



Arbor Acres Plus

International Broiler Supplement

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An Aviagen Brand

The Arbor Acres Plus

The Arbor Acres Plus is available in two types, one which produces sexable broilers and one which produces all fast-feathering broilers.

The sexable type produces fast-feathering female broilers and slow-feathering male broilers. This allows the broilers to be sexed in the hatchery by evaluating feather development differences.

Growing male and female broilers separately allows companies to capitalize on the natural growth and developmental differences between the sexes and tailor their nutritional programs. It also enables different requirements for broilers within the same market to be met more efficiently [e.g. fast-feathering females can be grown to supply small birds (rotisserie) and males for larger birds (deboning)]. Sex-separate rearing also improves body weight uniformity of flocks for the processing plant.

The non-sexable type produces all fast-feathering broilers. They cannot be sexed in the hatchery by evaluating the feathers because males and females grow their feathers at the same rate. This early feather coverage helps protect skin from damage - leading to improved carcass quality and grade in the processing plant.

Both types will have similar growth, feed conversion and meat yield characteristics. The nutritional requirements for the broilers will also be the same.

This supplement should be used in conjunction with the Arbor Acres Broiler Manual. For further information on managing Arbor Acres broilers, please consult your Technical Services Manager or contact the technical services department.

Arbor Acres Plus Broiler

As-Hatched Performance

Day	Body Weight (g) ¹	Daily Gain (g)	Cum. Intake (g) ²	FCR ³
0	42			
1	50	8		
2	61	11		
3	75	14		
4	93	17		
5	113	20		
6	137	23		
7	163	26	148	0.91
8	192	28	179	0.93
9	223	31	215	0.96
10	258	34	256	0.99
11	294	37	302	1.03
12	334	40	353	1.06
13	376	43	410	1.09
14	422	46	474	1.12
15	470	48	543	1.15
16	521	51	617	1.18
17	575	54	699	1.22
18	631	56	786	1.25
19	689	58	877	1.27
20	750	61	976	1.30
21	813	63	1078	1.33
22	878	65	1187	1.35
23	946	68	1301	1.37
24	1015	69	1418	1.40
25	1086	71	1540	1.42
26	1159	73	1668	1.44
27	1234	74	1798	1.46
28	1310	76	1933	1.48
29	1388	78	2071	1.49
30	1466	78	2213	1.51
31	1545	80	2361	1.53

Day	Body Weight (g) ¹	Daily Gain (g)	Cum. Intake (g) ²	FCR ³
32	1626	81	2512	1.54
33	1708	82	2666	1.56
34	1790	83	2828	1.58
35	1874	84	2989	1.59
36	1957	83	3160	1.61
37	2040	83	3329	1.63
38	2125	84	3506	1.65
39	2209	84	3687	1.67
40	2292	84	3870	1.69
41	2376	84	4059	1.71
42	2459	83	4247	1.73
43	2542	83	4439	1.75
44	2624	82	4632	1.77
45	2705	81	4829	1.79
46	2786	81	5027	1.80
47	2866	80	5225	1.82
48	2945	79	5422	1.84
49	3022	77	5628	1.86
50	3099	76	5830	1.88
51	3174	75	6031	1.90
52	3247	73	6232	1.92
53	3320	73	6443	1.94
54	3391	70	6645	1.96
55	3461	69	6850	1.98
56	3529	67	7052	2.00
57	3595	66	7258	2.02
58	3661	65	7459	2.04
59	3724	63	7668	2.06
60	3786	61	7867	2.08
61	3847	61	8073	2.10
62	3905	58	8270	2.12
63	3963	56	8475	2.14

¹On-farm body weight (i.e., feed present in intestinal tract)

²Feed consumption per living bird

³FCR includes initial body weight at placement and does not account for mortality

Arbor Acres Plus

Broiler

Male Performance

Day	Body Weight (g) ¹	Daily Gain (g)	Cum. Intake (g) ²	FCR ³
0	42			
1	50	8		
2	60	10		
3	74	15		
4	91	17		
5	112	21		
6	134	23		
7	161	27	146	0.91
8	190	29	177	0.93
9	221	32	213	0.96
10	256	35	255	0.99
11	294	38	301	1.02
12	335	41	353	1.05
13	379	44	411	1.08
14	427	47	477	1.12
15	477	50	547	1.15
16	531	54	625	1.18
17	588	57	710	1.21
18	648	60	801	1.24
19	711	63	899	1.26
20	777	65	1002	1.29
21	845	68	1111	1.31
22	917	72	1228	1.34
23	991	74	1350	1.36
24	1067	76	1475	1.38
25	1144	78	1605	1.40
26	1225	81	1743	1.42
27	1307	82	1881	1.44
28	1391	84	2025	1.46
29	1477	86	2173	1.47
30	1564	87	2326	1.49
31	1652	89	2484	1.50

Day	Body Weight (g) ¹	Daily Gain (g)	Cum. Intake (g) ²	FCR ³
32	1742	90	2645	1.52
33	1832	90	2809	1.53
34	1924	91	2980	1.55
35	2016	92	3151	1.56
36	2109	93	3332	1.58
37	2201	93	3514	1.60
38	2294	92	3700	1.61
39	2387	93	3891	1.63
40	2480	93	4085	1.65
41	2573	93	4283	1.67
42	2664	91	4481	1.68
43	2755	91	4681	1.70
44	2846	91	4883	1.72
45	2935	89	5087	1.73
46	3024	88	5291	1.75
47	3111	87	5493	1.77
48	3196	85	5692	1.78
49	3281	84	5898	1.80
50	3364	83	6102	1.81
51	3446	81	6302	1.83
52	3525	79	6504	1.84
53	3604	78	6710	1.86
54	3680	76	6910	1.88
55	3755	74	7110	1.89
56	3828	72	7310	1.91
57	3898	70	7507	1.93
58	3967	68	7705	1.94
59	4035	66	7904	1.96
60	4100	64	8097	1.97
61	4164	63	8290	1.99
62	4225	61	8482	2.01
63	4285	58	8675	2.02

¹On-farm body weight (i.e., feed present in intestinal tract)

²Feed consumption per living bird

³FCR includes initial body weight at placement and does not account for mortality

Arbor Acres Plus Broiler

Female Performance

Day	Body Weight (g) ¹	Daily Gain (g)	Cum. Intake (g) ²	FCR ³
0	42			
1	51	9		
2	62	11		
3	76	14		
4	95	18		
5	115	20		
6	139	24		
7	165	26	149	0.90
8	193	28	181	0.94
9	225	31	217	0.97
10	258	33	257	1.00
11	294	36	302	1.03
12	332	38	353	1.06
13	373	41	409	1.10
14	416	43	470	1.13
15	462	46	537	1.16
16	510	48	609	1.19
17	560	50	686	1.23
18	612	52	768	1.26
19	666	54	855	1.28
20	722	56	946	1.31
21	779	58	1042	1.34
22	839	60	1144	1.36
23	900	62	1249	1.39
24	963	63	1359	1.41
25	1027	64	1472	1.43
26	1093	65	1589	1.45
27	1160	67	1710	1.47
28	1228	68	1837	1.50
29	1297	69	1962	1.51
30	1367	70	2095	1.53
31	1438	71	2232	1.55

Day	Body Weight (g) ¹	Daily Gain (g)	Cum. Intake (g) ²	FCR ³
32	1510	72	2372	1.57
33	1583	73	2516	1.59
34	1657	74	2666	1.61
35	1731	74	2816	1.63
36	1805	74	2974	1.65
37	1880	75	3133	1.67
38	1954	75	3298	1.69
39	2029	75	3465	1.71
40	2104	75	3639	1.73
41	2179	75	3816	1.75
42	2253	75	3991	1.77
43	2328	75	4175	1.79
44	2402	74	4357	1.81
45	2475	74	4545	1.84
46	2548	73	4735	1.86
47	2620	73	4928	1.88
48	2692	72	5119	1.90
49	2763	71	5320	1.93
50	2832	70	5520	1.95
51	2901	69	5717	1.97
52	2969	68	5919	1.99
53	3035	67	6125	2.02
54	3101	66	6329	2.04
55	3166	65	6535	2.06
56	3230	64	6741	2.09
57	3292	63	6948	2.11
58	3353	61	7155	2.13
59	3413	60	7364	2.16
60	3472	59	7573	2.18
61	3530	58	7780	2.20
62	3585	56	7987	2.23
63	3640	55	8198	2.25

¹On-farm body weight (i.e., feed present in intestinal tract)

²Feed consumption per living bird

³FCR includes initial body weight at placement and does not account for mortality

Arbor Acres Plus Broiler

Carcass Component Yield

Arbor Acres Plus Male Broilers

Live Weight (g)	Eviscerated (%)	Breast (%)	Thigh (%)	Drumstick (%)	Leg Meat (%)
1600	69.70	16.86	12.32	10.27	16.09
1800	70.07	17.16	12.49	10.27	16.15
2000	70.43	17.44	12.65	10.28	16.19
2200	70.77	17.71	12.80	10.28	16.21
2400	71.11	17.95	12.93	10.28	16.24
2600	71.43	18.18	13.05	10.29	16.26
2800	71.73	18.39	13.16	10.29	16.28
3000	72.03	18.58	13.27	10.29	16.31
3200	72.31	18.75	13.37	10.30	16.33
3400	72.58	18.91	13.46	10.30	16.34
3600	72.84	19.04	13.55	10.30	16.35

Arbor Acres Plus Female Broilers

Live Weight (g)	Eviscerated (%)	Breast (%)	Thigh (%)	Drumstick (%)	Leg Meat (%)
1600	69.19	17.43	12.61	9.67	15.12
1800	69.60	17.70	12.77	9.65	15.19
2000	70.01	17.96	12.94	9.62	15.26
2200	70.39	18.19	13.10	9.59	15.32
2400	70.76	18.41	13.23	9.57	15.37
2600	71.10	18.62	13.37	9.55	15.44
2800	71.43	18.80	13.48	9.51	15.49

Processing Terms:

Eviscerated %: eviscerated carcass (without neck, abdominal fat and giblets) as a percentage of live weight.

Breast %: breast meat (without skin and bone removed) as a percentage of live weight.

Thigh/Drumstick %: whole thigh/drumstick (with skin and bone in) as a percentage of live weight.

Leg Meat %: sum of deboned thigh (without skin) and deboned drumstick (without skin) as a percentage of live weight.

Note: Carcass component yield will vary among processing plants depending on, for example, type of equipment used and the exact portion(s) being produced.

Arbor Acres Plus

Broiler Nutrition Recommendations

1.6 kg Female Broilers

	Starter 0-14d	Grower 15-28d	Finisher 29-MKT	Total
Amount fed – kg	0.45	1.05	1.14	2.64
Amount fed – lb	0.99	2.31	2.51	5.82
Approx days on feed	14	14	8	36

	0-14d	15-28d	29-MKT
ME kcal/kg	3086	3152	3196
ME kcal/lb	1400	1430	1450
ME MJ/kg	12.91	13.19	13.37
Protein, %	22.00	20.00	18.00

Amino Acids	Total	Available	Total	Available	Total	Available
Lysine, %	1.35	1.21	1.10	0.98	1.01	0.90
Methionine, %	0.53	0.46	0.43	0.38	0.40	0.36
MET+CYS, %	0.97	0.86	0.79	0.70	0.75	0.66
Threonine, %	0.87	0.77	0.70	0.63	0.67	0.59
Isoleucine, %	0.91	0.81	0.74	0.66	0.68	0.59
Arginine, %	1.46	1.32	1.19	1.07	1.11	0.99
Valine, %	1.04	0.92	0.85	0.74	0.78	0.68
Tryptophan, %	0.22	0.19	0.18	0.15	0.17	0.15

Minerals

Calcium, %	1.00	0.90	0.85
Avail. Phosphorus, %	0.50	0.45	0.42
Sodium, %	0.21	0.21	0.21
Chloride, %	0.17	0.17	0.17
Potassium, %	0.40	0.40	0.40

Other

Choline, ppm	1550	1500	1400
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Arbor Acres Plus

Broiler Nutrition Recommendations

1.8 kg Male and Straight-Run Broilers

	Starter 0-14d	Grower 15-28d	Finisher 29-MKT	Total
Amount fed – kg	0.45	1.14	1.41	3.00
Amount fed – lb	0.99	2.51	3.11	6.61
Approx days on feed	14	14	8	36

	0-14d	15-28d	29-MKT
ME kcal/kg	3086	3152	3196
ME kcal/lb	1400	1430	1450
ME MJ/kg	12.91	13.19	13.37
Protein, %	22.00	20.00	18.00

Amino Acids	Total	Available	Total	Available	Total	Available
Lysine, %	1.35	1.21	1.18	1.05	1.09	0.97
Methionine, %	0.53	0.46	0.46	0.41	0.43	0.38
MET+CYS, %	0.97	0.86	0.85	0.75	0.80	0.71
Threonine, %	0.87	0.77	0.76	0.67	0.72	0.64
Isoleucine, %	0.91	0.81	0.79	0.70	0.73	0.64
Arginine, %	1.46	1.32	1.28	1.15	1.19	1.06
Valine, %	1.04	0.92	0.91	0.80	0.84	0.74
Tryptophan, %	0.22	0.19	0.19	0.16	0.18	0.16

Minerals

Calcium, %	1.00	0.90	0.85
Avail. Phosphorus, %	0.50	0.45	0.42
Sodium, %	0.21	0.21	0.21
Chloride, %	0.17	0.17	0.17
Potassium, %	0.40	0.40	0.40

Other

Choline, ppm	1550	1500	1400
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Arbor Acres Plus

Broiler Nutrition Recommendations

2.5 kg Male and Straight-Run Broilers

	Starter 0-14d	Grower 15-28d	Finisher 29-36d	Withdrawal 37-MKT	Total
Amount fed – kg	0.45	1.14	1.41	1.64	4.64
Amount fed – lb	0.99	2.51	3.11	3.61	10.23
Approximate days on feed	14	14	8	8	44
	0-14d	15-28d	29-36d	37-MKT	
ME kcal/kg	3042	3141	3196	3218	
ME kcal/lb	1380	1425	1450	1460	
ME MJ/kg	12.73	13.14	13.37	13.46	
Protein, % (minimum)	22.00	20.00	18.00	17.00	
Amino Acids	Total	Available	Total	Available	Total
Lysine, %	1.35	1.21	1.18	1.05	1.09
Methionine, %	0.53	0.46	0.46	0.41	0.43
MET+CYS, %	0.97	0.86	0.85	0.75	0.80
Threonine, %	0.87	0.77	0.76	0.67	0.72
Isoleucine, %	0.91	0.81	0.79	0.70	0.73
Arginine, %	1.46	1.32	1.28	1.15	1.19
Valine, %	1.04	0.92	0.91	0.80	0.84
Tryptophan, %	0.22	0.19	0.19	0.16	0.18
Minerals					
Calcium, %	1.00		0.90		0.85
Avail. Phosphorus, %	0.50		0.45		0.42
Sodium, %	0.21		0.21		0.21
Chloride, %	0.17		0.17		0.17
Potassium, %	0.40		0.40		0.40
Other					
Choline, ppm	1550		1500		1400

Arbor Acres Plus

Broiler Nutrition Recommendations

3.0 kg Male and Straight-Run Broilers

	Starter 0-14d	Grower 15-28d	Finisher 29-42d	Withdrawal 43-MKT	Total
Amount fed – kg	0.45	1.14	2.50	2.36	6.45
Amount fed – lb	0.99	2.51	5.51	5.20	14.22
Approximate days on feed	14	14	14	10	52

	0-14d	15-28d	29-42d	43-MKT
ME kcal/kg	3042	3141	3196	3218
ME kcal/lb	1380	1425	1450	1460
ME MJ/kg	12.73	13.14	13.37	13.46
Protein, % (minimum)	22.00	20.00	17.50	16.50

Amino Acids	Total	Available	Total	Available	Total	Available	Total	Available
Lysine, %	1.35	1.21	1.18	1.05	1.06	0.95	1.01	0.91
Methionine, %	0.53	0.46	0.46	0.41	0.42	0.37	0.42	0.37
MET+CYS, %	0.97	0.86	0.85	0.75	0.78	0.69	0.77	0.68
Threonine, %	0.87	0.77	0.76	0.67	0.70	0.62	0.69	0.61
Isoleucine, %	0.91	0.81	0.79	0.70	0.71	0.62	0.71	0.62
Arginine, %	1.46	1.32	1.28	1.15	1.16	1.04	1.11	0.98
Valine, %	1.04	0.92	0.91	0.80	0.81	0.72	0.78	0.69
Tryptophan, %	0.22	0.19	0.19	0.16	0.18	0.15	0.17	0.15

Minerals				
Calcium, %	1.00	0.90	0.85	0.76
Avail. Phosphorus, %	0.50	0.45	0.42	0.37
Sodium, %	0.20	0.20	0.20	0.19
Chloride, %	0.17	0.17	0.17	0.17
Potassium, %	0.40	0.40	0.40	0.40

Other				
Choline, ppm	1550	1500	1400	1250

Arbor Acres Plus Broiler

Trace Mineral Recommendations

Trace mineral premix should supply below finished feed amounts

Trace Mineral	ppm
Iron	20
Manganese	120
Zinc	110
Copper	16
Iodine	1.25
Selenium	0.30

Comments: suggested sources of above elements

Manganese (Mn) – sulfate

Zinc (Zn) – sulfate

Iron (Fe) – sulfate

Copper (Cu) – chloride

Iodine (I) – calcium iodate

Selenium (Se) – sodium selenite

Vitamin Recommendations

Vitamin premix should supply below finished feed amounts

Vitamin	Units	Primary Cereal Grain (units/kg)	
		Wheat	Maize
A	IU	8,860	8,270
D ₃	IU	3,030	3,030
E	IU	50	50
B ₁₂	µg	15.4	15.4
Riboflavin	mg	7.7	7.7
Niacin	mg	51.8	51.8
Pantothenic Acid	mg	12.7	12.7
Menadione	mg	2.2	2.2
Folic Acid	mg	1.1	1.1
Pyridoxine	mg	3.1	2.4
Thiamin	mg	2.4	2.4
Biotin	µg	155	110

Arbor Acres Plus Lighting Program*

Flock Age (days)	Light Intensity		Light Duration hr light on/ hr light off
	lux	ft candles	
0-7	30-40	3.0-4.0	23/1
8-28	10-15	1.0-1.5	20/4
29-end	3-5	0.3-0.5	23/1

* This lighting program can be used where light control is possible and local regulations permit.

- When broilers are placed, the light intensity should be 20-25 lux (2-2.5 foot candles) at the feeder level and then gradually reduced so that by 29 days it is approximately 3-5 lux (0.3-0.5 foot candles).
- Light intensity should be uniform throughout the house.
- As soon as the lights come on, feed and water should be available to all birds.
- All birds should have equal access to feed and water.
- During the dark period, light intensity should be no more than 0.4 lux or 0.04 foot candles.
- This lighting program should serve as a guide to help achieve maximum performance from your Arbor Acres Plus broilers. For assistance in modifying the program to suit your particular operation, contact your technical services manager.



An Aviagen Brand

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