EUROPEAN PARENT STOCK

ROSS 308 FF

Nutrition Specifications

2021

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Introduction

This booklet contains the nutritional recommendations for the European Ross® 308 FF (fast feathering) parent stock and is to be used with the **Ross Parent Stock Management Handbook**, the Ross 308 FF Management Supplement, and the **European Ross 308 FF Parent Stock Performance Objectives**.

Performance

To achieve optimal reproductive performance, it is important that the body-weight profiles recommended in the **European Ross 308 FF 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 and reproductive performance objectives to be achieved.

Recommendations included in this booklet suggest different rearing programs for the following scenarios:

- **4-Stage Rearing Program -** where a smooth energy transition is applied between rearing and laying phases.
- **5-Stage Rearing Program -** where a developer ration is introduced to smooth the transition to a pre-breeder.
- **Separate Male Feed –** only for males in production.

Nutrient values must be adjusted to reflect the feeding of different energy levels. Feed allocation should be determined by body weight, evaluation of fleshing and egg production, and therefore altered to maintain the recommended weight and egg production profiles.

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

The energy values used in these specifications are based on assays for Metabolizable Energy (ME) published by the World's Poultry Science Association (WPSA). The values for amino acid digestibility are based on Standardized Ileal Digestibility (SID) assays.

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Female Parent Stock Nutrient Specifications
4-Stage Rearing Program

		Starter 1	Starter 2	Grower	Pre-breeder	Breeder 1	Breeder 2	Breeder 3
Age Fed		0-21 days	22-42 days	43-105 days	106 days to 5% production	>5% production to 224 days	225-350 days	After 351 days
Energy per kg*	kcal	2800	2800	2600	2700	2800	2800	2800
	MJ	11.7	11.7	10.9	11.3	11.7	11.7	11.7
DIGESTIBLE AMINO ACIDS								
Lysine (max)**	%	1.00	0.72	0.48	0.47	0.62	0.56	0.52
Methionine	%	0.46	0.37	0.33	0.33	0.38	0.35	0.34
Methionine & Cystine	%	0.84	0.68	0.58	0.57	0.62	0.57	0.55
Threonine	%	0.70	0.60	0.48	0.48	0.55	0.53	0.51
Valine	%	0.81	0.72	0.56	0.55	0.64	0.60	0.56
Tryptophan	%	0.18	0.18	0.14	0.14	0.15	0.14	0.13
Arginine	%	1.15	0.92	0.72	0.72	0.85	0.82	0.79
Leucine	%	1.20	1.03	0.76	0.76	0.95	0.90	0.86
Isoleucine	%	0.70	0.58	0.44	0.42	0.52	0.50	0.49
Histidine	%	0.43	0.32	0.24	0.21	0.30	0.28	0.26
Crude Protein (min)	%	19.0	17.0	14.0	14.0	15.0	14.0	13.0
MINERALS								
Calcium	%	1.05	0.94	0.90	1.20	3.00	3.20	3.40
Available Phosphorus	%	0.50	0.47	0.45	0.45	0.36	0.34	0.32
Sodium	%	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23
Chloride	%	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23
Potassium	%	0.60-0.90	0.60-0.90	0.60-0.90	0.60-0.90	0.70-0.90	0.65-0.90	0.60-0.90
ADDED TRACE MINERALS PER KG								
Copper	mg	16				16		
Iodine	mg	2				3		
Iron	mg	40				50		
Manganese	mg	130				130		
Selenium	mg	0.3				0.3		
Zinc***	mg	90				90		
ADDED VITAMINS PER KG								
Vitamin A***	IU	10000				10000		
Vitamin D3***	IU	3200				3200		
Vitamin E	IU	100				130		
Vitamin K (Menadione)	mg	6				9		
Thiamin (B1)	mg	5				6		
Riboflavin (B2)	mg	15				20		
Niacin	mg	50				70		
Pantothenic Acid	mg	20				25		
Pyridoxine (B6)	mg	5				8		
Biotin	mg	0.3				0.6		
Folic Acid	mg	3				5		
Vitamin B12	mg	0.05				0.07		
MINIMUM SPECIFICATION								
Choline per kg	mg	1400				1600		
Linoleic Acid	%	1.25				2.00		

** Nutrients should be factored accordingly when feeding different energy values.*
*** In order to achieve the amino acid requirements without exceeding the recommended levels of digestible lysine it may be necessary to adopt more complex diets.*
**** Established limits according to EU legislation.*

NOTES: *These feed specifications should be used as a guide. They may require adjustment for local environmental conditions, ingredient availability, and markets.*

Female Parent Stock Nutrient Specifications

5-Stage Rearing Program

		Starter 1	Starter 2	Grower	Developer	Pre-Breeder	Breeder 1	Breeder 2	Breeder 3
Age Fed		0-21 days	22-42 days	43-105 days	106 -140 days	141 days to 5% production	>5% production to 224 days	225-350 days	After 351 days
Energy per kg*	kcal	2800	2800	2600	2700	2800	2800	2800	2800
	MJ	11.7	11.7	10.9	11.3	11.7	11.7	11.7	11.7
DIGESTIBLE AMINO ACIDS									
Lysine (max)**	%	1.00	0.72	0.48	0.48	0.48	0.62	0.56	0.52
Methionine	%	0.46	0.37	0.33	0.33	0.34	0.38	0.35	0.34
Methionine & Cystine	%	0.84	0.68	0.58	0.58	0.58	0.62	0.57	0.55
Threonine	%	0.70	0.60	0.48	0.48	0.49	0.55	0.53	0.51
Valine	%	0.81	0.72	0.56	0.56	0.56	0.64	0.60	0.56
Tryptophan	%	0.18	0.18	0.14	0.14	0.15	0.15	0.14	0.13
Arginine	%	1.15	0.92	0.72	0.73	0.74	0.85	0.82	0.79
Leucine	%	1.20	1.03	0.76	0.77	0.78	0.95	0.90	0.86
Isoleucine	%	0.70	0.58	0.44	0.43	0.43	0.52	0.50	0.49
Histidine	%	0.43	0.32	0.24	0.22	0.20	0.30	0.28	0.26
Crude Protein (min)	%	19.0	17.0	14.0	14.0	14.0	15.0	14.0	13.0
MINERALS									
Calcium	%	1.05	0.94	0.90	0.90	1.50	3.00	3.20	3.40
Available Phosphorus	%	0.50	0.47	0.45	0.45	0.35	0.36	0.34	0.32
Sodium	%	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23
Chloride	%	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23	0.18-0.23
Potassium	%	0.60-0.90	0.60-0.90	0.60-0.90	0.60-0.90	0.60-0.90	0.70-0.90	0.65-0.90	0.60-0.90
ADDED TRACE MINERALS PER KG									
Copper	mg	16					16		
Iodine	mg	2					3		
Iron	mg	40					50		
Manganese	mg	130					130		
Selenium	mg	0.3					0.3		
Zinc***	mg	90					90		
ADDED VITAMINS PER KG									
Vitamin A***	IU	10000					10000		
Vitamin D3***	IU	3200					3200		
Vitamin E	IU	100					130		
Vitamin K (Menadione)	mg	6					9		
Thiamin (B1)	mg	5					6		
Riboflavin (B2)	mg	15					20		
Niacin	mg	50					70		
Pantothenic Acid	mg	20					25		
Pyridoxine (B6)	mg	5					8		
Biotin	mg	0.3					0.6		
Folic Acid	mg	3					5		
Vitamin B12	mg	0.05					0.07		
MINIMUM SPECIFICATION									
Choline per kg	mg	1400					1600		
Linoleic Acid	%	1.25					2.00		

** Nutrients should be factored accordingly when feeding different energy values.*
*** In order to achieve the amino acid requirements without exceeding the recommended levels of digestible lysine it may be necessary to adopt more complex diets.*
**** Established limits according to EU legislation.*

NOTES: *These feed specifications should be used as a guide. They may require adjustment for local environmental conditions, ingredient availability, and markets.*

Parent Stock Nutrient Specifications

Nutrient Allocations at Peak Production

Nutrient	Nutrient Allocation at Peak
Energy (kcal/bird/day)	463
Digestible Amino Acids (mg/bird/day)	
Lysine	1025
Methionine	628
Methionine & Cystine	1025
Threonine	909
Valine	1058
Tryptophan	248
Arginine	1406
Leucine	1571
Isoleucine	860
Histidine	496
Minerals (mg/bird/day)	
Calcium	4961
Available Phosphorus	595

European Male Parent Stock Nutrient Specifications
Separate Diet in Production

		Male Diet
Energy per kg*	kcal	2700
	MJ	11.3
DIGESTIBLE AMINO ACIDS		
Lysine**	%	0.34
Methionine	%	0.32
Methionine & Cystine	%	0.56
Threonine	%	0.41
Valine	%	0.45
Tryptophan	%	0.14
Arginine	%	0.66
Leucine	%	0.64
Isoleucine	%	0.40
Histidine	%	0.15
Crude Protein	%	12.0
MINERALS		
Calcium	%	0.70
Available Phosphorus	%	0.35
Sodium	%	0.18-0.20
Chloride	%	0.20-0.23
Potassium	%	0.60-0.75
ADDED TRACE MINERALS PER KG		
Copper	mg	16
Iodine	mg	2
Iron	mg	40
Manganese	mg	120
Selenium	mg	0.3
Zinc***	mg	90
ADDED VITAMINS PER KG		
Vitamin A***	IU	10000
Vitamin D3***	IU	3200
Vitamin E	IU	100
Vitamin K (Menadione)	mg	6
Thiamin (B1)	mg	5
Riboflavin (B2)	mg	15
Niacin	mg	50
Pantothenic Acid	mg	20
Pyridoxine (B6)	mg	5
Biotin	mg	0.3
Folic Acid	mg	3
Vitamin B12	mg	0.05
MINIMUM SPECIFICATION		
Choline per kg	mg	1400
Linoleic Acid	%	1.25

** Energy base value. Nutrients should be factored accordingly when feeding different energy values.*
*** In order to achieve the amino acid requirements without exceeding the recommended levels of digestible lysine it may be necessary to adopt more complex diets.*
**** Established limits according to EU legislation.*

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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