



Turkey Nutrition

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www.lauckemills.com.au

Laucke Mills History



- Family owned and operated milling company, founded in 1899.
- Laucke Mills started as a flour milling business and commenced manufacturing mash feeds in the late 1950's.
- Due to an ever growing demand for pelleted products, in 1989 a new state of the art feed mill was commissioned at Daveyston.
- Numerous upgrades have followed resulting in the Daveyston Mill being one of the most technically advanced Mills in Australia.

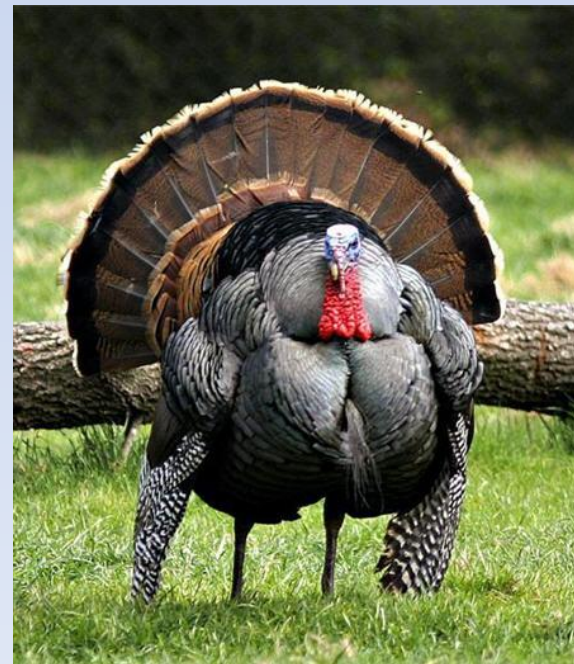
Laucke Mills



- Manufacture a range of bulk and bagged feeds to cater for the nutritional requirements of various livestock, poultry, pets and fish.
- 75% bulk feeds predominantly for commercial pig and poultry farms
- 25% bagged feed

The Importance of Nutrition

- Helping your birds perform to their potential
- Nutritionally well fed birds are generally healthier birds
 - Less susceptible to disease/better immune response
 - More productive
 - More fertile
 - More Viable



Commercial Diet Specs

	Starter	Grow 1	Grower 2	Dev 1	Developer 2	Finisher
Age (Wks)	0 – 4	5 – 8	9 – 11	12 – 14	15 – 16	17+
Crude protein (%)	28	26	23	21	18	16
ME (kcal/kg)	2850	2900	3050	3200	3250	3325
Lysine (%)	1.70	1.60	1.45	1.30	1.12	1.00
Methionine (%)	0.62	0.56	0.52	0.48	0.42	0.35
Calcium (%)	1.4	1.25	1.15	1.05	0.95	0.85
Av. phosphorus (%)	0.75	0.7	0.65	0.6	0.55	0.48
Sodium (%)	0.17	0.17	0.17	0.17	0.17	0.17

Components of a balanced diet

Energy

- Critical for all functions in the body
- Sources from:
 - Carbohydrates (simple & complex)
 - Fats/Oils – Essential Fatty acids
 - Amino acids (when in energy deficit)

Protein - Amino acid balance

Minerals

- Macro minerals eg - Ca, P, Mg Na, Cl
- Trace minerals eg. Zn, Cu, Mn, I, Fe etc.

Vitamins

- A, D, E, K, B vitamins

Fibre

Water

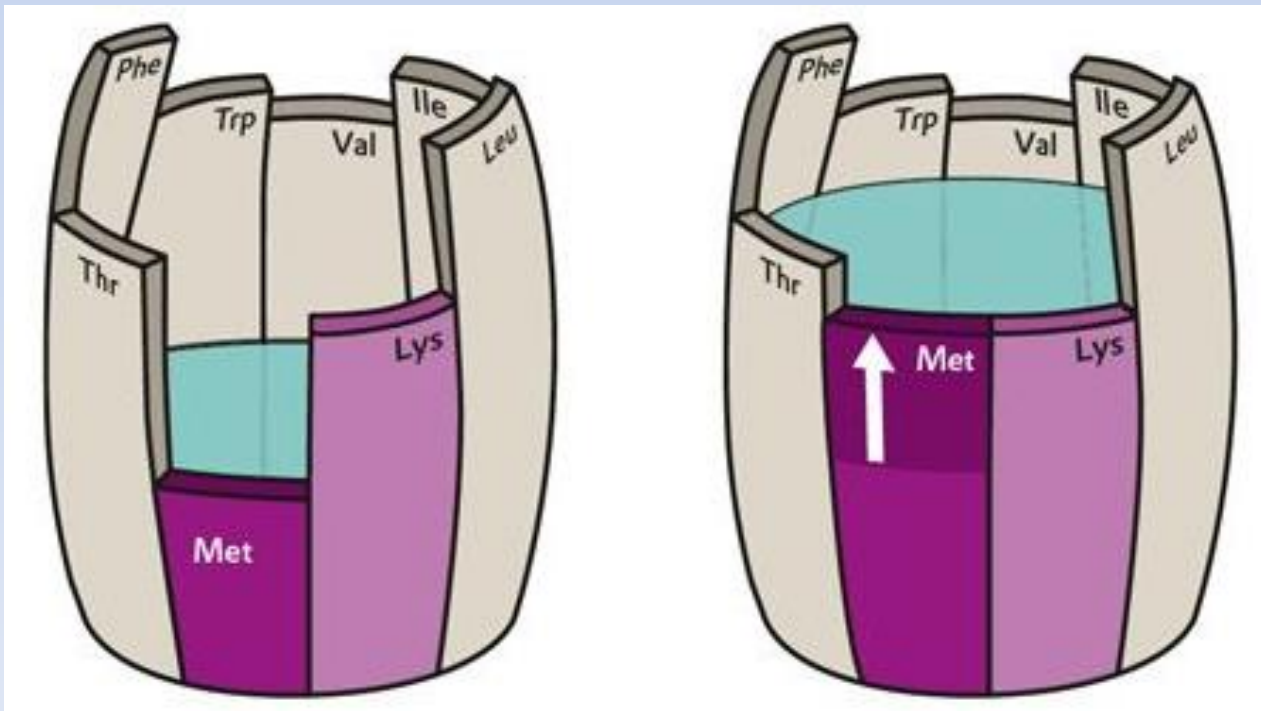
- Clean & Fresh!

ME Poultry _____	kcal/kg.
eME Poultry _____	kcal/kg.
Protein _____	%.
Fat _____	%.
Fibre _____	%.
Lysine _____	%.
Available Lysine - Poultry _____	%.
Methionine _____	%.
Methionine+Cystine _____	%.
Threonine _____	%.
Tryptophan _____	%.
Isoleucine _____	%.
Leucine _____	%.
Valine _____	%.
Arginine _____	%.
Na+K-Cl _____	meq/kg.
Bulk Density (ground) _____	kg/m ³ .
Bulk Density (no grind) _____	kg/m ³ .
Legume _____	%.
Choline _____	mg/kg.
Linoleic Acid _____	%.
Potassium (K) _____	%.
Sodium (Na) _____	%.
Chloride (Cl) _____	%.
Calcium (Ca) _____	%.
Phosphorus (P) _____	%.
Available Phosphorus _____	%.
Salt (NaCl) _____	%.

Proteins – Amino Acids

Protein - Amino acid balance

- Thousands of proteins, twenty amino acids
- 9 essential amino acids (must be in diet)
- First limiting amino acid/amino acid ratios



A Good Start is Crucial!

- First week mortalities for turkeys higher for turkeys than chickens.
- Prone to “Starve-out”
 - Failure to eat or drink despite being apparently readily accessible.
- Critical factors
 - Feed availability
 - Feed consumption
 - Appropriate Nutritional specification
 - Feed form



Feed form



- Poults perform better on quality crumbles than on a mash of identical nutritional specification

Impact of Feed texture on growth rate (g)

Poult age (days)	Mash	Quality crumbles	Difference (%)
7	117	140	20
14	250	320	28
21	450	600	30
28	780	1020	30

Adapted from Nixey (2003)

Feed form plays a crucial role in determining feed intake



Poult Nutrition



Critical for the early development of the bird and setting up for lifetime health and productivity.

Low feed intake – high nutritional specs

Balance of nutrients critical

Skeletal development

Poult Nutrition

Turkey Starter

- High quality crumble
- Protein 28% minimum
- Properly balanced ration
- To be fed ad lib. from day old until 6 weeks
- Contains Lasalocid sodium as a coccidiostat
- Ensure clean fresh water is available at all times



Grower Nutrition



The grower has a greater capacity to eat

Protein- amino acid requirements lower

Calcium requirements reduced

Grower Nutrition

Meatline Starter

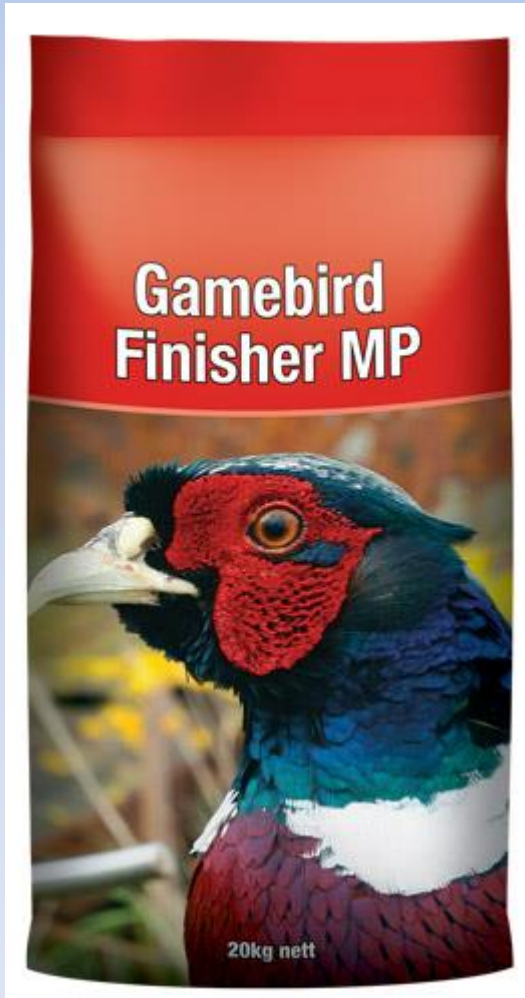
- High quality crumble
- Protein 22% minimum
- Properly balanced ration
- To be fed ad lib. from 6 weeks until 12 weeks
- Contains Lasalocid sodium as a coccidiostat
- Ensure clean fresh water is available at all times



Grower Nutrition

Gamebird Finisher MP

- 2mm micropellet
- Protein 22% minimum
- Properly balanced ration
- To be fed ad lib. from 6 weeks until 12 weeks
- NO COCCIDIOSTAT
- Ensure clean fresh water is available at all times



Finisher Nutrition



The final phase of feeding focuses more on fat than muscle

Protein- amino acid requirements lower

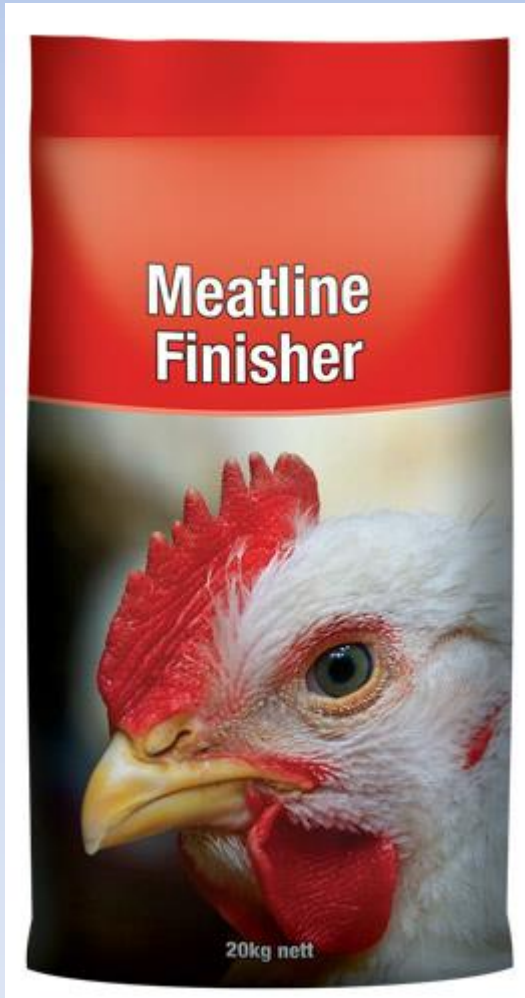
Calcium requirements reduced further

Finisher Nutrition

Meatline Finisher

4mm pellet

- Protein 20% minimum
- Properly balanced ration
- To be fed ad lib. from 12 weeks until kill
- Contains Lasalocid sodium as a coccidiostat *note WHP*
- Ensure clean fresh water is available at all times
- 3 day WHP for meat



Breeder Program



0 – 10 weeks



10 – 15 weeks



15 weeks to point of lay

Breeder Program



0 – 10 weeks



10 – 15 weeks

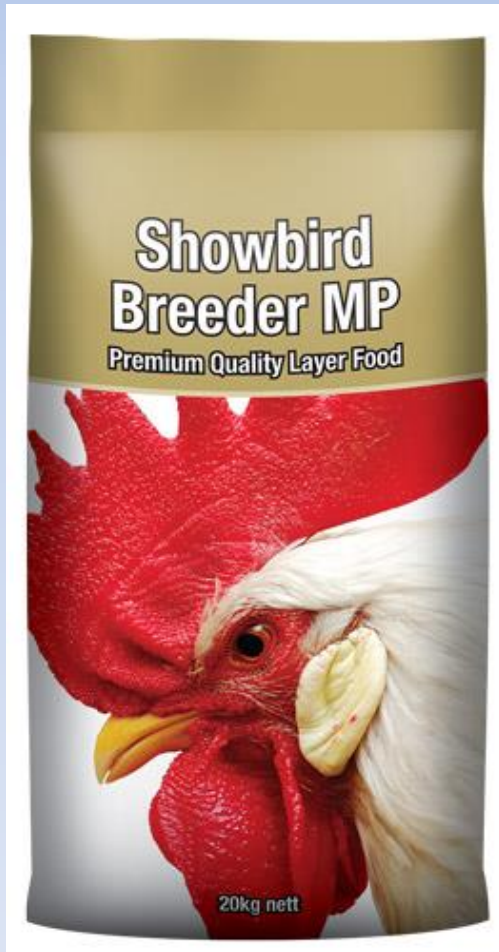


15 weeks to point of lay

Breeder Nutrition

Showbird Breeder

- *No Grind micropellet*
- Highest levels of essential amino acids promotes quality egg production
- High inclusion of Linoleic acid for egg size, fertility and hatchability
- Added enzymes enhance digestion
- Specific vitamin & mineral premix designed for breeders



Laucke Mills *Since 1899*



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