



# *Arbor Acres* plus

## Parent Stock Nutrition Specification

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## Introduction

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This booklet contains the nutrition specifications for Arbor Acres Plus Parent Stock and is to be used with the Arbor Acres Plus Parent Stock Management Guide and Arbor Acres Plus Parent Stock Performance Objectives.

### PERFORMANCE

To achieve optimal reproductive performance, it is important that the body weight profiles recommended in the Arbor Acres Parent Stock Performance Objectives are followed. For the nutritional recommendations that follow, nutrient specifications presented have been based upon daily energy allocations that enable body weight profiles to be achieved.

The feed specifications are based on a 3-stage rearing program to be used with breeders that receive their first light stimulation after 21 weeks of age (147 days +) to achieve 5% production at 25 weeks of age.

Feed specifications and feed allocations are based on a dietary energy value of 2800 kcal ME/kg.

**It must be remembered that these are examples, and adjustments to nutrient inclusion will have to be made if energy value is altered. Feed allocation should be determined by body weight and therefore altered to maintain the recommended weight profile.**

It may be beneficial to use a specific male feed during the production period. An example specification can be found on page 4 of this booklet.

If you require any further information regarding these recommendations please contact your Aviagen Nutrition Service Manager.

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# Arbor Acres Plus Parent Stock *Nutrition Specification*

**Table 1:** Example Female Parent Stock Nutrient Specifications

Three stage rearing program.

First light stimulation after 21 weeks (147 days +) - 5% production at 25 weeks of age.

Age fed	Weeks	Starter		Grower		Pre-Breeder		Breeder		Breeder #2	
		0-4		5-18		19-5% Production		5% Production-44		from 45	
Energy per kg	kcal ME	2800		2800		2800		2800		2800	
	MJ ME	11.7		11.7		11.7		11.7		11.7	
<b>Amino Acids*</b>											
		Total	Digest <sup>1</sup>	Total	Digest <sup>1</sup>	Total	Digest <sup>1</sup>	Total	Digest <sup>1</sup>	Total	Digest <sup>1</sup>
Lysine	%	1.01	0.90	0.74	0.66	0.65	0.58	0.65	0.58	0.65	0.58
Methionine + Cystine	%	0.79	0.70	0.62	0.55	0.56	0.50	0.58	0.52	0.58	0.52
Methionine	%	0.38	0.35	0.30	0.27	0.30	0.28	0.30	0.28	0.30	0.28
Threonine	%	0.71	0.62	0.56	0.49	0.48	0.42	0.48	0.42	0.48	0.42
Valine	%	0.81	0.70	0.64	0.55	0.56	0.49	0.56	0.49	0.56	0.49
iso - Leucine	%	0.70	0.61	0.56	0.50	0.51	0.45	0.53	0.46	0.53	0.46
Arginine	%	1.08	0.97	0.84	0.76	0.71	0.64	0.69	0.62	0.69	0.62
Tryptophan	%	0.17	0.14	0.17	0.15	0.15	0.13	0.15	0.13	0.15	0.13
Crude Protein	%	19.0		15.0		14.5-15.5		14.5-15.5		14.5-15.0	
<b>Minerals*</b>											
Calcium	%	1.00		0.90		1.20		3.00		3.30	
Available Phosphorus	%	0.45		0.42		0.35		0.35		0.32	
Sodium	%	0.16-0.23		0.16-0.23		0.16-0.23		0.16-0.23		0.16-0.23	
Chloride	%	0.16-0.23		0.16-0.23		0.16-0.23		0.16-0.23		0.16-0.23	
Potassium	%	0.40-0.90		0.40-0.90		0.60-0.90		0.60-0.90		0.60-0.90	
<b>Added Trace Minerals Per Kg</b>											
Copper	mg	16		16		10		10		10	
Iodine	mg	1.25		1.25		2.00		2.00		2.00	
Iron	mg	40		40		50		50		50	
Manganese	mg	120		120		120		120		120	
Selenium	mg	0.30		0.30		0.30		0.30		0.30	
Zinc	mg	100		100		100		100		100	
<b>Added Vitamins Per Kg</b>											
		Wheat Based Feed	Maize Based Feed	Wheat Based Feed	Maize Based Feed	Wheat Based Feed	Maize Based Feed	Wheat Based Feed	Maize Based Feed	Wheat Based Feed	Maize Based Feed
Vitamin A	iu	11000	10000	11000	10000	12000	11000	12000	11000	12000	11000
Vitamin D3	iu	3500	3500	3500	3500	3500	3500	3500	3500	3500	3500
Vitamin E	iu	60	60	45	45	100	100	100	100	100	100
Vitamin K (Menadione)	mg	3	3	2	2	5	5	5	5	5	5
Thiamin (B1)	mg	3	3	2	2	3	3	3	3	3	3
Riboflavin (B2)	mg	6	6	5	5	12	12	12	12	12	12
Nicotinic Acid	mg	30	35	25	30	50	55	50	55	50	55
Pantothenic Acid	mg	13	15	13	15	13	15	13	15	13	15
Pyridoxine (B6)	mg	4	3	3	2	5	4	5	4	5	4
Biotin	mg	0.20	0.15	0.20	0.15	0.30	0.25	0.30	0.25	0.30	0.25
Folic Acid	mg	1.50	1.50	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Vitamin B12	mg	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
<b>Minimum Specification</b>											
Choline per kg	mg	1400		1400		1000		1000		1000	
Linoleic Acid	%	1.00		1.00		1.20-1.50		1.20-1.50		1.00	

Digest<sup>1</sup> = Digestible

\*Energy base value. Nutrients should be factored accordingly when feeding differing energy values.

**Notes:**

*These feed specifications should be used as a guide. They require adjustment for local conditions, legislation and markets.*

**Table 2:** Female Parent Stock Energy and Feed Allocation

Three stage rearing program.

First light stimulation after 21 weeks (147 days +) - 5% production at 25 weeks of age.

Age of Flock		Energy	Feed Quantity
Day	Week	(kcal ME/bird/day)	(g/bird/day)
7	1	59	21
14	2	81	29
21	3	87	31
28	4	98	35
35	5	109	39
42	6	120	43
49	7	126	45
56	8	134	48
63	9	143	51
70	10	151	54
77	11	157	56
84	12	165	59
91	13	179	64
98	14	196	70
105	15	207	74
112	16	224	80
119	17	235	84
126	18	246	88
133	19	258	92
140	20	280	100
147	21	294	105
154	22	308	110
161	23	322	115
168	24	336	120
175	25	350	125
182	26	386	138
189	27	423	151
196	28	456	163
203	29	456	163
210	30	456	163
217	31	456	163
224	32	456	163
231	33	454	162
238	34	451	161
245	35	448	160
252	36	448	160
259	37	445	159
266	38	445	159
273	39	442	158
280	40	442	158
287	41	440	157
294	42	440	157
301	43	437	156
308	44	437	156
315	45	434	155
322	46	434	155
329	47	431	154
336	48	431	154
343	49	428	153
350	50	428	153
357	51	426	152
364	52	426	152
371	53	423	151
378	54	423	151
385	55	420	150
392	56	420	150
399	57	417	149
406	58	417	149
413	59	414	148
420	60	414	148
427	61	412	147
434	62	412	147
441	63	409	146
448	64	409	146

**Notes:**

*These feed specifications should be used as a guide. They require adjustment for local conditions, legislation and markets.*

**Table 3:** Example Male Parent Stock Nutrient Specifications

Feed allocation will be determined by male body weight and condition and should follow the guidelines for males previously described.

		Male feed	
Crude Protein	%	12-14	
Energy per kg	kcal ME	2600-2800	
	MJ ME	10.9-11.7	
<b>Amino Acids*</b>			
		Total	Digest <sup>1</sup>
Lysine	%	0.45-0.55	0.40-0.49
Methionine + Cystine	%	0.38-0.46	0.34-0.41
Methionine	%	0.16-0.22	0.15-0.20
Threonine	%	0.36-0.46	0.32-0.40
Valine	%	0.48-0.58	0.42-0.50
iso – Leucine	%	0.40-0.51	0.35-0.45
Arginine	%	0.61-0.72	0.55-0.65
Tryptophan	%	0.10-0.17	0.09-0.15
<b>Minerals*</b>			
Calcium	%	0.8-1.2	
Available Phosphorus	%	0.3-0.4	
Magnesium	%	0.05-0.10	
Sodium	%	0.16-0.23	
Chloride	%	0.16-0.23	
Potassium	%	0.40-0.75	
<b>Added Trace Minerals Per Kg</b>			
Copper	mg	10	
Iodine	mg	2	
Iron	mg	50	
Manganese	mg	120	
Selenium	mg	0.3	
Zinc	mg	100	
<b>Added Vitamins Per Kg</b>			
		Wheat Based Feed	Maize Based Feed
Vitamin A		12000	11000
Vitamin D3	iu	3500	3500
Vitamin E	iu	100	100
Vitamin K (Menadione)	iu	5	5
Thiamin (B1)	mg	3	3
Riboflavin (B2)	mg	12	12
Nicotinic Acid	mg	50	55
Pantothenic Acid	mg	13	15
Pyridoxine (B6)	mg	5	4
Biotin	mg	0.3	0.25
Folic Acid	mg	2	2
Vitamin B12	mg	0.03	0.03
	mg		
<b>Minimum Specification</b>			
Choline per kg	mg	1000	
Linoleic Acid	%	0.8-1.20	

Digest<sup>1</sup> = Digestible

\*Energy base value. Nutrients should be factored accordingly when feeding differing energy values.

**Notes:**

*These feed specifications should be used as a guide. They require adjustment for local conditions, legislation and markets.*

**Table 4:** Male Parent Stock Energy and Feed Allocation

Three stage rearing program.

First light stimulation after 21 weeks (147 days +) - 5% production at 25 weeks of age.

Age of Flock		Energy	Feed Quantity
Day	Week	(kcal ME/bird/day)	(g/bird/day)
7	1	73	26
14	2	101	36
21	3	123	44
28	4	151	54
35	5	171	61
42	6	185	66
49	7	188	67
56	8	190	68
63	9	196	70
70	10	204	73
77	11	210	75
84	12	216	77
91	13	221	79
98	14	230	82
105	15	235	84
112	16	246	88
119	17	260	93
126	18	272	97
133	19	283	101
140	20	297	106
147	21	311	111
154	22	325	116
161	23	336	120
168	24	347	124
175	25	356	127
182	26	364	130
189	27	370	132
196	28	372	133
203	29	372	133
210	30	375	134
217	31	375	134
224	32	378	135
231	33	378	135
238	34	381	136
245	35	381	136
252	36	384	137
259	37	384	137
266	38	386	138
273	39	386	138
280	40	389	139
287	41	389	139
294	42	392	140
301	43	392	140
308	44	395	141
315	45	395	141
322	46	398	142
329	47	398	142
336	48	400	143
343	49	400	143
350	50	403	144
357	51	403	144
364	52	406	145
371	53	406	145
378	54	409	146
385	55	409	146
392	56	412	147
399	57	412	147
406	58	414	148
413	59	414	148
420	60	417	149
427	61	417	149
434	62	420	150
441	63	420	150
448	64	423	151

**Notes:**

*These feed specifications should be used as a guide. They require adjustment for local conditions, legislation and markets.*



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