



# POULTRY NUTRITION

BRETT KREIFELS  
NEBRASKA EXTENSION  
DOUGLAS-SARPY COUNTIES

## FEEDING CHICKENS

- Properly feeding your chickens is one of the most important things you can do.
- Proper nutrition will ensure that the hens continue to lay good, strong, nutritious eggs for you and your family.
- Good nutrition helps produce those good show winners!



## FEED COMPONENTS



<u>Ingredients</u>	<u>% In Diet</u>	<u>Use</u>
Corn	50-60%	Energy
Soybean Meal	20-30%	Protein
Distillers Grains	5-20%	Energy and Protein
Limestone	4-7%	Calcium/Egg Shell
Phosphorus	0.3-0.5%	Calcium/Egg Shell
Oil	1%	Energy
Salt	0.40-0.60%	Bodily Functions
Vit. and Minerals	0.30-.50%	Bodily Functions
Amino Acids	0.30-1.5%	Protein



## OTHER FEED INGREDIENTS

### Energy

Corn  
Wheat  
Sorghum(Milo)  
Distillers Grains



### Calcium

Limestone  
Oyster Shell  
Egg Shells



### Protein

Meat and Bone Meal  
Feather Meal  
Sunflower Meal  
Fish Meal  
Distillers Grains




### Fat

Vegetable Oil (Corn or Soy)  
Poultry Fat  
Beef Tallow



# VITAMINS AND MINERALS

- Needed in very small amount
- Essential to the health of the bird
- Macro minerals
  - Calcium, Phosphorus, Sodium Chloride (Salt)
- Micro minerals
  - Manganese, Cobalt, Selenium, Magnesium, Iron etc.
- Vitamins
  - Vitamins A, E, D<sub>3</sub>, K (Fat Soluble)
  - Vitamins B (Niacin, B<sub>12</sub>, Biotin, Riboflavin) Vit. C (Water Soluble)

The logo for Northwest Extension is located in the bottom right corner. It features a large red letter 'N' with a green four-leaf clover to its right. Below these symbols, the word 'EXTENSION' is written in red capital letters.

## FEEDS AND FEEDING



## FEEDS AND FEEDING

- Chickens should have access to feed at all times
- Some supplementation with table scraps is okay but should not be the bulk of their diet.
- Grass and insects are beneficial feedstuffs for chickens.
- Depending on the breed, age and weather, your hen will eat between 110-250 grams of feed per day.  
(0.24 – 0.55 lbs of feed per day).
- Oyster shell or grit is recommended for proper digestion and calcium levels.
- Always provide clean, fresh water daily.



## FEEDS AND FEEDING

To ensure proper nutrition:

Check bag labels to ensure you are feeding the right feed to the right aged birds.

Do not feed moldy or insect-infested feed.

Keep feed away from rodents or birds.

### Medicated vs Non-Medicated

Medicated feed often has Amprolium which is used to prevent coccidiosis. It is not harmful to humans.



## LAYING HEN VS BROILER DIETS

<u>Ingredient</u>	<u>%</u>
Corn	60.0
Soybean Meal	28.0
Fat (Oil)	2.0
Limestone	7.8
Dicalcium Phosphate	1.0
Salt	0.35
Vit./Mineral Premix	1.0
Methionine	0.10
<u>Total</u>	<u>100.0</u>
	2860
Energy	Kcal/kg
<b>Crude Protein</b>	<b>18.6</b>
<b>Calcium</b>	<b>3.30-4.40</b>
Av. Phosphorus	0.41
Sodium	0.19

	%	%	%
Ingredient	Starter 1-14 d	Grower 15-28 d	Finisher 29-49 d
Corn	43.69	37.42	30.86
Soybean Meal	35.67	31.46	22.84
Wheat	15	25	40
Oil	1.83	2.35	2.37
Dicalcium Phos.	1.3	1.19	1.18
Limestone	1.23	1.31	1.37
Salt	0.3	0.3	0.3
Vitamin Premix	0.25	0.25	0.25
Mineral Premix	0.25	0.25	0.25
DL-Methionine	0.32	0.3	0.32
L-Lysine	0.17	0.18	0.26
Total	100%	100%	100%
Energy	2950	3000	3050
<b>Crude Protein</b>	<b>22</b>	<b>21</b>	<b>18</b>
<b>Calcium</b>	<b>0.86</b>	<b>0.86</b>	<b>0.86</b>
Av. Phosphorus	0.43	0.43	0.43
Sodium	0.14	0.14	0.14



## EXTRAS

- Should not be the main component of the diet
- Types of Treats:
  - Table Scraps (No meat products)
  - Fruit
  - Vegetables
  - Sunflower seeds (Oil from seeds is great for show birds)
  - Scratch Grains (Cracked Corn, Milo, Oats)
  - Insects, grass, weeds.



## DOLLARS AND CENTS- EGGS

- 50 lbs of feed = \$15 and 3 lbs of feed per doz. eggs
- \$15 per bag / 50 lb bag of feed = \$0.30 per lb of feed
- Assuming 3 lbs to produce 1 dozen eggs x \$0.30 per lb feed
- Equals \$0.90 to produce 1 dozen eggs for one hen.

Equaling ~ \$0.08 per egg!



## DOLLARS AND CENTS-BROILERS

- Assuming 50lbs at \$15.00 per bag
- The cost is roughly \$.30 per lb of feed
- A 6 lb broiler will consume around 12 lbs of feed.
- Thus, 12 lbs x \$.30 per lb = \$3.60 per broiler in feed costs.
- \$3.60 / 6 lbs = \$.60 per lb of muscle.
- Other factors like weather, space, etc. can influence these figures.



## WELFARE

- Maintain a balanced and complete diet.
- Avoid extra items that off balance the feed
- Proper nutrition eliminates nutritional deficiencies.
- Keep feed dry and away from rodents, insects and birds.
- Maintaining proper protein and amino acid levels decreases bird cannibalism.

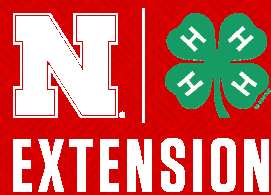




# THANK YOU! QUESTIONS?



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