



**Nutrena<sup>®</sup>**  
Nutrition for a lifetime.



Bagged Feeds



**RAISING CHICKENS IN  
YOUR BACKYARD**

# Start Off on the Right Foot



Select the right breed for your needs

## Egg-producing breeds

- Smaller bodies
- Start to lay eggs at approximately 20-22 weeks
- Average hen lays 20-23 dozen eggs the first year
- First molt at approximately 14 months
- Healthy hens lay for several years
- Example: Gold Comets, Buff Orpingtons



# Meat Birds



## (Broilers & Fryers)

- Broad breasted and larger than layers
- Produce 1 pound of meat for every 2 pounds of feed
- Can weigh 5 pounds at 8 weeks
- Harvested at 3.5-5.0 pounds
- Examples: Cornish and Cornish/  
Plymouth Rock Cross, Freedom Rangers
- Process yourself or make an appointment with your local butcher  
ASAP- most have limited availability



# Dual Purpose Breeds (Meat and Eggs)



- The classic "backyard" chicken
- Large-bodied birds
- Very hardy and self-reliant
- Most lay large, brown-shelled eggs
- Keep for egg production for a season or two, then process
- Example: Rhode Island Red



# The Legal Stuff



- Make sure that your town allows chickens.
- Check on the number allowed
- Any special housing requirements?
- Fees for structures or livestock?
- The State of Maine says that if you are starting with chicks and you have no other poultry, you must have AT LEAST two.
- At this time there are no State restrictions regarding the number of adult birds but you should have at least two because they are social



# Should I start with chicks or adults?



Chicks are a fun family project, but they are very dependent on you for the first several weeks of their lives. They need:

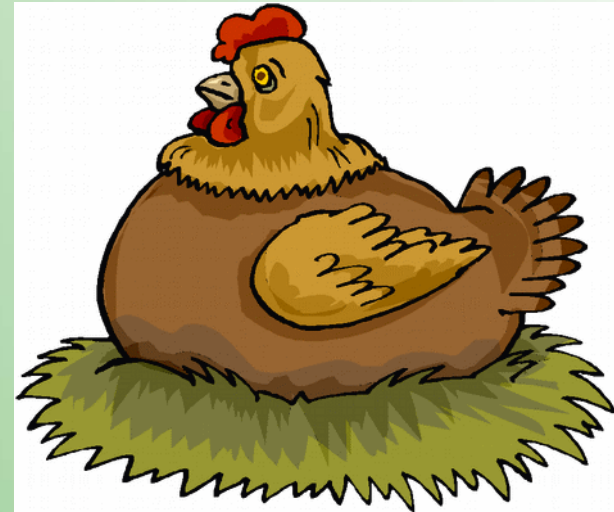
- Heat and light
- Access to food and water
- Security- keep inside
- Cleanliness
- Two types of feed
- Once they are feathered (around 8 weeks) they may go outside



# Should I start with chicks or adults?



- Adults are typically 16-18 weeks old and will soon be ready to lay
- They can go outside and don't need to transition through different feeds
- They are fully feathered and don't need heat lamps
- Great option if you want to get eggs ASAP



# Starting with Chicks



## Decisions, decisions...

- Order chicks for spring delivery, typically in April, if the weather allows
- Straight run (male and female) or pullets (females)
- Hatcheries are 90-95% accurate, so it is possible that you may get a rooster even if you order pullets
- Do I need a rooster? (No, you don't, and some towns prohibit them)





# Equipment Checklist



- Healthy Chicks
- Brooder & Brooder Guard
- Bedding Material (Shavings)
- Feeders for young birds and adults
- Waterers for young birds and adults
- Fencing
- Feed



# Get Ready Ahead of Time



- Create a comfortable and controlled environment for chicks
- Set up proper heating and lighting
- Provide proper access to water
- Provide proper feeding

Here's how you do it....



# Getting Ready for Chicks Nutrena®

## SPACE

- Create a small area to hold chicks for 7-10 days. Later they will need more space.
- Objectives:
  - Keep them warm and comfortable
  - Keep them close to feed and water
  - Help them adjust to their environment
- Approximately 1 square foot per chick for first month, then 2 sq ft for weeks 6-8
- Housing options: plastic tote box, stock tank, **NO CARDBOARD BOXES!**
- Shavings are the best bedding (do not use straw or newspaper)



# Getting Ready for Chicks Nutrena®

## HEAT & LIGHT

- Set up and start heat lamps 24 hours in advance. One 250-watt infrared heat lamp should suffice for every 25-100 chicks
- Have a second bulb in case one burns out
- Recommended temperature is 90-95° F for first week, decrease slowly each week
- Hang lamps 18-20" above floor and adjust as necessary
- Chicks need light as well as heat
- Hang the heat lamp securely to prevent accidents- safety at all times!



# Temperature Control



Week 1	90-95° F
Week 2	85-90° F
Week 3	80-85° F
Week 4	75-80° F
Week 5	70-75° F
Week 6	70-75° F
Week 7	70-75° F
Week 8	65-70° F
Week 9	65° F Minimum



# DON'T LEAVE CHICKS



## IN THE DARK

- Light improves their growth rate & performance
- Keep light on the chicks for at least the first 48 hours, except for 1/2 hour the first two nights (make sure temp doesn't drop)
- Use natural light during the day
- Provide 18-20 hours of light daily for days 3-7
- Reduce light gradually to 10-12 hours daily thereafter



# Lighting Programs for Poultry



## Hours of Light Per Day

Period	Broilers	Layers	Turkeys	Gamebirds & Waterfowl
1-2 Days	23.5	23.5	23.5	23.5
3-7 Days	18-20	18-20	20	Standard Day Length
1-5 Wks	14-16	16-18	16-20	Standard Day Length
5 Wks to Market	10-16	12-16	16-20	Standard Day Length
6-18 Wks	NA	10-12	NA	NA

# FOOD & WATER



- Provide a one-gallon waterer per 25 young birds to start
- Provide 1" of feeder space per chick to start
- Clean and place feeders and waters before birds arrive
- Set the height of feeder and water even with the backs of young birds





# RECEIVING BABY CHICKS



- Good quality birds are essential for successful results
- Some hatcheries vaccinate before shipping
- Check young birds carefully before placing them in the brooder
- Confine chicks for 7-10 days to keep them safe and close to feed and water
- Cull any sick birds
- When you receive day-old chicks, allow them to drink water before introducing feed



# Helpful Management Tips



- Scatter some feed on a paper plate the first day to help chicks start eating sooner
- Keep feeders and waterers full the first week
- Reduce feed in feeder to half-full after the first week, but make sure it doesn't run out
- Keep feeders and waters clean- disinfect waterers several times a week
- Always provide clean, fresh water
- Provide more space as birds get bigger
- Keep bedding clean and dry



# Keeping Your Birds Healthy Nutrena®

- Clean & disinfect facilities in advance
- Buy chicks from a reputable source
- Avoid mixing birds from different sources
- Keep facilities clean & dispose of bedding properly
- Locate/build pens to minimize contact with wild animals
- Avoid borrowing/sharing equipment with neighbors (always wash & disinfect first)
- Fresh, clean air is important- clean coops before you smell ammonia



# DISEASE PREVENTION



## Coccidiosis

- Characterized by diarrhea, unthriftiness, possibly mortality
- Minimize contact with other flocks to reduce the risk of infection
- Clean, sanitary conditions are the best defense
- Medicated chick feed can help prevent coccidiosis
- Amprolium is the most common medication. No withdrawal period is needed before you eat the eggs or process the chicken

## AVIAN FLU

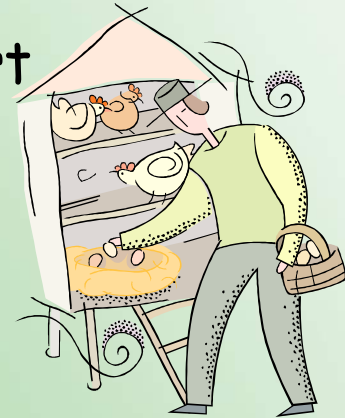
- Characterized by diarrhea, respiratory distress
- High mortality rate
- Carried by wild birds, especially those who are migrating
- Prevention is key- keep your flock inside, keep wild birds out of your coop and run
- Netting may help but won't prevent possible infection by contaminated droppings from wild birds
- **ANY CASES MUST BE REPORTED TO THE STATE'S DEPT OF AGRICULTURE!** This is highly contagious (but not to humans)

# Options for Housing



## Chicken Coops and Pens

- Allow at least 4 sq ft per bird
- Roosts should allow 6 inches per bird and be away from nests
- Place roosts 18-24 inches above floor, one foot apart
- Provide bedding at least 6 inches deep
- Make sure the space is draft-free
- Provide an adjacent pen for turn-out
- A pen made of chicken wire is ideal
- Secure wire underground to protect against burrowing predators
- Netting or wire overhead protects against hawks, owls, falcons
- Ventilation and fresh air is very important for good health- if you have cobwebs or ammonia fumes, your coop is not properly ventilated



# Options for Housing (cont.)



- Keep feeders and waterers in the pen to encourage night-time roosting. Hang or position them even with the birds' backs.
- Nesting boxes should be 12 x 12 inches in size with 3 inches of bedding
- Provide 2 boxes for the first 4 hens, add one for every 4 additional birds
- A good option is one that keeps birds safe and allows them to forage
- Free range or pastured poultry is another option, but be mindful of predators
- Pens and coops should be easy to clean



# Dust Baths



- Chickens love to use a dust bath, and they should have free access to one. This is nature's way of helping the chicken control mites, lice, and other external parasites
- A dust bath can be as simple as loose soil or sand in a shallow pan, or a corner of the run where chickens can scratch and scuff their feathers in the dirt
- Food grade diatomaceous earth can be added for additional parasite control



# Daily Care



## MORNING

- ✓ Let the chickens out of the coop
- ✓ Give them feed and fresh water
- ✓ Check for eggs



## EVENING (Dusk)

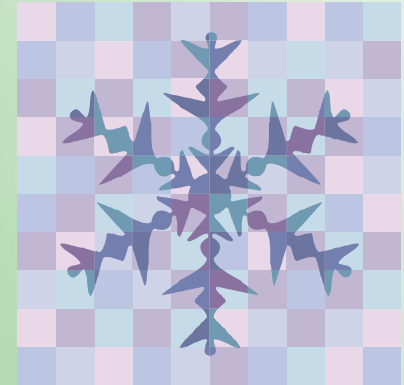
- ✓ Check the water, make sure they have enough to go through the night
- ✓ Remove feeder or make sure it's nearly empty
- ✓ Make sure everyone is inside
- ✓ Check again for eggs
- ✓ Close the coop door so predators don't get in



# What about winter?



- Keep water from freezing
- Swap out waterers
- Use a heated base or heated waterer  
(Do not put a plastic heater on a metal base...fire hazard!)
- Birds like water temp 50-55 degrees
- Provide warm water at least twice a day
- Keep birds away from drafts
- Tight, secure building
- Extra bedding to insulate from the ground



# Poultry Fun Facts



• Commercial chickens lay 20-23 dozen eggs (or more!) per year. Chicken eggs can range in color depending on the breed of the hen.



• You can determine the color of egg that a chicken will lay by looking at her earlobes.

Chickens with white earlobes lay white eggs, and chickens with reddish-brown earlobes lay brown eggs.



• Chickens are relatively quiet when they are happy

# What should I feed?



## Nutrition

Many different factors influence the nutritional requirements of poultry including:

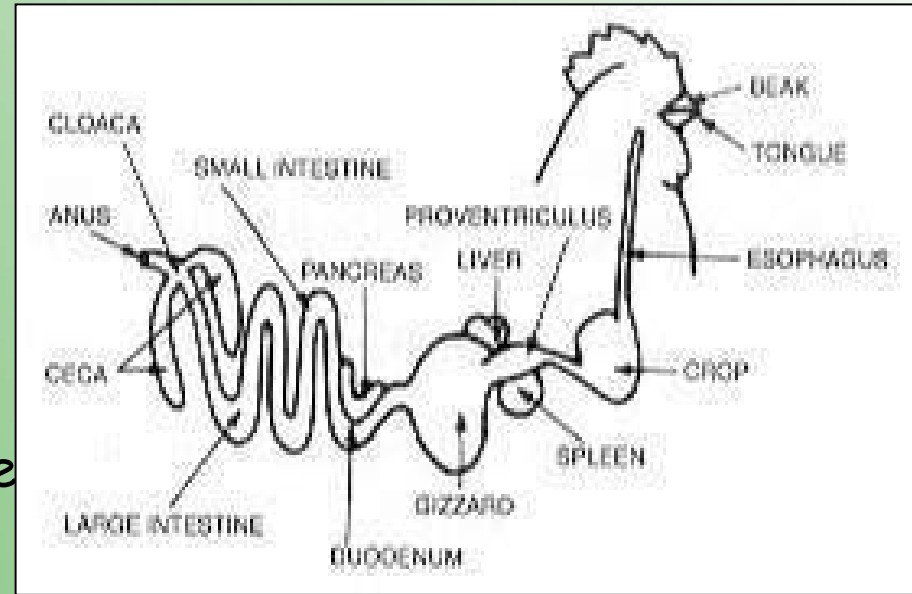
- Genetics
- Age
- Degree of production
- Health status
- Flock density
- Environment (temperature, humidity, air quality)



# Poultry Digestive System



- Beak- aids in breaking down food
- Tongue- moves feed around in mouth (chickens don't have teeth)
- Esophagus- passage from mouth to stomach
- Crop- serves as holding and moistening reservoir
- Stomach- 2 parts-Proventriculus (site of gastric juice production and food storage) and gizzard, which reduces food particle size
- Small intestine, ceca, and large intestine- digest food, absorb nutrients, and secrete waste
- Cloaca- ureters empty here, waste is excreted as a pasty white urine. In hens, this is the exit for the egg.



# Feeding and Watering Guide



Bird Age	Feeder Space	Watering Space
0-2 weeks	1 inch per chick	1 gal. waterer per 50 chicks
2-6 weeks	2 inches per chick	1 gal. waterer per 20 chicks
6-20 weeks	3 inches per chick	1 gal. waterer per 10 chicks
Layer	4 inches per bird	1 gal. waterer per 10 birds

## Feed Amount for the Period

Layers	0-10 Weeks	9-10 lbs per bird
	8-20 Weeks or the start of laying	12 lbs per bird
Broilers	0-6 Weeks	8-10 lbs per bird

# Poultry Feeds by Nutrena Nutrena®

## Chick Starter-Grower Crumbles

- Complete feed for layer chicks, no need to supplement
- 18% protein
- Fortified with vitamins, minerals, and balanced amino acids to support muscle development and growth
- Feed from birth through 16-18 weeks
- Comes as medicated or non-medicated
- Medicated feed contains Amprolium to help prevent coccidiosis. Amprolium is not an antibiotic; it blocks thiamin which coccidia need to multiply



# Poultry Feeds by Nutrena

## Nature Smart Organic



### Organic Chick Starter Grower Crumbles

- 20% protein
- Non-medicated
- Probiotics and yeast cultures to support digestion and immune health
- Precise blend of nutrients to support growth and muscle development
- No animal by-products, hormones, or antibiotics
- For layer chicks up to 16 weeks and meat bird chicks



# Poultry Feeds by Nutrena



## Layer Feed

- 16% protein in a crumble or pellet form
- Complete feed- no need to supplement
- Fortified with vitamins, minerals and balanced amino acids to support health and egg production
- Start feeding at 16-18 weeks

## Egg Producer

- 21% protein in pellet form
- Complete feed- no need to supplement
- Fortified with vitamins, minerals and balanced amino acids to support health and egg production
- Start feeding at 18 weeks
- Excellent feed for free-range chickens





# Poultry Feeds by Nutrena

## Nature Wise Natural Feeds



### Hearty Hen

- Enriched with Omega 3 from flaxseed
- Contains marigold extract for golden eggs
- Contains probiotics and yeast culture for digestion and immune health

### Feather Fixer

- Specialty product designed to help your birds through molting; healthy protein & energy levels
- Contains chelated minerals, marigold extract, pre- and probiotics to support feather regrowth, eggshell strength, digestion and immune levels

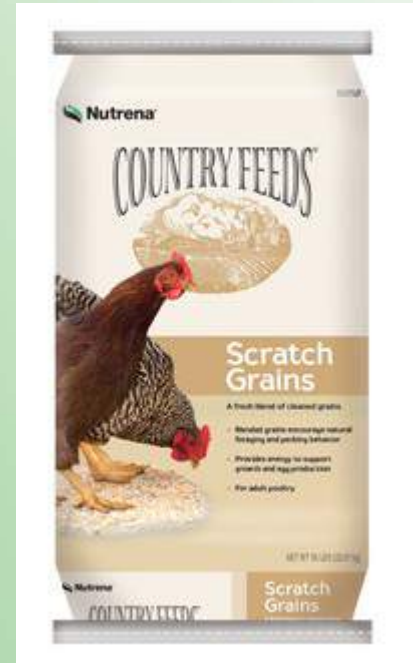


# Poultry Feeds by Nutrena



## Scratch grain

- Contains 7.5% protein on average
- Here in the Northeast, scratch tends to be a corn/oats mixture
- Use as a treat- should not comprise a significant part of the diet due to the low protein content
- For adult birds- not for growing birds
- Helps to provide additional energy for laying





# MOLTING



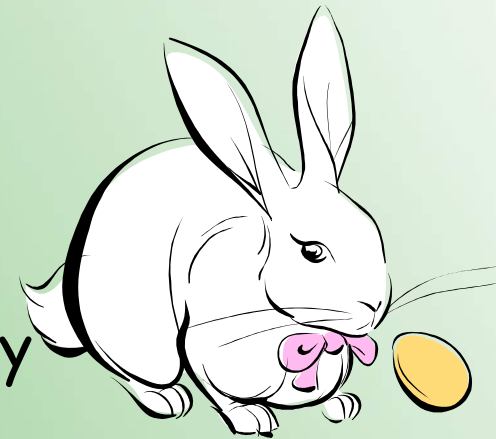
- Molting is the process of losing old feathers and growing new ones
  - Typically this first happens at 14 months, then yearly after that in the fall. This allows the bird to go into winter with the best possible feather coat
  - Hens that are good layers tend to look worse during molting than hens that are poor layers
  - Molting can last from 4-16 weeks
  - Hard molt means that all the feathers appear to be lost at roughly the same time. Soft molt means that the chicken slowly loses feathers over several weeks
  - Hens don't lay during molting- all the protein that they ingest is going into the new feathers
  - Reducing stress helps the chicken to recover quicker
- <https://www.nutrenaworld.com/blog/the-molting-process>

# Why aren't my chickens laying?



## Most common reasons:

- Not enough water - one hour of dehydration can lead to a week without eggs
- Stress from predators, too many roosters, too much commotion
- Diet - not enough protein
- Molting - Nature's way of getting them ready for winter
- Not enough light - 16 hours per day is ideal. Add supplemental light in the winter but do so slowly. Morning light is better than extending the day.



# Why are my chickens hurting each other?



Chickens can become cannibalistic for several reasons:

- They sense that one is weaker - remove her and give her a chance to heal
- Boredom - provide entertainment, such as a head of cabbage, if they are closed inside
- Not enough room to move around
- Flock stress - too many roosters, or a rooster that is too aggressive (may also lead to a decrease in eggs)
- Try red lights, Hot Pick
- Provide enough nesting boxes to prevent competition while laying

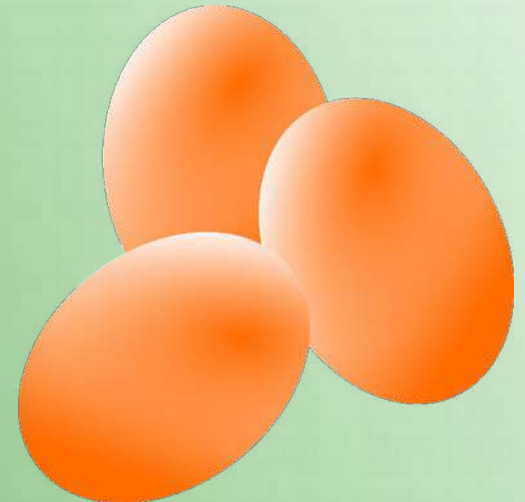


# They're eating the eggs!

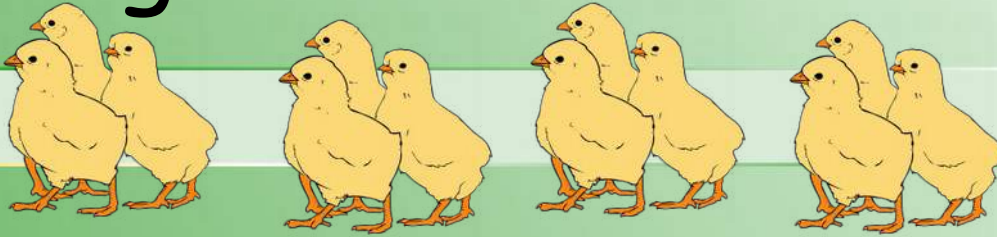


This is behavior that you want to stop as soon as possible

- Learned behavior, probably from sampling a broken egg
- Isolate the guilty so others don't learn the bad habit!
- Use a wooden or ceramic egg to re-train
- Use quality feed with an appropriate protein/vitamin/mineral package



# Raising Meat Birds



- Meat bird chicks have similar requirements as layer chicks in terms of light, heat, space, food and water.
- They grow faster, so are fully feathered and able to leave the heat lamps sooner
- Keep food and fresh water in front of them at all times
- Meat birds do not move around much, but still need adequate room to spread their wings and squat
- Typically these birds are processed at 8 weeks of age, but may go earlier if they get very large
- It is not advisable to keep them beyond 9 weeks, as they will start to develop health problems

# Raising Meat Birds



## Meat Bird Feeds

### Country Feeds

- 22% protein in a crumble form
- Complete nutrition for healthy growth and muscle development, no supplementing needed

### Nature Wise Natural

- 22% protein in crumble form
- Contains added marigold meal, pre- and probiotics, yeast cultures
- Contains no added hormones or antibiotics
- Formulated for multiple bird species

### Nature Smart Organic

- Use Organic Chick Starter Grower

