# Masterfeeds Poultry Nutrition

#### **POULTRY CONTENTS**

#### **RESOURCES**

Broiler Management Guide Layer Management Guide

#### **POULTRY FEEDS**

RWA 25% Turkey/Game Bird Starter (Crumble)
RWA 20% Poultry Starter/Grower (Crumble)
RWA 16% Poultry Grower/Finisher (Crumble)
RWA 17% Layer Ration (Crumble)
RWA 33% Layer/Grower Supplement
RWA Hen Scratch

#### **POULTRY SUPPLEMENTS**

ChikPek™ Beak Blunting Supplement (Block)

Sweetlix® Game Bird & Fowl Block

## BROILER MANAGEMENT GUIDE



Masterfeeds Farm Choice poultry feeds are balanced, quality products backed by results. We are proud feed suppliers of some of the most successful chicken, turkey and duck producers across Canada.

Masterfeeds poultry feeds promote optimal health at every stage and include wholesome grains and vegetable proteins balanced with minerals and vitamins, nutrient-dense, carefully-balanced diets, and formulations that increase growth and development.

The following information is designed to assist poultry producers to avoid management problems and prevent the potential for serious issues in the flock. A Masterfeeds Poultry Account Manager will help you maximize margins with a total barn approach. Factors such as temperature, intestinal health, lighting and stimulation, feeder space, water microbial and mineral content and floor space to name a few are imperative for ideal conditions for healthy and productive flocks.

#### **SELECTING BIRDS**

Meat Production Breeds – The commercial broiler strains of Cornish and White Rock breeding are the most economical strains for meat production. They may be purchased as straight run or on a sexed basis. The males can be caponized (castrated) at three to five weeks of age to produce a more tasty variety of meat. The most economical time to slaughter is when the birds are at the fryer stage. The amount of feed consumed per pound of gain increases as the bird gets older.

Type of Bird	Age (Weeks)	Average Live Weight (lbs)	Average Dressed Weight (lbs)
Cornish Game Hen	5	2.5	1.5
Fryer	6	4.5	3.3
Roosters	12	8.0	6.0
Capons	17	10.0	8.0

#### PREPARING FOR BIRD ARRIVAL

- 1. Remove all old litter.
- 2. Clean and disinfect house and equipment using an approved disinfectant.
- 3. Fumigate if possible.
- 4. Let house lie empty and air out for two weeks.
- 5. Provide one square foot of floor space per chick, one day old through the 12<sup>th</sup> week.
- 6. Place about four inches of clean, dry litter such as pine shavings or sawdust.
- Use chick guards: 18 to 24 inch cardboard to keep chicks close to heat, feed and water for first 10 days.

- 8. Chick feeders: minimum of one foot long per 15 chicks.
- 9. Water Fountains: one gallon capacity per 25 chicks or ¼ inch trough space per chick.
- 10. Bring house up to brooding temperature one day before delivery.
- 11. Fill waterers four hours before arrival. Allow birds to drink for three to four hours before giving first feed. This will help prevent dehydration.
- Refer to feeding guide to determine amount of feed needed for each stage of growth.

Buy chicks from a reputable hatchery. The source of chicks is very important to assure disease-free stock. The hatchery should source birds from government approved breeding flocks to minimize disease.

#### **BROODING**

Brooder stoves or heat lamps can be utilized. Place a maximum of 350 birds per stove or 75 birds per heat lamp. Use a minimum of two heat lamps in case one burns out. Adjust the temperature to 32° C at the chick level. Reduce temperature 5° per week to a minimum of 16° C. The best indication of a comfortable temperature is when the chicks are spread evenly within the chick guard. Remove wet areas around waterers and feeders daily to maintain good litter condition and to keep leg problems and disease conditions at a minimum. Brooder litter paper should be used when starting chicks. It makes it easier for the chicks to get around and reduces the chicks' tendency to eat the litter, causing starve-outs. Keep litter clean and dry to promote a healthy environment for chicks.



#### LIGHT MANAGEMENT

The effect of light on growth and production is a very important factor. Chicks should be placed on 24 hours of light for the first week. Broilers and capons can then be allowed to follow the natural day length as long as there is at least 14 hours of light provided.

General guidelines for total hours of natural and artificial light could be as follows:

- 1. First week after chicks are housed 24 hours of light.
- 2. Two to six weeks 16 hours of light.
- 3. Six to 12 weeks 13 hours of light.
- 4. 12 to 18 weeks 10 hours of light.
- At 18 weeks, increase day length one half hour per week until 15 hours of day length is reached.

One 25-watt bulb (per 200 square feet of floor space) is adequate for growing pullets, broilers and capons.

#### **TEMPERATURE & VENTILATION**

The optimum temperature range for birds over four weeks of age is 18° to 24° C. As temperature gets above or below this range, the production, growth rate or efficiency can suffer. To control temperature, ammonia, humidity, dust, disease and litter condition, fresh air movement is essential. Approximately five to 10 times as much ventilation is needed in warm temperature conditions as in cold conditions.

#### **FEED MANAGEMENT**

**Water** – The most important nutrient. Poultry should have free access to clean, fresh water at all times. During brooding, clean and disinfect water fountains daily. When starting day-old birds or after moving or transporting birds, give access to water before placing feed in the feeders. Water consumption will be three times as high when temperatures reach 38° C as compared to 10° C weather.

**Grit** – When birds have access to coarse litter or whole grains, an insoluble grit should be fed. Limit intake of grit to one pound per 100 pounds of feed or two pounds per 100 birds per week. Grit can be blended with their regular ration or offered free-choice in a separate feeder. But when offering a commercial prepared feed, grit is NOT needed (the feed is already ground).

Do not allow feeders to run empty or stale feed to accumulate. Never feed any feedstuffs that are mouldy, musty or suspect in any way.

#### **SPACE & EQUIPMENT REQUIREMENTS**

Absolute minimums per bird.

Type of Bird	Age (Weeks)	Floor Space	Feeder Spaces (linear inches)	Water Space (linear inches)
Broilers	0-1	10.0 in <sup>2</sup>	1.0	0.25
	1-6	1.0 ft <sup>2</sup>	2.5	0.5
	6+	1.5 ft <sup>2</sup>	4.0	1.0

#### **CULLING**

It is always a good idea to cull and destroy sick or lame birds. These birds are generally inefficient because they do not grow while continuing to eat feed.

Almost every flock of birds is going to be exposed to a disease stress at some time or other. Many diseases can be prevented by keeping visitors and pet traffic at a minimum and controlling exposure to rodents and wild birds. A disease will usually result in a decrease in feed consumption, after which mortality may suddenly increase. An accurate diagnosis of the disease is necessary before treatment can begin.

Some of the more common health problems are discussed in the next few paragraphs.

#### **BIRD HEALTH PROBLEMS**

Coccidiosis: This disease is caused by a parasite called coccidia. The disease is common in both chickens and turkeys, as well as other animals. Masterfeeds Farm Choice brand poultry feeds contain Alltech® technology to aid in the development of immunity to this disease. Birds with this disease appear listless, pale and chilled and may also show bloody droppings. The disease may be treated with Sulfaquinoxaline or Amprolium in the water.

**Mareks Disease:** This disease affects the nerves and visceral organs of the chicken, resulting in paralysis and tumors of the internal organs. There is no treatment, however, vaccination at the hatchery is highly recommended.

Leg Problems: Twisted joints, swelled or bowed legs and curled toes will occur to a certain extent in most flocks of broilers and turkeys. However, management, nutrition, litter and disease can contribute to a higher incidence. To minimize the problem, follow feeding, floor space and equipment recommendations. Also keep the litter in good condition by removing wet spots and maintaining proper ventilation.

**Breast Blisters:** This condition is caused by constant contact with litter or equipment. The condition or incidence increases with wet litter, overcrowding and leg problems. The condition is most common with heavy broiler chickens or turkeys.

**Cannibalism:** This is a habit that develops in the form of feather picking, "pickouts" of the vent or picking at other areas on the bird. This bad habit can start at any age if conditions are right. The most common causes of cannibalism are overcrowding, too high a temperature, poor ventilation and high light intensity. Remove any affected birds, maintain adequate feed intake and correct any of the above management problems. Beak trimming could be considered to help correct the problem.

**Lice and Mites:** These parasites can steal profits without being noticed. They can cause severe decreases in growth rate. Lice can easily be detected around the vent or base of the feathers. Mites will appear as a sprinkling of gray pepper in the vent area. Both lice and mites can be controlled by insecticides. Three or four treatments at 10 day intervals may be needed.

**Internal Parasites:** Worms commonly infest the intestinal tract of birds. The most common are the large round worms, caecal worms and tape worms. Good sanitation between flocks and control of wild birds and insects will help prevent infestation of worms.

#### **FEEDING GUIDELINES**

Convention	onal Program											I		1	1	1	1	ı		1	
	1	2	3	4	5	5 6 7 8 9 10						12	13	14	15	16	17	18	19	20+	
Broilers	2 kg*			1.5 to	o 2 kg/week																
Turkeys	2 kg				8 kg/hen or 10 kg/tom							1.25 kg/week									
Ducks †	2.5 kg	g			1.25	1.25 kg/week															
Geese †	6.5 kg	g					2 kg/	week													
20% Poultry Starter/Grower 16% Poultry Grower/Finisher 25% Turkey/Game Starter																					

<sup>\*</sup> Estimated intake per bird. Intakes for each specie are estimates and should only be used as a guide.

<sup>†</sup> Ducks and geese should only be fed unmedicated feeds.

Organic Program																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
2 kg*			1.5 to	2 kg/week															
2 kg				8 kg/hen or 10 kg/tom							1.25 kg/week								
2.5 kg	3			1.25 k	kg/wee	ek													
6.5 kg	3					2 kg/	week												
	1 2 kg* 2 kg 2.5 kg	1 2 2 kg*	1 2 3 2 kg* 2 kg 2.5 kg	1 2 3 4 2 kg* 1.5 to 2 kg 2.5 kg	1     2     3     4     5       2 kg*     1.5 to 2 kg/v       2 kg     8 kg/v       2.5 kg     1.25 l	1     2     3     4     5     6       2 kg*     1.5 to 2 kg/week       2 kg     8 kg/hen or       2.5 kg     1.25 kg/week	1       2       3       4       5       6       7         2 kg*       1.5 to 2 kg/week         2 kg       8 kg/hen or 10 kg/t         2.5 kg       1.25 kg/week	1       2       3       4       5       6       7       8         2 kg*       1.5 to 2 kg/week         2 kg       8 kg/hen or 10 kg/tom         2.5 kg       1.25 kg/week	1     2     3     4     5     6     7     8     9       2 kg*     1.5 to 2 kg/week       2 kg     8 kg/hen or 10 kg/tom       2.5 kg     1.25 kg/week	1       2       3       4       5       6       7       8       9       10         2 kg*       1.5 to 2 kg/week         2 kg       8 kg/hen or 10 kg/tom         2.5 kg       1.25 kg/week	1       2       3       4       5       6       7       8       9       10       11         2 kg*       1.5 to 2 kg/week       2 kg/week         2 kg       8 kg/hen or 10 kg/tom       1.25 kg/week         2.5 kg       1.25 kg/week	1       2       3       4       5       6       7       8       9       10       11       12         2 kg*       1.5 to 2 kg/week       2 kg/week         2 kg       8 kg/hen or 10 kg/tom       1.25 kg/week         2.5 kg       1.25 kg/week	1       2       3       4       5       6       7       8       9       10       11       12       13         2 kg*       1.5 to 2 kg/week       1.25 kg/week         2 kg       8 kg/hen or 10 kg/tom       1.25 kg/week         2.5 kg       1.25 kg/week	1       2       3       4       5       6       7       8       9       10       11       12       13       14         2 kg*       1.5 to 2 kg/week       1.25 kg/week         2 kg       8 kg/hen or 10 kg/tom       1.25 kg/week         2.5 kg       1.25 kg/week	1       2       3       4       5       6       7       8       9       10       11       12       13       14       15         2 kg*       1.5 to 2 kg/week       2 kg/week       1.25 kg/week       1.25 kg/week         2.5 kg       1.25 kg/week       1.25 kg/week	1       2       3       4       5       6       7       8       9       10       11       12       13       14       15       16         2 kg*       1.5 to 2 kg/week       2 kg/week       1.25 kg/week       1.25 kg/week         2.5 kg       1.25 kg/week       1.25 kg/week	1     2     3     4     5     6     7     8     9     10     11     12     13     14     15     16     17       2 kg*     1.5 to 2 kg/week       2 kg     8 kg/hen or 10 kg/tom     1.25 kg/week       2.5 kg     1.25 kg/week	1     2     3     4     5     6     7     8     9     10     11     12     13     14     15     16     17     18       2 kg*     1.5 to 2 kg/week       2 kg     8 kg/hen or 10 kg/tom     1.25 kg/week       2.5 kg     1.25 kg/week	1     2     3     4     5     6     7     8     9     10     11     12     13     14     15     16     17     18     19       2 kg*     1.5 to 2 kg/week       2 kg     8 kg/hen or 10 kg/tom     1.25 kg/week       2.5 kg     1.25 kg/week

Organic program feeds do not contain coccidiostats.

20% Organic Poultry Starter/Grower 17% Organic Poultry Grower/Finisher



25% Conventional Turkey/Game Starter

<sup>\*</sup> Estimated intake per bird. Intakes for each specie are estimates and should only be used as a guide.

<sup>†</sup> Organic 25% Turkey Starter is not part of the Organic Program but a 25% Starter is available as part of the RWA Program.



## LAYER MANAGEMENT GUIDE



Masterfeeds Farm Choice poultry feeds are balanced, quality products backed by results. We are proud feed suppliers of some of the most successful chicken, turkey and duck producers across Canada.

Masterfeeds poultry feeds promote optimal health at every stage and include wholesome grains and vegetable proteins balanced with minerals and vitamins, nutrient-dense, carefully-balanced diets and formulations that increase egg production and egg shell quality. As always, Masterfeeds layer feeds contain no antibiotics.

The following information is designed to assist poultry producers avoid management problems and prevent the potential for serious issues in the flock. A Masterfeeds Poultry Account Manager will help you maximize margins with a total barn approach. Factors such as temperature, intestinal health, lighting and stimulation, feeder space, water microbial and mineral content and floor space to name a few are imperative for ideal conditions for healthy and productive flocks.

#### **SELECTING BIRDS**

**Egg Production Breeds** – Several Leghorn white egg strains are available. Leghorns start laying eggs at about 20 weeks, at which time they weigh about three pounds. With proper management, they will lay 18 to 22 dozen eggs per bird during the first year of production.

The brown egg strains will weigh about four pounds by 20 weeks of age. They come in a variety of feather color patterns and will generally produce fewer eggs while requiring more feed than the Leghorn breeds. They are generally classified as dual purpose breeds with the cockerels used for meat production and the hens for egg production.

#### PREPARING FOR BIRD ARRIVAL

- 1. Remove all old litter.
- Clean and disinfect house and equipment using an approved disinfectant.
- 3. Fumigate if possible.
- 4. Let house lie empty and air out for two weeks.
- 5. Provide one square foot of floor space per chick, one day old through the 12<sup>th</sup> week.
- 6. Place about four inches of clean, dry litter such as pine shavings or sawdust.
- 7. Use chick guards: 18 to 24 inch cardboard to keep chicks close to heat, feed and water for first 10 days.
- 8. Chick feeders: minimum of one foot long per 15 chicks.
- Water Fountains: one gallon capacity per 25 chicks or ¼ inch trough space per chick.
- 10. Bring house up to brooding temperature one day before delivery.

- 11. Fill waterers four hours before arrival. Allow birds to drink for three to four hours before giving first feed. This will help prevent dehydration.
- 12. Refer to feeding guide to determine amount of feed needed for each stage of growth.

Buy chicks f chicks from a reputable hatchery. The source of chicks is very important to assure disease-free stock. The hatchery should source birds from government approved breeding flocks to minimize disease.

#### **BROODING**

Brooder stoves or heat lamps can be utilized. Place a maximum of 350 birds per stove or 75 birds per heat lamp. Use a minimum of two heat lamps in case one burns out. Adjust the temperature to 32° C at the chick level. Reduce temperature 5° per week to a minimum of 16° C. The best indication of a comfortable temperature is when the chicks are spread evenly within the chick guard. Remove wet areas around waterers and feeders daily to maintain good litter condition and to keep leg problems and disease conditions at a minimum. Brooder litter paper should be used when starting chicks. It makes it easier for the chicks to get around and reduces the chicks' tendency to eat the litter, causing starve-outs. Keep litter clean and dry to promote a healthy environment for chicks.



#### LIGHT MANAGEMENT

The effect of light on growth and production is a very important factor. Chicks should be placed on 24 hours of light for the first week.

Day length control is very critical for attaining maximum egg production. A basic rule is: never decrease day length for laying hens.

General guidelines for total hours of natural and artificial light could be as follows:

- 1. First week after chicks are housed 24 hours of light.
- 2. Two to six weeks 16 hours of light.
- 3. Six to 12 weeks 13 hours of light.
- 4. 12 to 18 weeks 10 hours of light.
- At 18 weeks, increase day length one half hour per week until 15 hours of day length is reached. Laying hens must have a minimum of eight continuous hours of rest (blackout) per 24 hour period.

Use one 60-watt bulb for laying hens or very young birds. One 25-watt bulb (per 200 square feet of floor space) is adequate for growing pullets, broilers and capons.

#### **TEMPERATURE & VENTILATION**

The optimum temperature range for birds over four weeks of age is 18° to 24° C. As temperature gets above or below this range, the production, growth rate or efficiency can suffer. To control temperature, ammonia, humidity, dust, disease and litter condition, fresh air movement is essential. Approximately five to 10 times as much ventilation is needed in warm temperature conditions as in cold conditions.

#### FEED MANAGEMENT

**Water** – The most important nutrient. Poultry should have free access to clean, fresh water at all times. During brooding, clean and disinfect water fountains daily. When starting day-old birds or after moving or transporting birds, give access to water before placing feed in the feeders. Water consumption will be three times as high when temperatures reach 38° C as compared to 10° C weather.

**Grit** – When birds have access to coarse litter or whole grains, an insoluble grit should be fed. Limit intake of grit to one pound per 100 pounds of feed or two pounds per 100 birds per week. Grit can be blended with their regular ration or offered free-choice in a separate feeder. But when offering a commercial prepared feed, grit is NOT needed (the feed is already ground).

Do not allow feeders to run empty or stale feed to accumulate. Never feed any feedstuffs that are moldy, musty or suspect in any way.

#### **EGG STORAGE & CLEANING**

Eggs should be gathered two or three times per day. Wash, dry and cool them as quickly as possible to maintain freshness. The wash water should be warmer than the temperature of the eggs. Use detergents designed for washing eggs. Store eggs at approximately 10° C and 70% relative humidity.

#### **ROOSTING & NEST SPACE**

Roosts may be used for growing or mature birds, although they are not essential. Allow six inches of roost space per bird. To keep eggs clean, nests must be provided for laying hens. Allow one nest for every four hens. To prevent floor eggs, put nests in darkened area of the house. Keep the nests filled with adequate amounts of litter to prevent egg breakage and dirty eggs.

#### **SPACE & EQUIPMENT REQUIREMENTS**

Absolute minimums per bird.

Type of Bird	Age (Weeks)	Floor Space	Feeder Spaces (linear inches)	Water Space (linear inches)
Leghorns	0-2	10.0 in <sup>2</sup>	1.0	0.25
	2-6	0.7 ft²	2.0	0.5
	6+	1.25 ft²	3.0	1.0

#### **CULLING**

It is always a good idea to cull and destroy sick or lame birds. These birds are generally inefficient because they do not grow or produce eggs while continuing to eat feed.

By the end of the first production cycle (10 to 12 months of lay), many laying hens will naturally quit producing eggs and molt. These hens could be removed and slaughtered for meat, if desired. Birds in laying condition will have a large, bright, waxy-appearing comb, moist vent and flexible keel and pubic bones that are wide apart.

Non-layers will have a dull, small comb and dry vent with rigid keel. The distance between the pubic bones will be only one or two finger widths, while three or four fingers will easily fit between these bones of a bird in laying condition.

Leghorn hens may be molted (rested) after their first production cycle. After four to eight weeks of resting, the hens will return to production at a production rate somewhat less than their first cycle.

Almost every flock of birds is going to be exposed to a disease stress at some time or other. Many diseases can be prevented by keeping visitors and pet traffic at a minimum and controlling exposure to rodents and wild birds. A disease will usually result in a decrease in egg production or feed consumption, after which mortality may suddenly increase. An accurate diagnosis of the disease is necessary before treatment can begin.

#### **BIRD HEALTH PROBLEMS**

Coccidiosis: This disease is caused by a parasite called coccidia. The disease is common in both chickens and turkeys, as well as other animals. Masterfeeds Farm Choice brand poultry feeds contain Alltech® technology to aid in the development of immunity to this disease. Birds with this disease appear listless, pale and chilled and may also show bloody droppings. The disease may be treated with Sulfaquinoxaline or Amprolium in the water.

**Mareks Disease:** This disease affects the nerves and visceral organs of the chicken, resulting in paralysis and tumors of the internal organs. There is no treatment, however, vaccination at the hatchery is highly recommended.

Leg Problems: Twisted joints, swelled or bowed legs and curled toes will occur to a certain extent in most flocks of broilers and turkeys. However, management, nutrition, litter and disease can contribute to a higher incidence. To minimize the problem, follow feeding, floor space and equipment recommendations. Also keep the litter in good condition by removing wet spots and maintaining proper ventilation.

**Breast Blisters:** This condition is caused by constant contact with litter or equipment. The condition or incidence increases with wet litter, overcrowding and leg problems. The condition is most common with heavy broiler chickens or turkeys.

**Cannibalism:** This is a habit that develops in the form of feather picking, "pickouts" of the vent or picking at other areas on the bird. This bad habit can start at any age if conditions are right. The most common causes of cannibalism are overcrowding, too high a temperature, poor ventilation and high light intensity. Remove any affected birds, maintain adequate feed intake and correct any of the above management problems. Beak trimming could be considered to help correct the problem.

**Lice and Mites:** These parasites can steal profits without being noticed. They can cause severe decreases in egg production, egg size and growth rate. Lice can easily be detected around the vent or base of the feathers. Mites will appear as a sprinkling of gray pepper in the vent area. Both lice and mites can be controlled by insecticides. Three or four treatments at 10 day intervals may be needed.

**Internal Parasites:** Worms commonly infest the intestinal tract of birds. The most common are the large round worms, caecal worms and tape worms. Good sanitation between flocks and control of wild birds and insects will help prevent infestation of worms.

#### **FEEDING GUIDELINES**

Convention	al Progr	am																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+	
Layers	1 kg*						6 kg*												120 g/bird/day		
	20% Poultry Starter/Grower 16% Poultry Grower/Finisher								Lay	ver Rati	on										

<sup>\*</sup> Estimated intake per bird. Intakes for each specie are estimates and should only be used as a guide.







## FOR STARTING & GROWING TURKEYS & GAME BIRDS



Masterfeeds RWA 25% Turkey Starter/Grower (crumble) is a nutrient dense, carefully balanced diet for starting and growing turkeys and game birds. Formulated using the latest technology to promote excellent growth and development. Wholesome grains and all-vegetable proteins are balanced with minerals and vitamins for a healthy and productive flock. Contains Alltech technologies to mitigate the risk of coccidiosis.

#### **FEEDING DIRECTIONS:**

Feed as the sole ration to turkey poults from zero to four weeks of age. Typical Intake 2 kg per bird during this period.

#### **FEATURES & BENEFITS:**

#### Complete and balanced products.

Formulated to meet the energy and protein requirements to encourage optimum growth and performance while minimizing the need for other supplements.

#### Contains Allstat®.

A combination of hydrolyzed yeast, natural flavours and organic minerals that work in synergy with one another to help strengthen the animals' natural defenses. Allstat® is incorporated into animal diets with a goal to support gut health.

#### Optimal vitamin and mineral levels.

Similar fortification levels found in commercial poultry diets. Formulated to meet 100% of the birds' requirements with organic trace minerals.

#### Multi-purpose rations.

Formulated to meet the needs of starting turkey poults as well as game birds.

#### Contains enzymes.

Makes phosphorus and other nutrients more digestible, reducing the amount of phosphorus excreted into the environment.

#### Contains Viligen™.

Supports natural defenses, early growth and qut function.

#### **FEEDING TIPS:**

- Water Poultry should have access to clean, fresh water at all times. When starting dayold birds or after moving or transporting birds, give access to water before putting feed in the feeders.
- 2. Grit When birds have access to coarse litter or whole grains, an insoluble grit should be fed. Limit intake of grit to 1 lb (0.5 kg) per 100 lbs (50 kg) of feed or 2 lbs (1 kg) per 100 birds per week. Grit can be blended with the ration or offered free-choice in a separate feeder.
- 3. Do not allow feeders to run empty or stale feed to accumulate.
- 4. Never feed any feedstuffs that are moldy, musty or suspect in any way.

#### This feed contains added Selenium at 0.3 mg/kg.

#### **GUARANTEED ANALYSIS**

Crude Protein (minimum)	25.0%
Crude Fat (minimum)	1.5%
Crude Fibre (maximum)	5.0%
Calcium (actual)	
Phosphorus (actual)	0.8%
Sodium (actual)	0.17%
Vitamin A (minimum)	2,500 IU/kg
Vitamin D (minimum)	.4,200 IU/kg
Vitamin E (minimum)	100 IU/kg





#### FOR STARTING CHICKS, DUCKLINGS, GOSLINGS &GROWING TURKEY POULTS



Masterfeeds RWA 20% Poultry Starter/Grower (crumble) is a nutrient dense, carefully balanced diet for starting chicks, ducklings and goslings as well as growing turkey poults. Formulated using the latest technology to promote strong growth, development and gut health. Wholesome grains and all-vegetable proteins are balanced with minerals and vitamins for a healthy and productive flock. Contains Alltech technologies to mitigate the risk of coccidiosis.

#### **FEEDING DIRECTIONS:**

Feed as the sole ration to broiler chicks from zero to three weeks. Typical intake is 2 kg per bird during this period.

Feed as the sole ration to pullets intended for laying from zero to six weeks. Typical intake is 1 kg per bird during this period.

Feed as the sole ration to ducks and geese from zero to four weeks. Typical intake per bird during this time is 2.5 kg per bird.

Feed this as the sole ration to turkey poults from five to ten weeks of age. Typical intake during this period is 8 kg per hen and 10 kg per tom.

#### **FEATURES & BENEFITS:**

#### Complete and balanced products.

Formulated to meet the energy and protein requirements to encourage optimum growth and performance while minimizing the need for other supplements.

#### Contains Allstat®.

A combination of hydrolyzed yeast, natural flavours and organic minerals that work in synergy with one another to help strengthen the animals' natural defenses and support gut health.

#### Optimal vitamin and mineral levels.

Provides backyard poultry producers with similar fortification levels found in commercial poultry diets. Formulated to meet 100% of the birds' requirements with organic trace minerals.

#### Multi-purpose rations.

Formulated to meet the needs of starting pullets, broilers, ducks and geese, as well as growing turkeys

#### Contain enzymes.

Makes phosphorus and other nutrients more digestible, reducing the amount of phosphorus excreted into the environment.

#### Contains Viligen™.

Supports natural defenses, early growth and gut function.

#### **FEEDING TIPS:**

- Water Poultry should have access to clean, fresh water at all times. When starting dayold birds or after moving or transporting birds, give access to water before putting feed in the feeders.
- 2. Grit When birds have access to coarse litter or whole grains, an insoluble grit should be fed. Limit intake of grit to 1 lb (0.5 kg) per 100 lbs (50 kg) of feed or 2 lbs (1 kg) per 100 birds per week. Grit can be blended with the ration or offered free-choice in a separate feeder.
- 3. Do not allow feeders to run empty or stale feed to accumulate.
- 4. Never feed any feedstuffs that are moldy, musty or suspect in any way.

#### This feed contains added Selenium at 0.3 mg/kg.

#### **GUARANTEED ANALYSIS**

Crude Protein (minimum)	20.0%
Crude Fat (minimum)	2.0%
Crude Fibre (maximum)	7.0%
Calcium (actual)	1.0%
Phosphorus (actual)	0.7%
Sodium (actual)	0.15%
Vitamin A (minimum)1	L1,250 IU/kg
Vitamin D (minimum)	.3,750 IU/kg
Vitamin E (minimum)	25 IU/kg





#### FOR STARTING CHICKS, DUCKLINGS, GOSLINGS &GROWING TURKEY POULTS



Masterfeeds RWA 16% Poultry Grower/Finisher (crumble) is a nutrient dense, carefully balanced diet for growing and finishing all types of poultry. Formulated using the latest technology to promote excellent growth and development. Wholesome grains and all-vegetable proteins are balanced with minerals and vitamins for a healthy and productive farm flock. Contains Alltech® technology which helps to promote gut health.

#### **FEEDING DIRECTIONS:**

Feed as the sole ration to broilers – four weeks to market. Typical intake is 1.5 to 2 kg per bird per week.

Feed as the sole ration to pullets intended for laying – seven to 17 weeks. Typical intake 6 kg per bird during this period.

Feed as the sole ration to turkeys/game birds 11 weeks to market.

Feed as the sole ration to ducks and geese four weeks to market.

#### **FEATURES & BENEFITS:**

#### Complete and balanced products.

Formulated to meet the energy and protein requirements to encourage optimum growth and performance while minimizing the need for other supplements.

#### Contains Actigen®.

A cost effective, safe and traceable technology developed through nutrigenomics to aid nutrient utilization and help birds reach their genetic potential.

#### Optimal vitamin and mineral levels.

Provides backyard poultry producers with similar fortification levels found in commercial poultry diets. Formulated to meet 100% of the birds' requirements with organic trace minerals.

#### Multi-purpose rations.

Formulated to meet the needs of growing pullets, broilers, turkeys, ducks and geese.

#### Contain enzymes.

Makes phosphorus and other nutrients more digestible, reducing the amount of phosphorus excreted into the environment.

#### Contains Viligen™.

Supports natural defenses, early growth and qut function.

#### **FEEDING TIPS:**

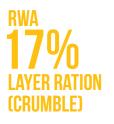
- Water Poultry should have access to clean, fresh water at all times. When starting dayold birds or after moving or transporting birds, give access to water before putting feed in the feeders.
- 2. Grit When birds have access to coarse litter or whole grains, an insoluble grit should be fed. Limit intake of grit to 1 lb (0.5 kg) per 100 lbs (50 kg) of feed or 2 lbs (1 kg) per 100 birds per week. Grit can be blended with the ration or offered free-choice in a separate feeder.
- 3. Do not allow feeders to run empty or stale feed to accumulate.
- 4. Never feed any feedstuffs that are moldy, musty or suspect in any way.

#### This feed contains added Selenium at 0.3 mg/kg.

#### **GUARANTEED ANALYSIS**

Crude Protein (minimum)	16.0%
Crude Fat (minimum)	2.0%
Crude Fibre (maximum)	5.0%
Calcium (actual)	0.8%
Phosphorus (actual)	0.6%
Sodium (actual)	0.15%
Vitamin A (minimum)	10,000 IU/kg
Vitamin D (minimum)	3,330 IU/kg
Vitamin E (minimum)	37 IU/kg





# FARM CHOICE Feeds

#### FOR LAYING HENS

Masterfeeds RWA 17% Layer Ration (crumble) is a nutrient dense, carefully balanced diet for laying hens. Formulated using the latest technology to increase egg production and egg shell quality. Wholesome grains and all vegetable proteins are balanced with minerals and vitamins for a healthy and productive farm flock.

#### **FEEDING DIRECTIONS:**

Feed Masterfeeds 17% Layer Ration as the sole ration to laying hens during periods of egg production. Typical intake should be between 95 grams to 105 grams per bird per day.

#### **FEATURES & BENEFITS:**

#### Complete and balanced products.

Encourages optimum growth and performance while minimizing the need for other supplements.

#### Optimal vitamin and mineral levels.

Provides farm flock poultry producers with similar fortification levels found in commercial poultry diets.

#### High calcium level.

Helps ensure strong egg shells.

#### Contains phytases.

Which make phosphorus and other nutrients more digestible. Improved digestibility reduces the amount of phosphorus excreted into the environment.

#### Contains Bioplex®.

Contributes to egg shell quality, egg mass, egg yolk and lower number of cracked eggs.

#### 100% Sel-Plex®.

Improves egg production, egg shell quality as well as feather quality.

#### **FEEDING TIPS:**

- Water Poultry should have access to clean, fresh water at all times. When starting dayold birds or after moving or transporting birds, give access to water before putting feed in the feeders.
- 2. Grit When birds have access to coarse litter or whole grains, an insoluble grit should be fed. Limit intake of grit to 1 lb (0.5 kg) per 100 lbs (50 kg) of feed or 2 lbs (1 kg) per 100 birds per week. Grit can be blended with the ration or offered free-choice in a separate feeder.
- 3. Do not allow feeders to run empty or stale feed to accumulate.
- 4. Never feed any feedstuffs that are moldy, musty or suspect in any way.
- 5. Supplemental feeding of oyster shells may be necessary after 45 weeks of age to improve shell quality.

#### This feed contains added Selenium at 0.3 mg/kg.

#### **GUARANTEED ANALYSIS**

Crude Protein (minimum)	17.0%
Crude Fat (minimum)	2.0%
Crude Fibre (maximum)	3.5%
Calcium (actual)	4.0%
Phosphorus (actual)	0.51%
Sodium (actual)	0.17%
Vitamin A (minimum)	10,000 IU/kg
Vitamin D (minimum)	3,300 IU/kg
Vitamin E (minimum)	35 IU/kg





# FARM CHOICE Feeds

## FOR STARTING & GROWING CHICKS, LAYING HENS OR BROILER BIRDS

Masterfeeds RWA 33% Layer/Grower Supplement is a nutrient dense and carefully balanced product which allows the use of local grains to make rations for starting and growing chicks, laying hens or broiler type birds. Formulated using the latest technology to promote strong growth and development. Composed of all vegetable proteins along with balanced minerals and vitamins, this feed complements on-farm grains producing balanced diets making for a healthy and productive farm flock.

#### **FEEDING DIRECTIONS:**

To make a complete layer ration, mix 200 kg of this supplement along with 75 kg of oyster shell or DD grit and 725 kg of wheat. Feed the resultant feed to layer chickens. To make a complete pullet and broiler grower ration, mix 200 kg of this supplement along with 800 kg of wheat. To make a complete broiler finisher ration, mix 150 kg of this supplement along with 850 kg of wheat. For additional feeding instructions using alternative grains, contact your Masterfeeds Nutrition and Management Consultant.

#### **FEATURES & BENEFITS:**

High nutrient dense formulation with added advanced Alltech technologies. The addition of a proprietary blend of enzymes (phytase and protease) along natural gut enhancing technologies allows for the release of nutrients resulting in less crude protein being required in the formulation.

**100% vegetable proteins.** A variety of highly digestible vegetable proteins are only used to form the protein content of the supplement. No animal proteins.

**Mixes to create complete and balanced products.** Encourages optimum growth and performance while minimizing the need for other supplements.

**Optimal vitamin and mineral levels.** Provides farm flock poultry producers with similar fortification levels found in commercial poultry diets. Added trace minerals are in an organic form resulting in high bioavailability.

**Can be used to mix separate products for different life stages.** Versatile supplement can be used to create pullet, broiler grower-finisher or layer rations.

**Contains phytases.** Make phosphorus and other nutrients more digestible. Improved digestibility reduces the amount of phosphorus excreted into the environment.

**Made for grind and mix capabilities.** Allows for use of local grains which can reduce cost per tonne of finished feed.

**Naturally occurring carophylls.** Provides a more consistent yolk color year round in layer feeds made using this supplement.

#### **FEEDING TIPS:**

- Water Poultry should have access to clean, fresh water at all times. When starting day-old birds or after moving or transporting birds, give access to water before putting feed in the feeders.
- 2. Grit When birds have access to coarse litter or whole grains, an insoluble grit should be fed. Limit intake of grit to 1 lb (0.5 kg) per 100 lbs (50 kg) of feed or 2 lbs (1 kg) per 100 birds per week. Grit can be blended with the ration or offered free-choice in a separate feeder.
- 3. Do not allow feeders to run empty or stale feed to accumulate.
- Never feed any feedstuffs that are moldy, musty or suspect in any way.
- 5. Oyster shell may be offered free choice to laying birds.

#### **GUARANTEED ANALYSIS**

Crude Protein (minimum)	33.0%
Crude Fat (minimum)	1.5%
Crude Fibre (maximum)	5.0%
Calcium (minimum)	5.0%
Phosphorus (minimum)	1.6%
Sodium (minimum)	
Sulfur (minimum)	0.4%
Iodine (minimum)	2.5 mg/kg
Iron (minimum)	790 mg/kg
Copper (minimum)	20 mg/kg
Manganese (minimum)	150 mg/kg
Selenium (minimum)	1.5 mg/kg
Zinc (minimum)	155 mg/kg
Vitamin A (minimum)	50,000 IU/kg
Vitamin D (minimum)	
Vitamin E (minimum)	125 IU/kg





## HEN SCRATCH

### FOR TIMES OF HIGH PRODUCTION TO HELP MAINTAIN BODY WEIGHT

Masterfeeds RWA Hen Scratch is a blend of cracked grains. It contains no added protein vitamins or minerals and is not a complete ration. Designed for times of high production to help maintain body weight. Hen Scratch should be fed free-choice in conjunction with Masterfeeds RWA 17% Layer Ration.

#### **FEEDING DIRECTIONS:**

Feed as a treat or offered free-choice at times of high production to help maintain body weight.

#### **FEATURES & BENEFITS:**

70% wheat, 30% corn.

High energy grains to help maintain bodyweight in times of high production.

#### **FEEDING TIPS:**

- Water Poultry should have access to clean, fresh water at all times. When starting dayold birds or after moving or transporting birds, give access to water before putting feed in the feeders.
- 2. Grit When birds have access to coarse litter or whole grains, an insoluble grit should be fed. Limit intake of grit to 1 lb (0.5 kg) per 100 lbs (50 kg) of feed or 2 lbs (1 kg) per 100 birds per week. Grit can be blended with the ration or offered free-choice in a separate feeder.
- 3. Do not allow feeders to run empty or stale feed to accumulate.
- 4. Never feed any feedstuffs that are moldy, musty or suspect in any way.
- 5. Supplemental feeding of oyster shells may be necessary after 45 weeks of age to improve shell quality.

# Promote bird welfare and support natural behaviours.

Pecking can be injurious and aggressive causing losses in productivity, increases in medication costs and even mortality. ChikPek $^{\text{TM}}$  is a formed block used to support the natural behavior of birds. The non-medicated; non-toxic ingredients and nutrients used in ChikPek $^{\text{TM}}$  are safe to feed to any poultry at all life-stages and does not interfere with a flock's regular nutrition program.

ChikPek™ offers unique formulation and innovative technology made with conventional ingredients and nutrients to encourage continuous pecking of the block as well as visual and recreational attraction.

#### Benefits of ChickPek™

- Economical and humane solution to pecking problems.
- Encourages instinctive foraging and exploratory behaviour including freerange exercise.
- Occupies and diverts attention from other birds.
- Deters feather pecking and supports plumage condition
- Prevents injuries sustained by eliminating aggressive pecking behaviours in backyard birds.

## ChikPek<sup>™</sup> Beak Blunting Supplement for all classes of Poultry

**ChikPek™** is a revolutionary feed supplement and tool, designed for preventing and controlling pecking vices in chickens and other classes of poultry. ChikPek™ helps blunt the beak with the continuous and mild abrasive effect it has with each peck.

ChikPek™ is an enrichment device and innovative beak-conditioning aid, featuring palatable and durable qualities that can be introduced throughout any stage of life. ChikPek's™ unique formulation diverts the birds' instinctive pecking behavior onto the ChikPek™ block, maintaining the welfare of your small flock or backyard birds.

DIRECTIONS FOR USE: PLACE IN SCRATCH AREAS AND LOCATIONS THE BIRDS VISIT FREQUENTLY OR LOCATIONS WHERE INJURIOUS PECKING IS OBSERVED. PLACE THE BLOCK IN AN APPROPRIATE FEEDER OR ON THE GROUND AWAY FROM EXCESSIVE MOISTURE. EACH BLOCK IS EXPECTED TO LAST SIX TO EIGHT WEEKS. PLEASE CONTACT YOUR MASTERFEEDS NUTRITION AND MANAGEMENT CONSULTANT FOR SPECIFIC FEEDING DIRECTIONS.









## CHKPEKTM BEAK BLUNTING SUPPLEMENT (BLOCK) FOR ALL CLASSES OF POULTRY

ChikPek™ is made with conventional ingredients to encourage continuous pecking of the block as well as visual and recreational attraction. ChikPek™ is non-medicated, non-toxic, economical, and a humane solution to pecking behavious in backyard birds.

#### **WHO USES:**

ChikPek™ Blocks are used by producers looking to curb injurious pecking. Suitable for broilers, layers, turkeys, ducks and geese as well as breeder birds.

#### **FEEDING DIRECTIONS:**

Place in scratch areas and locations the birds visit frequently or locations where injurious pecking is observed. Place the block in an appropriate feeder or on the ground away from excessive moisture. Each block is expected to last six to eight weeks.

Please Contact your Masterfeeds nutrition and management consultant for specific feeding directions.

#### **GUARANTEED ANALYSIS**

Moisture (maximum)......6.0%

Sweetlix® Game Bird & Fowl Block is a designed especially for the needs of wild fowl. Made with wholesome grains, minerals and vitamins critical for growth and egg production, Sweetlix® provides essential nutrients.

#### **FEEDING DIRECTIONS:**

Provide free-choice to wild birds. It may be necessary to provide more than one block for access purposes.

Place blocks in an appropriate feeder or on the ground away form excessive moisture.

#### **FEATURES & BENEFITS:**

#### Compressed block.

Easy to handle, improved consumption and results in less feed wastage.

**High quality protein.** Includes essential amino acids methionine and lysine.

Healthy whole grains. Provides energy.

Added oyster shell. Aids in proper digestion.

Satisfies bird's natural pecking tendencies. Can help alleviate aggressive behaviour between birds.

#### NOTE:

Store blocks in a cool, dry area away from rodents and insects.

#### **GUARANTEED ANALYSIS**

Crude Protein (minimum)	8.25%
Crude Fat (minimum)	4.0%
Crude Fibre (maximum)	4.5%
Calcium (actual)	2.6%
Calcium (maximum)	3.19
Phosphorus (minimum)	0.75%
Lysine (minimum)	0.39
Methionine (minimum)	0.25%