88.6
55	93.3	82.6	6.7	4.7	0.5	5.5	88.5
56	92.7	82.0	7.3	4.7	0.5	5.5	88.5
57	92.2	81.5	7.8	4.7	0.5	5.5	88.4
58	91.7	81.0	8.3	4.7	0.5	5.5	88.3
59	91.3	80.6	8.7	4.7	0.5	5.5	88.3
60	90.8	80.1	9.2	4.7	0.5	5.5	88.2
61	90.4	79.7	9.6	4.7	0.5	5.5	88.2
62	89.9	79.2	10.1	4.7	0.5	5.5	88.1
63	89.4	78.7	10.6	4.7	0.5	5.5	88.0
64	89.0	78.3	11.0	4.7	0.5	5.5	88.0
65	88.5	77.8	11.5	4.7	0.5	5.5	87.9

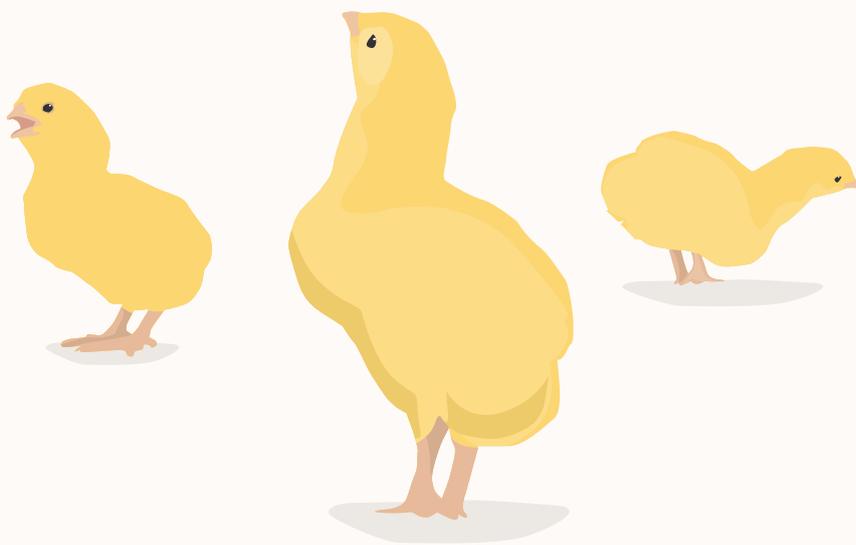
Rearing – Body Weight and Feed Intake – Cobb 500 Male

Week	Days	Body weight (g)	Feeding Period (days)	Feed (g)
Placement	placement	40	Placement - 7	23
1	7	150	8 - 14	30
2	14	335	15 - 21	35
3	21	520	22 - 28	40
4	28	690	29 - 35	45
5	35	830	36 - 42	49
6	42	965	43 - 49	53
7	49	1095	50 - 56	58
8	56	1225	57 - 63	62
9	63	1355	64 - 70	66
10	70	1490	71 - 77	69
11	77	1625	78 - 84	73
12	84	1760	85 - 91	76
13	91	1900	91 - 98	79
14	98	2040	99 - 105	82
15	105	2180	106 - 112	85
16	112	2330	113 - 119	89
17	119	2490	120 - 126	92
18	126	2650	127 - 133	95
19	133	2820	134 - 140	98
20	140	3000	141 - 147	101

Production – Body Weight and Feed Intake – Cobb 500 Male

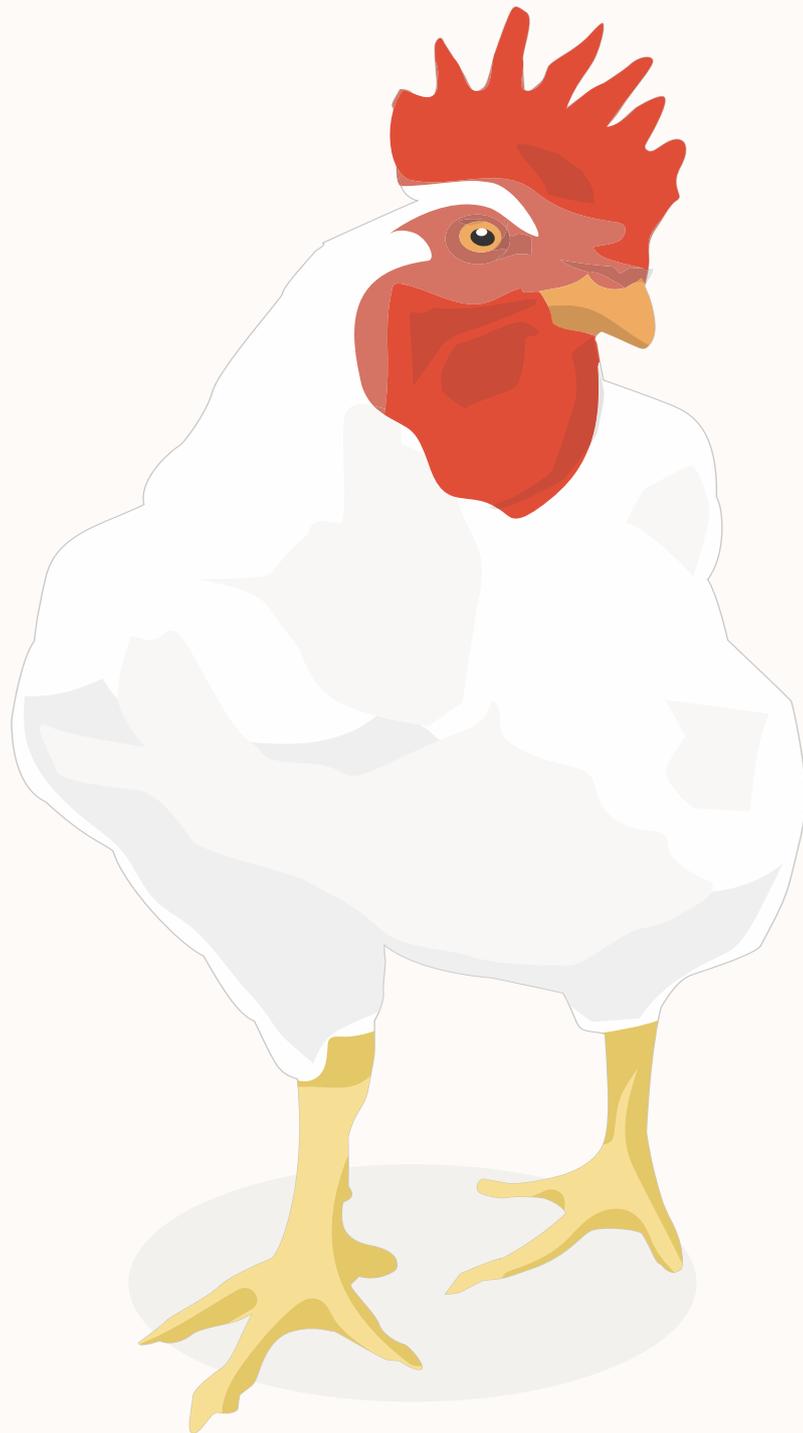
Weeks	Days	Body weight	Feeding Period (days)	Feed (g)
21	147	3260	148 – 154	104
22	154	3400	155 – 161	106
23	161	3540	162 – 168	108
24	168	3680	169 – 175	110
25	175	3800	176 – 182	112
26	182	3900	183 – 189	114
27	189	4000	190 – 196	117
28	196	4100	197 – 203	120
29	203	4190	204 – 210	123
30	210	4270	211 – 217	125
31	217	4320	218 – 224	127
32	224	4360	225 – 231	129
33	231	4390	232 – 238	131
34	238	4420	239 – 245	133
35	245	4450	246 – 252	135
36	252	4480	253 – 259	136
37	259	4510	260 – 266	137
38	266	4540	267 – 273	137
39	273	4570	274 – 280	138
40	280	4600	281 – 287	138
41	287	4630	288 – 294	139
42	294	4660	295 – 301	139
43	301	4690	302 – 308	141

Weeks	Days	Body weight	Feeding Period (days)	Feed (g)
44	308	4720	309 – 315	141
45	315	4750	316 – 322	141
46	322	4780	323 – 329	143
47	329	4810	330 – 336	143
48	336	4840	337 – 343	143
49	343	4870	344 – 350	145
50	350	4900	351 – 357	145
51	357	4930	358 – 364	145
52	364	4960	365 – 371	147
53	371	4990	372 – 378	147
54	378	5020	379 – 385	147
55	385	5050	386 – 392	149
56	392	5080	393 – 399	149
57	399	5110	400 – 406	149
58	406	5140	407 – 413	151
59	413	5170	414 – 420	151
60	420	5200	421 – 427	151
61	427	5230	428 – 434	153
62	434	5260	435 – 441	153



Cobb Germany Breeder Supplement

Management must meet the basic needs of the stock but also be optimized to attain the full potential of the breed. Our supplement reflects the genetic potential of the Cobb 500 breeder based on total eggs and hatch percent records taken from the top 25% of Cobb flocks worldwide.



Cobb Germany Avimex GmbH
Brösenweg 80
04509 Wiedemar

Telefon: +49 (0) 9402-9307-0
E-Mail: info@cobb-germany.com

DISCLAIMER

The information in this booklet is based on scientific literature, practical experience and field results. Although every attempt has been made to make the information in this booklet as relevant and accurate as possible, Cobb Germany accepts no liability for the consequences of using the information provided in this booklet. The data provided should be regarded as performance objectives, rather than specifications of standards.

Version 2023-01