PARENT STOCK

Nutrition Specifications

2014

ROSS

An Aviagen Brand

Introduction

This booklet contains the nutritional recommendations for the Ross® PM3 Parent Stock and is to be used with the Ross Parent Stock Management Handbook and the Ross PM3 Parent Stock Performance Objectives.

Performance

To achieve optimal reproductive performance, it is important that the body weight profiles recommended in the Ross PM3 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 in this booklet are for floor kept birds based on a 4-stage rearing programme which is applicable for situations where a lower nutrient density and a higher feed volume feeding strategy is required and a two stage breeder diet.

Please note these nutrient recommendations are based on the specified energy levels. Adjustment of nutrient levels must be made to reflect the feeding of different energy levels. Feed allocation should be determined by body weight and egg production levels, and therefore altered to maintain the recommended weight and egg production profiles.

It may be beneficial to use a separate male diet during the production period. A specification for a male diet is provided in this booklet.

For further information regarding these recommendations or for more specialised situations and advice on local markets please contact your Aviagen Nutritionist or Technical Service Manager.

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Female Parent Stock Nutrient Specifications

Four Stage Rearing Program

		Starter 1		Starter 2		Grower		Pre-breeder		Breeder 1		Breeder 2 **	
Age Fed	days	0-21		22-42		43-105		106 days to 5% production		From 5% production		After 315 days	
Energy per kg	kcal	2800		2800		2600		2800		2800		2800	
	MJ	11.7		11.7		10.9		11.7		11.7		11.7	
Energy per lb	kcal	1270		1270		1180		1270		1270		1270	
AMINO ACIDS*		**Total**	**Digest [1]**	**Total**	**Digest [1]**	**Total**	**Digest [1]**	**Total**	**Digest [1]**	**Total**	**Digest [1]**	**Total**	**Digest [1]**
Lysine	%	1.06	0.95	0.74	0.67	0.58	0.52	0.62	0.56	0.68	0.61	0.63	0.57
Methionine + Cystine	%	0.84	0.74	0.66	0.58	0.53	0.47	0.57	0.50	0.61	0.53	0.59	0.52
Methionine	%	0.46	0.40	0.32	0.28	0.34	0.31	0.37	0.33	0.39	0.35	0.38	0.34
Threonine	%	0.72	0.64	0.57	0.51	0.45	0.40	0.49	0.43	0.54	0.48	0.52	0.47
Valine	%	0.80	0.71	0.60	0.53	0.49	0.44	0.53	0.47	0.60	0.53	0.57	0.51
IsoLeucine	%	0.70	0.62	0.54	0.48	0.45	0.40	0.49	0.43	0.56	0.50	0.54	0.48
Arginine	%	1.17	1.05	0.87	0.78	0.72	0.64	0.77	0.70	0.87	0.78	0.85	0.77
Tryptophan	%	0.19	0.16	0.15	0.13	0.14	0.12	0.15	0.13	0.16	0.14	0.15	0.13
Leucine	%	1.23	1.11	0.84	0.76	0.77	0.69	0.83	0.75	0.98	0.89	0.94	0.85
Crude Protein	%	19.00		17.00		14.00		15.10		16.30		15.50	
Minerals*	%												
Calcium	%	1.00		1.00		0.90		1.20		3.35		3.55	
Avail. Phosphorus	%	0.45		0.45		0.42		0.36		0.39		0.36	
Sodium	%	0.16	0.23	0.16	0.23	0.16	0.23	0.16	0.23	0.15	0.20	0.15	0.20
Chloride	%	0.16	0.23	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	0.40	0.90	0.40	0.90	0.60	0.90	0.60	0.90
Added trace minerals per kg													
Copper	mg	16		16		16		16		12		12	
Iodine	mg	1.25		1.25		1.25		1.25		2.2		2.2	
Iron	mg	40		40		40		40		55		55	
Manganese	mg	120		120		120		120		130		130	
Selenium	mg	0.3		0.3		0.3		0.3		0.35		0.35	
Zinc	mg	110		110		110		110		120		120	
Added vitamins per kg		**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**	**Wheat based feed**	**Maize based feed**
Vitamin A	IU	11000	10000	11000	10000	11000	10000	11000	10000	13250	12200	13250	12200
Vitamin D3	IU	3500	3500	3500	3500	3500	3500	3500	3500	3850	3850	3850	3850
Vitamin E	IU	100	100	100	100	100	100	100	100	110	110	110	110
Vitamin K (Menadione)	mg	3	3	3	3	3	3	3	3	5.6	5.6	5.6	5.6
Thiamine (B1)	mg	3	3	3	3	3	3	3	3	3.6	3.6	3.6	3.6
Riboflavin (B2)	mg	6	6	6	6	6	6	6	6	13.2	13.2	13.2	13.2
Nicotinic Acid	mg	30	35	30	35	30	35	30	35	55.0	60.0	55.0	60.0
Pantothenic acid	mg	13	15	13	15	13	15	13	15	15.3	17.3	15.3	17.3
Pyridoxine (B6)	mg	4	3	4	3	4	3	4	3	5.6	4.6	5.6	4.6
Biotin	mg	0.2	0.15	0.2	0.15	0.2	0.15	0.2	0.15	0.35	0.30	0.35	0.30
Folic Acid	mg	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.2	2.2
Vitamin B12	mg	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.04	0.04	0.04	0.04
Minimum specification													
Choline per kg	mg	1400		1400		1300		1220		1325		1170	
Linoleic Acid	%	1		1		1		1		1.35		1.35	

Digest[1] = Digestible

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

*** A breeder 2 can be useful to help control egg size and improve shell quality.*

NOTES

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

Female Parent Stock Nutrient Allocations at Peak Production

Nutrient	Nutrient Allocation at Peak
Energy (kcal/bird/day)	415
DIGESTIBLE	
AMINO ACIDS	
mg/bird/day	
Lysine	904
Methionine + Cystine	784
Methionine	512
Threonine	708
Valine	784
Isoleucine	738
Arginine	1160
Tryptophan	211
Leucine	1311
MINERALS	
mg/bird/day	
Calcium	4958
Available Phosphorus	573

NOTES

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

These nutrient allocations at peak are based on feeding 148g (32.6 lb/100 birds/day) of a 2800 kcal ME/kg (1270 kcal ME/lb) diet.

Male Parent Stock Nutrient Specifications

Feed allocation will be determined by male body weight and condition.
The male diet should be introduced when birds are moved to the laying house or at light stimulation.

		Male Feed	
Energy per kg	kcal	2750	
	MJ	11.5	
Energy per lb	kcal	1248	
AMINO ACIDS*		**Total**	**Digest [1]**
Lysine	%	0.50	0.45
Methionine + Cystine	%	0.49	0.43
Methionine	%	0.32	0.29
Threonine	%	0.38	0.34
Valine	%	0.43	0.38
IsoLeucine	%	0.39	0.35
Arginine	%	0.59	0.53
Tryptophan	%	0.10	0.08
Leucine	%	0.59	0.53
Crude Protein	%	12.00	
MINERALS*			
Calcium	%	0.70	
Avail. Phosphorus	%	0.35	
Sodium	%	0.15-0.20	
Chloride	%	0.16-0.23	
Potassium	%	0.60-0.90	
Added trace minerals per kg			
Copper	mg	10	
Iodine	mg	2	
Iron	mg	50	
Manganese	mg	120	
Zinc	mg	110	
Selenium	mg	0.3	
Added vitamins per kg		**Wheat based feed**	**Maize based feed**
Vitamin A	IU	12000	11000
Vitamin D3	IU	3500	3500
Vitamin E	IU	100	100
Vitamin K (Menadione)	mg	5	5
Thiamine (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	0.30	0.25
Folic Acid	mg	2.00	2.00
Vitamin B12	mg	0.03	0.03
Minimum specification			
Choline per kg	mg	1000	
Linoleic Acid	%	1.00	

Digest[1] = 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 may require adjustment for local conditions, legislation and markets.

Notes

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Every attempt has been made to ensure the accuracy and relevance of the information presented. However, Aviagen accepts no liability for the consequences of using the information for the management of chickens.

For further information, please contact your local Nutrition or Technical Service Manager.

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