

SPRING CHICKENS



SO YOU PICKED UP YOUR BABY CHICKS
NOW WHAT?



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Alaska Garden & Pet Supply, Inc



LET'S TALK ABOUT CHICKS

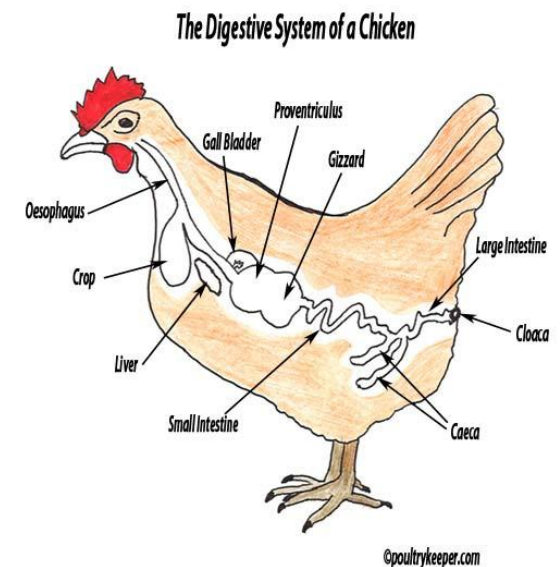
- ❖ Vocabulary
- ❖ Benefits/Negatives
- ❖ Types of Chickens
- ❖ Getting Setup, Brooding, and Starting Other Poultry
- ❖ Sheltering Methods
- ❖ Water, Food and Supplemental Feeding
- ❖ Chicken Health 101
- ❖ Chicken Behavior 101
- ❖ References





CHICKEN VOCABULARY

- ❖ **Chick:** young (baby) chicken
- ❖ **Pullet:** immature female chicken or turkey (0–20 weeks)
- ❖ **Layer:** adult female chicken producing eggs (4–5+ months old)
- ❖ **Broiler/Fryer:** a young chicken being raised for meat
- ❖ **Hen:** adult female chicken
- ❖ **Rooster:** adult male chicken
- ❖ **Cull:** to remove a chicken from the flock because of productivity, age, health, or personality issues (i.e., overly aggressive or timid, egg eating, etc.)
- ❖ **Flock:** a group of chickens



Who's Who of Chicken Owners



Prince Charles



Jennifer Anniston



Tori Spelling



Martha Stewart



Oprah

You're in good company!



BENEFITS OF RAISING CHICKS

- ❖ Fresh eggs
- ❖ Fresh meat
- ❖ Pest and weed control
- ❖ Supply of nitrogen-rich manure
- ❖ Projects for kids
- ❖ Family pet
- ❖ FUN and social birds

THE NEGATIVES

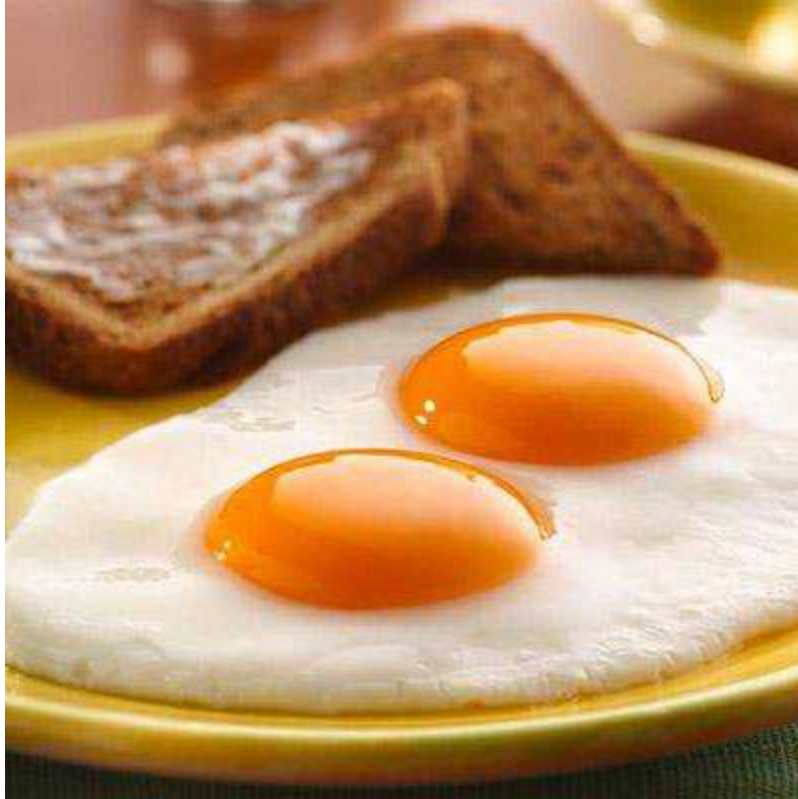
- ❖ Probably more expensive
- ❖ They need daily care
- ❖ Odor
- ❖ Noise – roosters get up early
- ❖ Potential for disease
- ❖ Bears, wolves, and dogs all love chickens!

PICK CHICKS FOR:

- ❖ Egg Color: white, brown, colored
- ❖ Meat production
- ❖ Show
- ❖ Pets
- ❖ Cold-weather tolerant



YOU ARE WHAT YOU EAT



70

Each egg only contains 70 calories - the perfect low calorie protein.

13/9

One egg contains 13 essential vitamins and minerals and all 9 essential amino acids.

6

One egg provides 6 grams of protein, nearly half of which is found in the yolk.

100%

The biological value of egg protein as a source of protein is 100%.



POPULAR BROWN EGG LAYERS

**Barred
Rock**



Dual purpose
Good layers
Brown eggs
Hardy
Not Broody

**Buff
Orpington**



Dual purpose
Good layers
Brown eggs
Hardy
Broody
Quiet & Gentle

**Rhode Island
Red**



Dual purpose
Good layers
Brown eggs
Hardy
Not Broody

Australorp



Similar to
Orpington

Good egg producers can
lay up to 200 eggs/year



OTHER FUN BREEDS

Silkie



Bantam
Many color varieties
Tames easily
Moderate egg layer
Good sitter
White Eggs

White Crested Polish



Small Show breed
Poor sitter
Small white eggs

Japanese



Ornamental
Good as pets
Small size
Many color varieties

Leghorn



Super egg layer
Common breed
White eggs

Mature chickens can adapt to temperature extremes through gradual exposure.

WHAT SHOULD YOU EXPECT?



How many chickens should you get?

- May be determined by local ordinances and neighborhood covenants
- How much time do you have?
- How many eggs do you want?

Baby chicks grow up.

- Plan for housing, protection, space
- Chickens begin laying at 18-20 weeks
- Hens eventually stop laying; will they become pets?

BEFORE THE CHICKS ARRIVE

Basic preparation increases success

- ❖ Home environment:
 - ❖ Dry and clean
 - ❖ Correct temperature
 - ❖ Draft free
 - ❖ Spacing
 - ❖ H₂O & Feeders
 - ❖ Clean & disinfect everything before chicks arrive
 - ❖ House, waterers, feeders
 - ❖ Disinfect regularly – 1:10 bleach water dilution
 - ❖ Bedding 2–5” Deep
 - ❖ Wood shavings, straw or shredded newspaper
 - ❖ No cedar



Purchase Chicks from a reputable hatchery or feed dealer

Suggest chicks be vaccinated for Marek's Disease and coccidiosis



CHIKC STARTER CHECKLIST

Get the feed, supplies and everything you need to start your backyard flock!



❖ Shelter/Containment

❖ Heat Lamp & Bulb



❖ Bedding



❖ Feeder

❖ Waterer



❖ Vitamins/Electrolytes (water soluble)



BROODING CHICKS



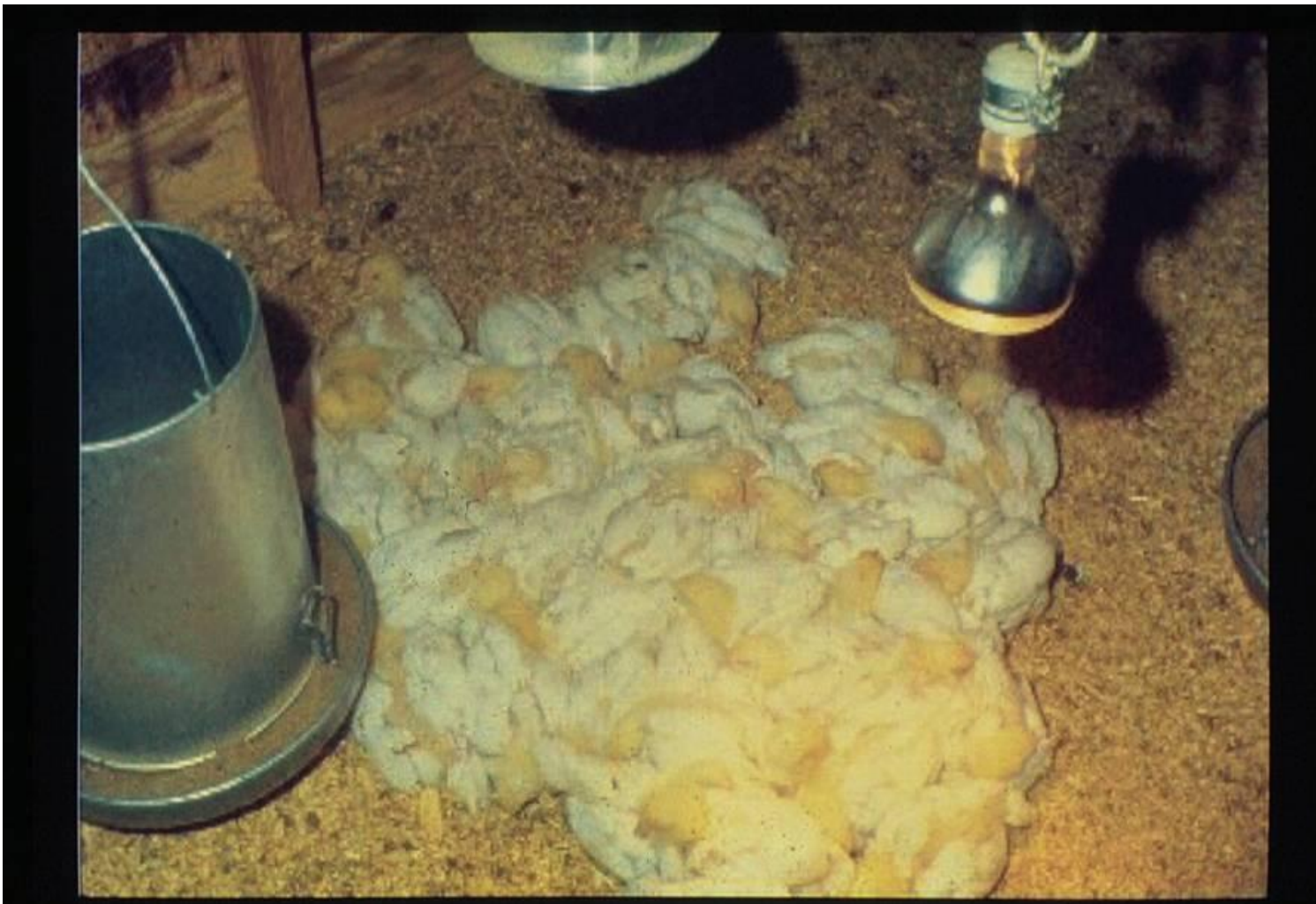
Avoid the "Big Chill"

Brooding Chicks

- ❖ Day old chicks: pre-heat area to 90° – 95° with heat lamp/light bulb approx 20" above chicks
- ❖ Place thermometer at chick level
- ❖ Comfort can be observed
 - ❖ If chicks huddle together under light – it's too cold
 - ❖ If chicks huddle in corners – it's too hot
- ❖ Reduce 5° each week until 65° minimum



INADEQUATE TEMPERATURE CONTROL



These chicks are cold!

INADEQUATE TEMPERATURE CONTROL



These chicks are too hot!

GOOD TEMPERATURE CONTROL



These chicks are perfect!

STARTING "OTHER" POULTRY



Turkey Poults

- ❖ Slow to understand eating & drinking: monitor
- ❖ To get started – dip beaks in H₂O & feed
- ❖ Turkey Starter (0–8 weeks)
- ❖ Turkey Grower/Finisher (9–18 weeks)

Ducklings/Goslings

- ❖ May swim in H₂O after 4 weeks
- ❖ Keep dry until then
- ❖ Place marbles in waterer to reduce splashing
- ❖ Duck & Goose Starter, non-medicated
- ❖ Duck & Goose Maintenance

Wild Bird

- ❖ Wild Game Bird Starter
- ❖ Wild Game Bird Grower



all feeds are non-medicated

FEEDER, WATER, FLOOR SPACE and LIGHTING

	Min FEEDER SPACE (Per 10 birds)	Min WATER SPACE (Per 10 birds)	Min FLOOR SPACE (Per bird)	ARTIFICIAL LIGHTS	FEEDING RECOMMENDATIONS
Chicks Layer & Broiler (0-8 weeks)	1.5 linear ft	1 quart or less	Minimum 10 sq in Max 1-2sq ft	21-23 hours reduce to 15-16 hours by 3 weeks	CHICK STARTER <i>Apprx total feed per Bird</i> Light Breeds: 3 lbs Heavy Breeds: 4 lbs
Layer Pullets (8-16 weeks)	2.5 – 3.5 linear ft	1-2 gallons	2-3 sq ft	After 3 weeks reduce to hours as dictated by natural length of day not under 12 hours	PULLET GROWER Introduce SCRATCH & TREATS <i>Apprx total feed per Bird</i> Light Breeds: 13 lbs Heavy Breeds: 17 lbs
Laying Hens (16 months & Up)	4.0 linear ft	2-3 gallons	3-6 sq ft	15-17 hours of light	LAYER 16% or 20% ALL PURPOSE POULTRY SCRATCH, GRIT, OYSTER SHELLS <i>Apprx total feed per Bird</i> Light Breeds: 1.5 lbs/week Heavy Breeds: 2 lbs/week
Broilers (all ages)	4.0 linear ft	2-3 gallons	3-5 sq ft	15-17 hours until processed	BROILER GROWER FINISHER <i>Apprx total feed per Bird</i> 10-12 lbs to reach butchering weight

LINEAR FOOT: one foot of feeding space or watering space. For example, a 6 ft feeder open on both sides has 12 linear ft of space.

PLENTY OF FEEDERS/WATERERS



GOOD EXAMPLE

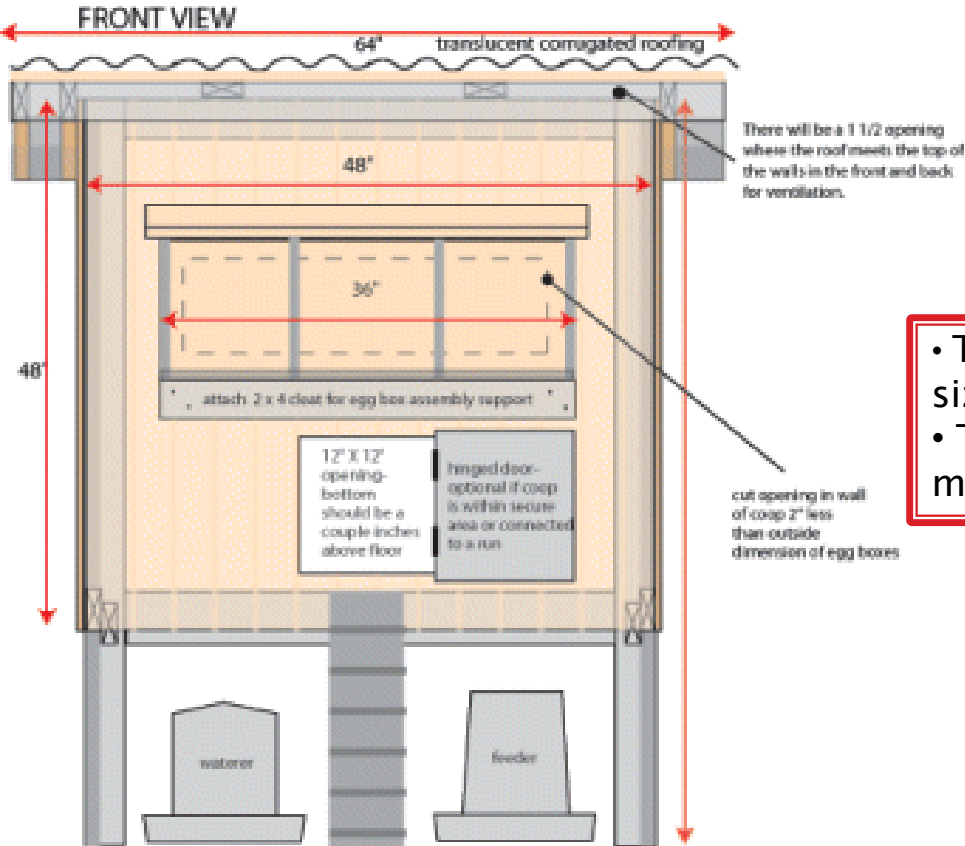


SHELTERING METHODS



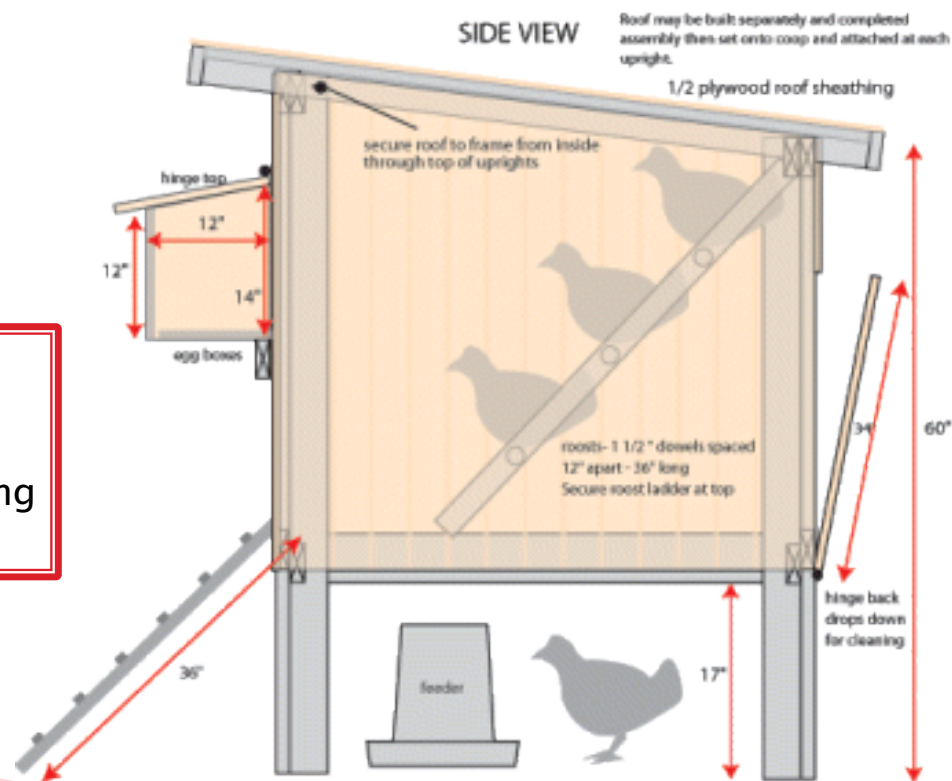
- ❖ **Free Range** – No confinement. Seen most in rural areas.
- ❖ **Pastured/Range Fed, Day Range** – Confinement to a portable shelter with a fenced foraging area. Used in family gardens or farms.
- ❖ **Yarding** – Confinement to a permanent building with an outdoor fenced yard. Used in small backyards.
- ❖ **Loose Housing** – Confinement within permanent building. Generally used for raising broilers or breeders or maintaining a flock during cold wet weather.
- ❖ **Hutch** – Cage confinement. Most often used in urban and suburban area or for show birds.





- The following coop plans accommodate 8 full size chickens or 12 bantams.
- The outside area for your birds should provide a minimum of 4 square feet per bird.

- You will want 1 nest box for every 4 hens.
- The inside of the coop floor should be covered with wood shavings 3-5 inches in depth and changed every few months, more or less depending on how many chickens you have.





WHEN CAN CHICKS GO OUTSIDE?

- ❖ Once they have all of their adult feathers at 5 to 6 weeks
- ❖ Still may need a heat lamp in coop at night or to regulate temperature



KEEPING YOUR CHICKENS SAFE

- ❖ Enclose outside run on all sides and top
- ❖ Bury wire screen at least 6 inches deep at perimeter of pen
- ❖ Use latches with a spring catch on any openings
- ❖ If you free range your chickens during the day, be sure the enclosure is fenced or keep watch on them
- ❖ Use small-opening welded wire screen (1" x 1/2")
- ❖ Electric Fence
 - ❖ 5,000–7,000 volt pulses
 - ❖ 14 gauge wire
 - ❖ Wire running 6–12" apart



THE IMPORTANCE OF H₂O



- ❖ Disinfect waterers prior to use – then weekly
- ❖ One 1-quart fount per 25 chicks
- ❖ Use fresh, cool (not cold) H₂O – refresh daily
- ❖ Dip beaks to induce drinking when chicks arrive
- ❖ Elevate waterer after 1st week to keep clean
- ❖ Waterer should not be higher than chick's back
- ❖ Double H₂O available capacity at 6 weeks
- ❖ Put marbles in waterer to keep chicks dry

- ❖ The average chicken drinks between 1–2 cups of water/daily
 - ❖ Age: older chickens drink more
 - ❖ Layers: drink twice as much
 - ❖ Ambient temperature: drink 2–4x as much in warm water
 - ❖ Time of day: dawn and dusk
 - ❖ Ideal water temperature: 50–55 °F
- ❖ Chicken's body contains more than 50% water and an egg is 65% water



TYPES OF FEED



- ❖ **Mash:** ground to various degrees of coarseness. Chicks pick through, typical form for home-mix rations. Warm mashes are great for cold winter temperatures and very palatable.
- ❖ **Pellets:** compressed, shaped. Each pellet has identical nutritional value. Complete and balanced. Often least wasted feed form.
- ❖ **Crumbles:** crushed pellets. Baby birds and adults. Take longer to eat. Less boredom. Easily wasted.
- ❖ **Scratch:** mixture containing a least two kinds of grain (usually cracked corn, wheat, oats. Scratch is high in energy, low in vitamins, minerals, and protein). Great “activity” diet. Never feed to birds under 8 weeks. It’s like candy = feed sparingly.
- ❖ **Grit:** Sand and small pebbles eaten by a chicken: used by its gizzard to grind up grain and plant fiber. Grit is not necessary when feeding pellets or crumbles.
- ❖ **Sprouting or Fodder:** the practice of growing grains to an eatable state.



BASIC INGREDIENTS IN CHICKEN FOOD

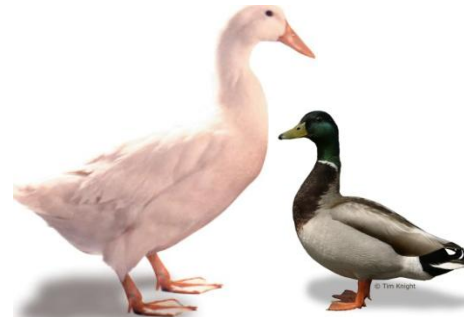
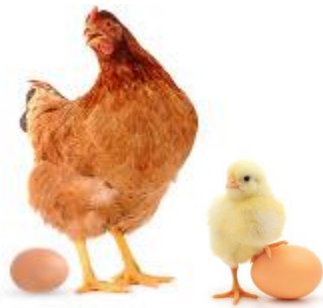
- ❖ Protein – corn, wheat, soybeans, safflower meal
- ❖ Carbohydrates – corn, wheat and sorghum grains
- ❖ Fat – natural plant oils (fats) that occur naturally in the ingredients or soybean oil

POISONOUS FOODS FOR CHICKENS

- ❖ Chocolate, Caffeine, Tobacco
- ❖ Apple seeds
- ❖ Peach, Cherry, Apricot, Nectarines and Pear pits *(The fleshy part of the fruit is fine)*
- ❖ Avocado *(The whole fruit, including guacamole)*
- ❖ Onions
- ❖ Tomato plant, including leaves and stem *(The fruit is fine as long as it is ripe)*
- ❖ Raw Beans *(Raw Kidney Bean, one is enough to cause serious harm, cooked is fine)*
- ❖ Potato plant *(As well as uncooked or unripe potatoes and supposedly potato peelings, cooked is fine)*



WHEN TO CHANGE FEEDS



LAYERS

BROILERS

TURKEYS, DUCKS, GEESE, AND WILD GAME BIRDS

HATCH

4-6
weeks

Chick Starter

Broiler Grower Finisher

DUCK & GOOSE STARTER

Turkey Starter

Wild Game Bird Starter

8-10
weeks

Pullet Grower
Scratch

16-20
weeks

LAYER - 16% - 20%
All Purpose Poultry
Scratch
Grit
Oyster Shells

Start more birds

DUCK & GOOSE MAINTENANCE
Turkey Grower
Wild Game Bird Grower
All Purpose Poultry

<u>FEED NAME</u>	<u>GAURANTEED ANALYSIS</u>	<u>INGREDIENTS</u>
Chick Starter Non-Medicated the first day to 4–6 weeks old	PROTEIN 20.00% FAT 2.50% FIBER 5.00%	Corn, Soybean Meal, Barley, #1 Wheat Screenings, Alfalfa, Dical, Calcium Carbonate, Vegetable Oil, Poultry Premix Vitamins, Salt, Methionine, Lysine.
Pullet Grower 4–6 weeks old to 4–5 months old	PROTEIN 15.00% FAT 2.50% FIBER 6.00%	Corn, #1 Wheat Screenings, Soybean Meal, Alfalfa, Calcium Carbonate, Dical, Vegetable Oil, Salt, Poultry Premix Vitamins, Lysine, Methionine.
16 % Layer Crumbles or Pellets From just before or the start of laying	PROTEIN 16.00% FAT 2.50% FIBER 4.50%	Corn, #1 Wheat Screenings, Soybean Meal, Calcium Carbonate, Alfalfa, Dical, Vegetable Oil, Poultry Premix Vitamins, Salt, Methionine. ALSO AVAILABLE IN A NO-CORN/NO-SOY FORMULA
20% Layer Crumbles or Pellets From just before or the start of laying	PROTEIN 20.00% FAT 2.50% FIBER 4.50%	Corn, Soybean Meal, #1 Wheat Screenings, Calcium Carbonate, Alfalfa, Dical, Vegetable Oil, Poultry Premix Vitamins, Salt, Methionine.
Boiler Grower–Finisher Crumbles or Pellets From the first day through day of butcher (8–10 weeks)	PROTEIN 20.00% FAT 5.00% FIBER 4.00%	Corn, Soybean Meal, #1 Wheat Screenings, Alfalfa, Dical, Vegetable Oil, Calcium Carbonate, Salt, Poultry Premix Vitamins, Methionine, Lysine ALSO AVAILABLE IN A NO-CORN/NO-SOY FORMULA
All Purpose Poultry Ration Could feed from hatch to lay, safe to feed to ducks/turkeys	PROTEIN 17% FAT 3.25% FIBER 4%	Corn, #1 Wheat Screenings, Soybean Meal, Calcium Carbonate, Alfalfa, Dical, Salt, Poultry Premix Vitamins, Methionine, Lysine
Standard Scratch	PROTEIN 9.00% FAT 2.00% FIBER 3.00%	Corn and Red Wheat

NO CORN-NO SOY CHICKEN FEEDS



No Corn



No Soy



<u>FEED NAME</u> <u>NO CORN – NO SOY</u>	<u>GAURANTEED</u> <u>ANALYSIS</u>	<u>INGREDIENTS</u>
Chick Starter – NON Medicated the first day to 4–6 weeks old	PROTEIN 20.00% FAT 6.00% FIBER 8.00%	Wheat, Barley, Canola, Fish Meal, Alfalfa, Whole Oats, Bran, Flax Seed, Vegetable Oil, Calcium Carbonate, Dical, Yeast, Salt, Poultry Pre-Mix Vitamins, Lysine, Vitamin E, Methionine.
16 % Layer Crumbles or Pellets From just before or the start of laying	PROTEIN 16.00% FAT 7.75% FIBER 7.50%	#1 Wheat Screenings, Barley, Whole Oats, Calcium Carbonate, Alfalfa, Fish Meal, Flax Seed, Vegetable Oil, Dical, Yeast, Poultly Premix Vitamins, Salt, TM with Selenium, Methionine, Lysine, Vitamin E
Boiler Grower–Finisher Crumbles or Pellets From the first day through day of butcher (8–10 weeks)	PROTEIN 17.00% FAT 8.00% FIBER 9.00%	#1 Wheat Screenings, Barley, Alfalfa, Whole Oats, Fish Meal, Flax Seed, Vegetable Oil, Dical, Limestone, Yeast, TM Salt, Poultry Premix Vitamins, Methionine, Lysine, Vitamin E.



***Organic , Non GMO
Feeds Available***

IS A CALCIUM SUPPLEMENT NECESSARY?

- ❖ High levels required for egg production
- ❖ If not provided in adequate quantities, hens will pull calcium from their skeleton causing weak and easily broken bones
- ❖ Calcium levels in layer diets are too high for young chicks or growing pullets. If fed, could lead to leg abnormalities.
- ❖ Feed a layer diet at first egg, but not before pullets are 16 weeks old.

OYSTER SHELLS

- ❖ Extensively used in the poultry industry
- ❖ Very high in calcium
- ❖ Good for egg shell formation and strong, thick shells
- ❖ Never feed oyster shell to chickens under 18 weeks



SUPPLEMENTAL FEEDING

❖ FLOCK BLOCK™

- ❖ Similar to Scratch
- ❖ Whole Grain Supplement
- ❖ Restores Pecking Instincts
- ❖ Going on Vacation?
 - ❖ Try Flock Block™ !
 - ❖ 25# Block Feeds up to 25 birds for 2-3 days (maybe longer)



❖ DIATOMACEOUS EARTH

- ❖ A naturally occurring fine powder composed of the fossilized remains of microscopic diatoms
- ❖ Dries out cage floor waste, lessening odor, and reducing fly populations
- ❖ Daily use in feed provides your birds with valuable trace minerals that results in better feathering and egg production



CHICKEN HEALTH 101

Coccidiosis

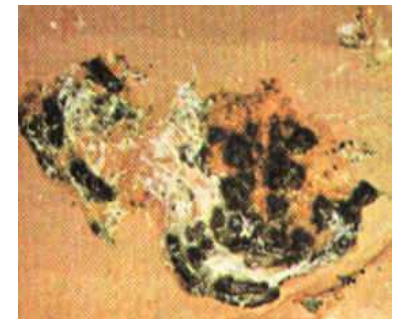
- ❖ Digestive tract disease in chickens
- ❖ Characterized by loose droppings and “tired” birds
- ❖ Younger birds more susceptible
- ❖ Cleanliness is key
- ❖ Keep litter dry
- ❖ Feed chicks medicated crumbles
- ❖ Water soluble medicines available



Birds will look dirty and unkempt

Pasting of chicks

- ❖ Vent area becomes impacted with manure
- ❖ More common with hen hatched/brooded chicks
- ❖ Clean with warm water
- ❖ Mineral oil can be used in severe cases



Runny/Loose droppings

CHICKEN HEALTH 101



Mites and Lice

- ❖ Small parasites in feathers or scales
- ❖ Inspect underneath wings and vent area
- ❖ Common in free range birds
- ❖ Use insecticidal dusts (Sevin, Malathion)

Other Diseases

- ❖ Fowl Cholera
- ❖ Bronchitis
- ❖ Newcastle Disease (green diarrhea)
- ❖ Fowl Pox (skin lesions)



Fowl Cholera



Fowl Pox

*Birds that are to be exhibited at
fairs/shows should be vaccinated*

CHICKEN HEALTH 101



Impacted Eggs

- ❖ Potentially life threatening
- ❖ Mineral oil probe with finger
- ❖ See a vet

Rooster Spurs

- ❖ Do not cut off!
- ❖ File or Dremel the sharp point

(A) Tarsometatarsal bone
(B) Calcar (spur) protruding from bone
(C) Keratinized horny layer that can be filed





What is Amprolium?

- ❖ Is not an antibiotic
- ❖ Is a coccidiostat (kills coccidia)
- ❖ Acts in the intestinal tract, stays there and is not absorbed
- ❖ Mimics Vitamin B1 (Thiamine) without being metabolically active
- ❖ Causes coccidia in the intestinal tract to develop "Thiamine Deficiency" and die
- ❖ Is approved for growing birds and layers
- ❖ Has no withdrawal time

CHICKEN BEHAVIOR 101



My Hen's Are Losing Feathers

- ❖ Is your hen molting?
- ❖ Molting: the shedding of old feathers and replacement with new feathers
- ❖ Chickens usually molt 1 – 2 times/year
- ❖ Stressed during this time = reduced egg production

How Long Do Chickens Live?

- ❖ The average chicken lives 6 to 8 years
- ❖ Pet chickens have been known to live longer, 10 – 15 years



CHICKEN BEHAVIOR 101



How Do I Stop "Cannibalism or Feather-Picking?"

Caused By:

- ❖ Poor nutrition
- ❖ Overcrowding or overheating
- ❖ Very bright lighting
- ❖ Boredom & or longer daylight hours

Corrective Measures:

- ❖ More space
- ❖ Better ventilation
- ❖ Less light (red)
- ❖ More feed, water
- ❖ Scratch feed



CHICKEN BEHAVIOR 101

Why Do Chickens Eat Their Eggs?

Caused By:

- ❖ Starts by accident
- ❖ Very difficult to stop
- ❖ Thin shells
- ❖ Not enough nest material
- ❖ Eggs in nest too long

Corrective Measures:

- ❖ Gather eggs frequently
- ❖ Feed adequate calcium
- ❖ Add more nesting material
- ❖ Cull problem birds
- ❖ Place 'fake' egg in nesting box



CHICKEN BEHAVIOR 101



Why Do All My Chickens Lay In One Box?

- ❖ One nesting box for every 1 to 2 boxes for every 4 hens
- ❖ Hens lay where they feel comfortable and where the eggs are seen
- ❖ Place “fake” eggs (wood, porcelain) in the other brooder boxes in encourage them to utilize them



CHICKEN BEHAVIOR 101



WHY WON'T MY HENS LAY?

- ❖ The trigger for poultry to begin laying is age and day length (assuming birds are at the correct age).
- ❖ Increasing day length stimulates birds that are ready to lay, birds need 12 – 16 hours of light. Decreasing day length in the fall signals hens to stop laying.
- ❖ It is common in the fall and winter for hens to stop laying unless they have supplemental light to extend the natural day length to 12 – 16 hours.
- ❖ If your hens stop laying in the fall or winter, determine the day length and jump it by 2 hours and then continue to increase it 15 minutes a week until the birds are around 16 hours of light per day.
- ❖ Egg production starts to decline around 3 – 4 years (depends on specific breed of bird).

Did you know
that you do not
need a rooster
for your hens
to lay?

REFERENCES



BOOKS & PUBLICATIONS

Storey's Guide to Raising Chickens, Gail Damerow

The 4-H Guide to Raising Chickens, Tara Kindschi

Applied Animal Nutrition, Feeds and Feeding, Peter R. Cheeke

Selecting, Brooding & Rearing Small Numbers of Chicks, Alaska
Livestock Series LPM-00840, UAF Cooperative Extension Service

KNOWLEDGEABLE PEOPLE

Lucy Peckham, The Coalition for Backyard Pets, 907-346-4615

US Cooperative Extension Offices

Palmer 907-745-3360

Anchorage 907-786-6300

Local Feed Stores: Alaska Mill & Feed, M Bar D,
Pet Zoos, Underdog Feed

Alaska Farm & Food & Alaska Chook Nook



THE VET WILL SEE YOU NOW

- ❖ Chester Valley Veterinarian 333-6591
- ❖ College Village Animal Clinic 274-5623
- ❖ VCA Alaska Pet Care 562-7387
- ❖ Hillside Pet Clinic 344-7913
- ❖ Diamond Animal Hospital & Emergency Services 562-8384
- ❖ The Pet Stop 522-1006
- ❖ Ravenwood Vet Clinic 694-9665
- ❖ North Star Animal Hospital 746-7387
- ❖ Palmer Veterinary Clinic 745-3219
- ❖ Wasilla Vet Clinic 376-3993

REFERENCES



WEBSITES

Alaska Department of Fish and Game, Electric Fences as Bear Deterrents.

<http://www.adfg.alaska.gov/index.cfm?adfg=livingwithbears.bearfences>

The Backyard Chicken, www.backyardchickens.com

Factors Affecting Egg Production in Backyard Chicken Flocks

<http://edis.ifas.ufl.edu/ps029>

Winter Chicken Care, www.plamondon.com

Artificial Lighting for Hens, www.plamondon.com

NEWSPAPER ARTICLES & MAGAZINES

“Rise of the Backyard Chicken”, Kathleen McCoy, KSKA, www.alaskapublic.org, published 07/01/2011

“Chicken U.”, Todd Disher, The Frontiersman, published 11/05/2009

<http://naturalchickenkeeping.blogspot.com/p/fermented-feed.html>

The End



Questions?