

A horizontal border with a red and white checkerboard pattern, spanning the width of the page.

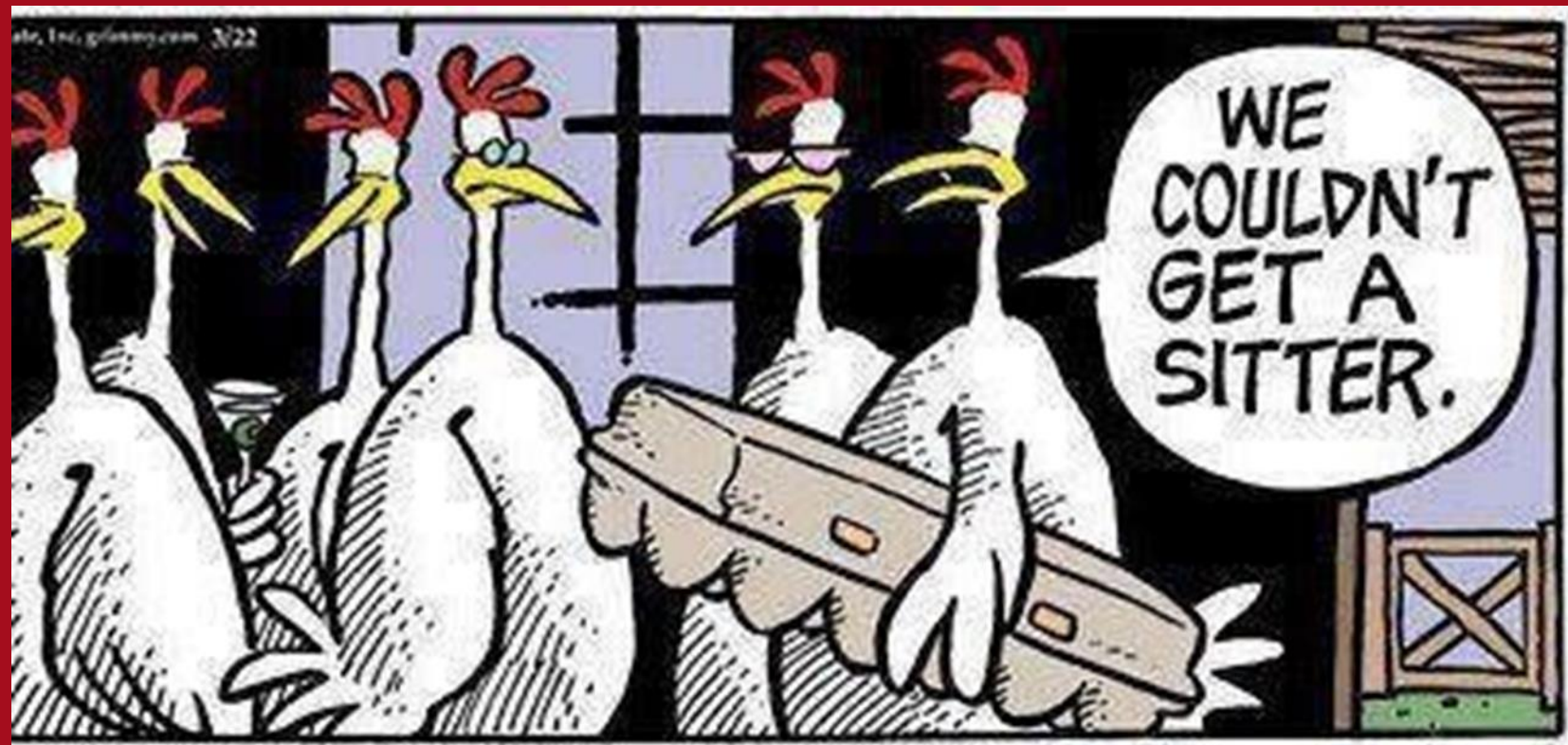
2019 CHICK DAYS PROGRAM



**RAISING HAPPY
& HEALTHY
CHICKS**

Today's Discussion


- **Why Have Chickens?**
- **What to Expect**
- **Meet the Breeds**
- **How to Get Started**
- **Products for a Productive Lifetime**
- **Chicken Behavior**
- **Health Maintenance**





Why are so many getting chickens?

 **PURINA**

- 
- A woman with short blonde hair, wearing a blue sleeveless top and denim shorts, is crouching in a garden. She is smiling and holding a white plastic scoop filled with feed. She is feeding several chickens, including a brown one and a yellow one. The background shows green foliage and a fence.
- Chickens are fun to watch!
 - Dozens of beautiful breeds
 - Distinct personalities & can be quite entertaining and funny
 - Great pets – can live many years

Raising Chickens



- **The pet you love also gives you breakfast!**
- **Partner in the Garden**
 - Produces fertilizer for gardens
 - Insect/Weed Management
- **Provides affordable 4-H projects, teaching children about competition, responsibility and sportsmanship**
- **#1 Reason? Fresh, healthful, nutritious eggs (and/or meat)**



300%

Additional Omega-3 when feeding Purina® Layena® Plus Omega-3.*

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%.

200%

Additional DHA and EPA (Omega 3 fatty acids) when feeding Purina® Layena® Plus Omega-3.*

*When fed a diet of Layena® Plus Omega-3 exclusively for at least 3 weeks. Based on large egg (50g). Results may vary with factors such as total diet and hen health. Compared to a typical egg that contains 65mg Omega-3 fatty acids.

What Should You Expect?



- **How much work?**
 - Time commitment for cleaning, feeding, egg-gathering
 - Monetary investment for birds, coop, feed, etc.
 - You may get more eggs than you need; consider a plan for the excess
 - Sell
 - Give away
 - Freeze for winter

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?**

If this is your first flock, check local ordinances and consider beginning with 3 to 6 chicks.

How Long Do Chickens Live?



Usually 5 to 12 years, and as long as 15

Hens can lay for 5 or more years, though egg production decreases after 3 years

According to Guinness World Records, the oldest living chicken (Muffy) is 22 years old

Meet the Breeds – Which is Right for You?

Classifications:

- **Egg-Laying Breeds**
- **Dual-Purpose Breeds**
(Laying & Meat)
- **Meat Breeds**
- **Bantam Breeds**
(Small size)
- **Show Breeds**



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**

Other Breeds

Silkie



Bantam
Many colors
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

Ameraucana

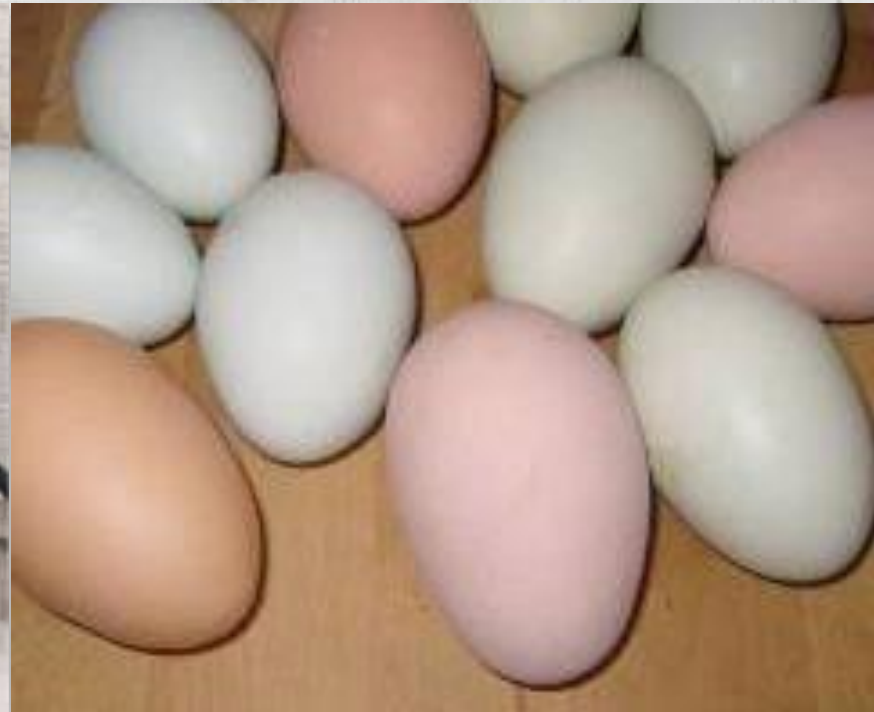


Lays eggs blue eggs

Birds can be many colors:

Black, Blue, Blue Wheaten, Brown Red, Buff, Silver, Wheaten and White

Easter Eggers



Lays eggs in colors varying from light blue to light green and shades of pink. Has characteristic cheek feather tufts.

Cold-tolerant Breeds

Cold-Tolerant Features

- Small comb
- Small wattle
- Heavy feathering
- Bearded
- Feathered legs
- Breed developed in a cold climate

Cold-Tolerant Breeds

Rocks
Wyandottes
Orpingtons
Brahmas
Cochins
Delaware
Rhode Island Red
Dominiques
Buckeyes
Araucana/Ameraucana
Silkies
Hamburgs

Heat-tolerant Breeds

Heat-Tolerant Features

- Large comb – Single
- Large wattle
- Finer feathering
- No beards or feathered legs
- Breed developed in a hot climate

Heat-Tolerant Breeds

Smaller breeds

Leghorns

Minorcas

Rhode Island Reds

New Hampshire Reds

Turkens

Barred Rocks

Other Poultry



Turkeys
Pheasants
Quail
Ducks
Geese

Getting Started & Management



Rhode Island Red Chicks

Getting Started with Chicks



- Purchase from a reputable hatchery or feed dealer
- Suggest chicks be vaccinated for Marek's Disease and Coccidiosis



Supplies to Get Started



- **Chicks**
- **Brooder**
- **Bedding**
- **Heat Lamp**
- **Waterer**
- **Feed**
- **Thermometer**
- **Cleaning Supplies**

Shelter

- **For Baby Chicks**
 - Brooder, indoors
- **For Adult Birds**
 - Coops (many types available)
 - Free Range during day, coop at night
- **Protection from Predators**



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")



Poultry theft

MOST WANTED

Don't let their cute looks fool you!



The POSSUM

Arrives at night
Can dig under the pen
Will kill an entire small flock



The FOX

Daylight sneak attack
Grab and run
Will return for seconds



The RACCOON

Arrives at night
Persistent and clever
Will find any opening
Can reach through chicken wire

Coyotes, hawks, bobcats & stray dogs can sometimes be the most destructive



Examples of Healthy Brooders



- Warmth
- Plenty of food
- Clean water
- Dry bedding
- Plenty of space

- Hatch to 6 weeks: Allow 1 – 2 sq. feet per chick
- 6 Weeks and Older: Allow 6 – 10 sq. feet per bird

What's Wrong with this Picture?



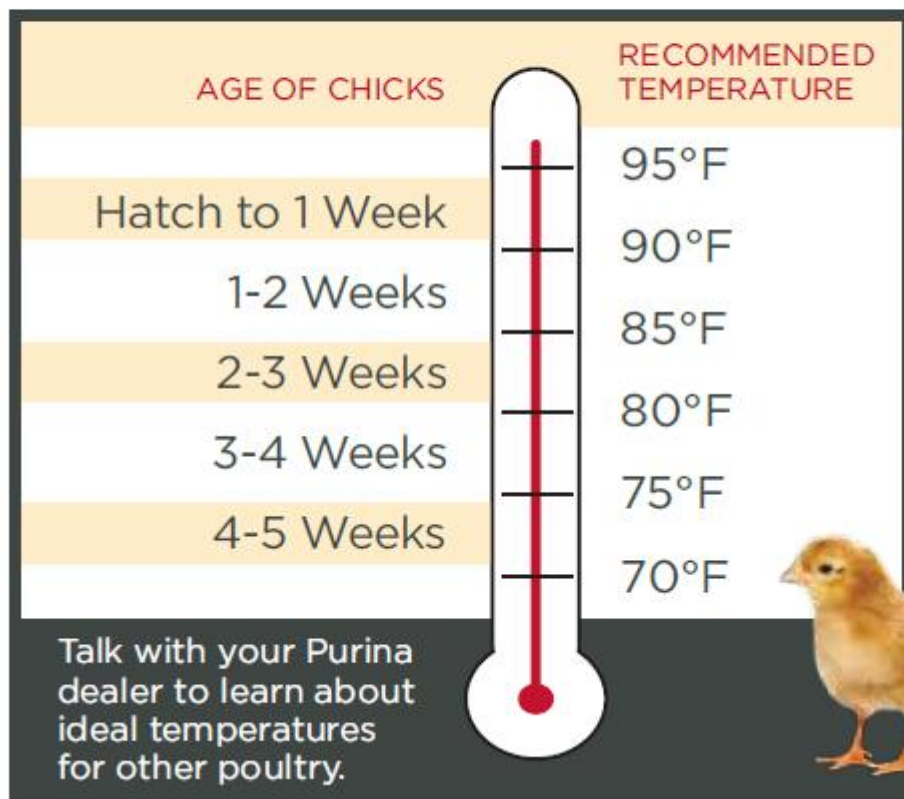
What's Wrong with this Picture?



Answer: Birds are too cold

New Chicks Temperature Chart

TEMPERATURE CHART FOR YOUR NEW CHICKS



Getting Started Right

Chicks never get over a poor start.

- If chickens can't drink, they won't eat and won't grow and/or develop strong immunity
- Chickens need to drink 2x what they eat. In the summer it may be 3 – 4x
- If you wouldn't drink their water, why should they?



Importance of Water



- Disinfect waterers prior to use – then weekly
- 10% mixture of bleach and water – rinse thoroughly!
- Use fresh (room temp) water – refresh daily
- Dip beaks to induce drinking with new chicks
- Elevate waterer after 1st week to keep clean
- Double water available capacity at 6 weeks
- Waterer should be set at level of chick's back to keep it clean

Tip: Layer pavers to elevate waterer as birds grow

When Can Chicks go outside?

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



What to Feed Layer Chicks



Purina® Premium Poultry Feed Start & Grow®

- Crumble form – easy intake for a fast start
- 18% protein for proper start
- Highly digestible protein - for muscle development and excellent feathering
- Marigold Extract – for brightly colored beaks, shanks and overall appearance
- Feed from hatch to lay (18-20 weeks)
- Medicated Option also available with Amprolium to prevent coccidiosis
- Excellent for layer chicks



Health Risks to Young Chicks

Intestinal Disease - Coccidiosis

- **Common disease of the intestines of young birds**
- **Caused by parasites (Cocci)**
- **Orally ingested through preening, eating off of the ground and water**
- **Parasites (cocci) enter intestinal cells, multiply, rupture the cells, cause intestinal damage**
- **Intestinal damage results in poor nutrient absorption**

Coccidiosis, continued

- **Symptoms: loose stool (sometimes with blood) birds look sick – sitting, droopy & ruffled feathers**
- **Primarily disease of young birds**
- **Older birds generally develop some immunity**
- **Feeding Purina Start & Grow Medicated Chick Feed with Amprolium is effective to help control coccidiosis**
 - **Not an antibiotic**
 - **Should not be fed if the birds are vaccinated against coccidiosis**
 - **Not a panacea for poor management!**

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

What is Amprolium?

Amprolium, continued.

- Some hatcheries vaccinate for coccidiosis
- **Young chicks that are vaccinated for coccidiosis should not be fed a feed containing Amprolium**
 - It prevents the vaccine from working
 - The chicken won't develop immunity from the vaccine
- If vaccinated chicks consume feed containing Amprolium
 - They need to continue being fed Amprolium until they are switched to layer feed, at which time they are old enough to have developed immunity

Benefits of Purina® Start & Grow®



SIMPLE INGREDIENTS

RECIPE HAS

No animal by-products or fillers added
No artificial preservatives added



BALANCED & COMPLETE

Made for chicks from hatch to first egg
Freshly-ground grains from North American farms
Fortified with vitamins, minerals and essential amino acids



SUPPORTS IMMUNE HEALTH

Prebiotics
Probiotics
Yeast



Other Starter Feeds

Purina® Premium Poultry Feed Flock Raiser®



- Crumble form – easy intake for a fast start
- 20% protein for meat & dual-purpose birds
- Highly digestible protein - for muscle development and excellent feathering
- Marigold Extract – for brightly colored beaks, shanks and overall appearance
- Excellent feed for meat chickens, ducks, and geese from hatch to market weight
- Can be fed to turkeys after 8 weeks
- Also available with Amprolium
- Great for all adult birds



© 2016 Purina Animal Health

© 2016 Purina Animal Health



PURINA

PREMIUM POULTRY FEED



DUCK FEED PELLETS

----- OPTIMUM NUTRITION FOR HEALTHY BIRDS -----
AND A STRONG START



SIMPLE INGREDIENTS

No artificial preservatives added



BALANCED & COMPLETE

Specifically formulated to meet the niacin requirements of growing and laying ducks (55 ppm or 27.27 mg/lb)




SUPPORTS IMMUNE HEALTH

Prebiotics and Probiotics

NET WT. 5 LB (2.27 KG)

PURINA

- 
- **BALANCED and COMPLETE-Specifically** formulated to meet the niacin requirements of growing and laying ducks.
 - **SUPPORTS IMMUNE HEALTH-Contains PREBIOTICS and PROBIOTICS.**
 - **19% PROTEIN**
 - **2.3% FAT**

Other Feeds



Purina® Premium Poultry Feed Layena®

- Pellet or Crumble for hens
- 16% protein
- Elevated levels of Calcium & Manganese for strong shells
- Not medicated
- Feed at 1st egg or at 18 weeks
- **DO NOT FEED TO BIRDS YOUNGER THAN 18 WEEKS**

Introducing Purina® Layena® with Oyster Strong™ System



Importance of Calcium

- The egg shell protects the egg and keeps it *fresh*
- An eggshell weighs about 5 grams
 - Of this, about 2 grams is CALCIUM!
 - That's **40%**!
- Average backyard hen lays 180 - 200 eggs per year
 - That's a lot of calcium...almost 1 pound of calcium

Why Oyster Strong™ System?

- What do backyard flock owners want?
 - Fresh, nutritious Eggs!
- How do we make sure they get eggs to their table?
 - Proper nutrition
 - Strong egg shells
- What can we do to make those shells as strong as possible?

Oyster Strong™ System

- Oyster shell



- Source of calcium



Why Oyster Shell?

- Shell strength!
- Larger particle size
- Produces strong shells when paired with limestone (a source of calcium)
- **#1 ingredient consumers wished was in their feed that wasn't already included!**



**TO SUPPORT
STRONG SHELLS**

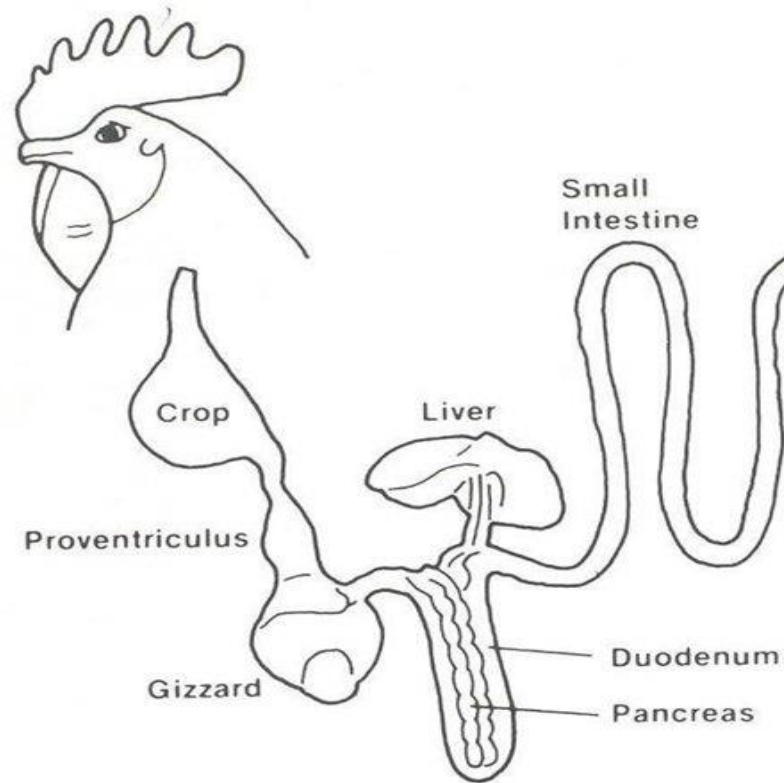
What's the Difference?



Passage rate through the bird is key

The “Bouncer”

- The gizzard
 - Muscle that grinds feed
 - Entrance to the small intestine is controlled by particle size
 - Larger particles must stay in the gizzard until they are small enough to pass



Egg Formation

- 24-hour cycle
 - Majority of eggs are laid in the morning
- First 6 hours – morning to early afternoon
 - Internal components are formed and assembled
 - Egg yolk, egg white formation, water added, membranes added
- Next 12 to 18 hours – afternoon to overnight
 - Rapid shell formation
 - Calcium requirement is high

Back to Oyster Shell

- Longer time in gizzard → longer time in the gut
- Calcium is slowly released into the small intestine
- Even when the bird is not eating

Benefits of Oyster Strong® System

- The oyster shell is incorporated into the pellet
- Oyster shell stays in the digestive tract longer
- **Our proprietary recipe of oyster shell along with limestone, minerals and vitamins such as Vitamin D provides calcium at night when the hen needs it most**
- Helps produce strong shell strength



Introducing Purina® Layena® with Oyster Strong™ System



Purina® Layena® Plus Omega-3

Feed to layers



- Each egg contains 250 mg Omega-3 when fed for at least 3 weeks
 - 50 mg Omega-3's in 56 g store-bought egg
- Formulated with Oyster Strong™ System for good production and strong egg shells
- Contains prebiotics and probiotics to support health
- Vegetarian formulation
 - **NO** added hormones or antibiotics

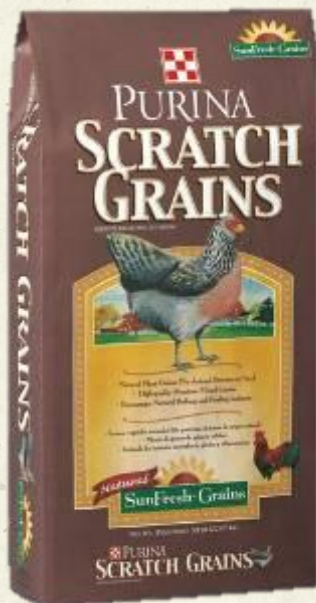


40 lb. bags



SunFresh® Recipe

Scratch® SunFresh® Recipe



- Blend of two
- Stimulates basic scratching and pecking instincts
- Use as a treat
- Should not be used as the sole diet for layers

 **PURINA**
A DIFFERENCE YOU CAN SEE™

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)



Purina® Organic

Purina® Organic Starter-Grower



- Proper calcium to phosphorus balance to support strong bones
- Highly digestible proteins to support muscle development
- Non-GMO
- Crumble only



Purina® Organic

Purina® Organic Layer Feed



- Rich in antioxidants, to support immune health
- Essential nutrients for nutritious eggs
- Non-GMO
- Available in a crumble or a pellet

Purina® Organic

Purina® Organic Scratch



- 3-grain scratch
- Encourages natural pecking and feeding behavior
- Non-GMO



- **BALANCED and COMPLETE NUTRITION-22% PROTEIN**
- **PREBIOTICS and PROBIOTICS- SUPPORTS DIGESTIVE and IMMUNE HEALTH**
- **SIMPLE INGREDIENTS- CONTAINS NO ANTIBIOTICS OR ADDED HORMONES.**

Bird Behavior



- Healthy, happy birds forage, peck and chatter
- Most active early morning, late afternoon
- Routinely take dust baths
- Preen feathers
- Appear alert, bright-eyed, inquisitive

Pecking Order

- Chickens have a social order
- One hen will be dominant
- Remaining hens will fall into an accepted order below the dominant hen
- Very stable structure until a bird is removed or new birds added; then order must be re-established, often physically





How do chickens handle the cold?

- Pretty well!
 - No scarf or boots required...
- Needs include:
 - Food
 - Water
 - Shelter
 - Clean bedding
 - Space to stretch the wings





Enjoy Fresh Eggs and Happy Chickens... Even in the Winter

- Increase feeding rates
- Prevent water from freezing
- Offer plenty of space for natural behaviors





WHAT TO WATCH FOR WHEN RAISING CHICKS

Concern: Pasty Butts

- **Caused by stress & changes in temperature**
- **Can cause serious illness and lead to death**
- **Treat by gently cleaning with warm soap and water and thoroughly drying the young chick**
- **May have to repeat for several days until the chick grows out of this condition**



Concern: Feather-Picking

Can be caused by:

- Overcrowding (stressful, leads to competition for food and water)
- Overheating
- Boredom & or longer daylight hours
- Very bright lighting
- Poor nutrition - lack of protein
- Hormones kicking in at sexual maturity
- Mixing birds

Corrective measures:

- More space
- Better ventilation
- Less light/dimmer light
- More feed, water
- Barriers & places to hide
- Small handfuls of hay

Poisonous Foods for Chickens

- Chocolate (Dark, light, milk, white chocolate are all included)
- Apple Seeds
- Peach, Cherry, Apricot, Nectarines and Pear pits (The fleshy part of the fruit is fine)
- Avocado (The whole fruit, including guacamole)
- Onions
- Alcohol
- Tomato plant, including leaves and stem (The fruit is fine as long as it is ripe)
- Caffeine (Which is found in most Pop drinks, Energy drinks and coffee)
- Salt (So yes that means no McDonald French fries)
- Raw Beans (ex: 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)
- Tobacco (Inspect your yard for any cigarette butts that may have blown in)

Do Dogs & Cats Play Well with Chickens?

Very dependent on individuals

- herding breeds of dogs have strong instinct to “move” the birds, sometimes to excess
- some dogs may learn to guard the birds
- cats hunt, ignore, or get along with chickens
- some cats and dogs may even be afraid!



Health & Sanitation

The goal of biosecurity is to:

- Reduce disease transmission
- Protect birds & protect family!



Practicing Good BioSecurity

Sanitation

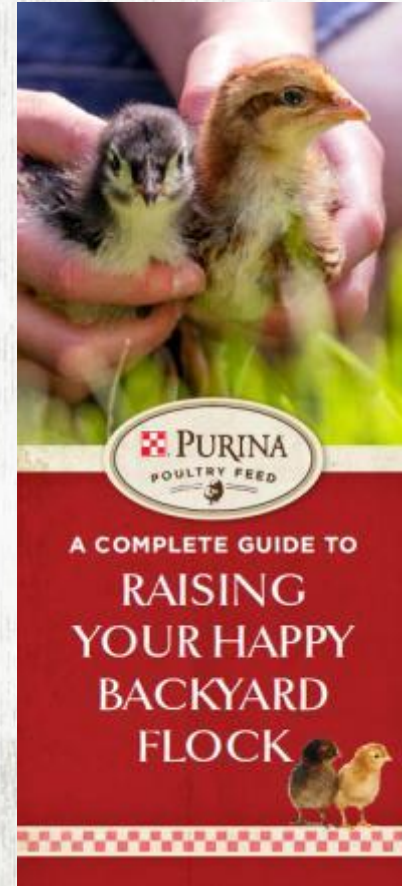
- **Clean coop and equipment**
 - Clean coop and remove dirty litter on a regular basis
 - Clean dirt from materials and wash with a disinfectant – 10% solution of water and bleach is effective. Rinse thoroughly
- **Wash hands after handling birds, eggs, etc.**
- **Gather eggs often**
- **Remove damp or moist litter or litter that is too dry and dusty**
- **Wear clean clothes, including clean shoes**



More Chicken Resources

What resources are there to learn more?

- www.purinamills.com/chicken-feed
- Hatchery Websites
 - McMurray (www.mcmurrayhatchery.com)
 - Ideal (www.ideal-poultry.com)
 - Privett (www.privetthatchery.com)
 - Mt. Healthy (www.mthealthy.com)
 - Ridgeway (www.ridgewayhatchery.com)
- Other Websites
 - www.mypetchicken.com
 - www.poultryone.com
 - www.backyardchickens.com
 - <https://www.youtube.com/watch?v=PedajVADLGw>



A Chicken Care Checklist

- **Daily – replenish feed & water**
 - clean bedding
 - check temperature
- **Weekly – disinfect feeders, waterers**
 - lower temperature 5°
 - adjust height of feeders, waterers
- **Monthly – evaluate space allotment**
 - Waterfowl may have swimming water at 4 weeks
 - Follow recommendations for changing feeds as birds mature

Can Chickens Fly?



Yes!

- They can escape and are more susceptible to predators
- Clip primary feathers on one wing to prohibit flight

Why Aren't They Eating?

- They may not have enough clean water
- The water could be directly under the heat lamp – too hot
- The water may be dirty
- The water may be frozen
- Feeder may have residual old feed that is spoiling
- It may be too hot and/or humid outside

Keep it fresh and clean. Add more space/ventilation.

Supplement layers with oyster shell during hot periods when they eat less.

Why Aren't They Eating?

- **Chickens may be sick**
 - **Isolate sick chickens, and keep them away from others**
 - **Provide warmth, water and feed**
 - **Contact a veterinarian**

Why Won't They Lay?

- Hens begin to lay at 16 – 20 weeks
- 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.
- If birds don't have clean water they will not eat and will not lay.
- Birds are too hot to eat enough

Why Won't the Hens Lay?

Hens need 16 hours of light to lay optimally:

- **In the fall keep light to 16 hours by adding a light and placing it on a timer**
- **Low intensity – 40 watt bulb. Just need enough light to see surroundings**
- **Do not keep lights on 24 hours**

What is Molting?

A natural process in which feathers are lost and replaced

- **Can occur at any time but usually stimulated by decreasing day length in the fall**
- **Will re-occur each fall. Providing 16 hours of light may delay its onset**
- **Lasts 8 – 16 weeks; no eggs are laid**
- **Jump-starts egg production**
- **Allows birds to refresh and rejuvenate!**



Feather loss moves from front to back

Do Chickens Need Grit?

- **Not needed for chickens in cages because they eat a highly digestible diet**
- **Backyard chickens eat a variety of coarse foods and unground materials.**
- **Grit is helpful in digestion of coarse food particles**
- **Birds often eat very small stones for this purpose**

Why Do Hens Go Broody?

- **It's a natural tendency for a hen to sit on her nest of eggs to hatch chicks**
- **Breed-specific – Cochins & Silkies are champions**
- **Reduce broodiness by:**
 - **Collecting eggs more often**
 - **Locking hen out of her nest**

How Does Egg Eating Start?

Hens accidentally step on the egg and break it, then taste it and like it

There isn't enough nesting material to protect eggs

Eggs are in the nest too long, exposed to traffic

Shells are too thin

How to Correct Egg Eating?

- Gather eggs frequently
2 – 3 times per day
- Feed a complete feed like
Purina® Premium Poultry Feeds
with calcium
- Add more nesting material
- Cull problem birds



How to Add Birds to a Flock

- **Never mix young birds with old – high risk of disease and cannibalism for the young birds**
- **Wait until the younger birds are fully grown and the same size.**
- **Try to add a number of birds at the same time to avoid the dominant hens picking on one or two newbie's**
- **All new birds should be quarantined in a separate room for 30 days to make sure they are healthy and free of disease**



Biosecurity:

The Key To Keeping Your Birds Healthy



Definition of Biosecurity: procedures intended to protect against disease



**You
are the best
protection
your birds have.**

1. Keep Your Distance.



1. Restrict visitor access to your birds. Visitors may unknowingly bring disease.
2. Do not let domestic birds have access to areas wild birds use, including ponds or standing water.

2. Keep It Clean.



1. Use dedicated footwear and clothing when working with your flock.
2. Wash hands before and after working with your flock.
3. Keep feed pans, water containers and other equipment clean. Clean out manure regularly.

3. Don't Haul Disease Home.



1. Buy birds from reputable sources.
2. Quarantine any new birds before adding into an established flock.

4. Don't Borrow Disease From Your Neighbor.



Thoroughly clean and disinfect any borrowed item before using it with your flock.

5. Know the Warning Signs of Infectious Bird Diseases.



1. Sudden increase in deaths, with no sign of predator attack
2. Sneezing, coughing, or trouble breathing
3. Diarrhea
4. Lack of energy, poor appetite
5. Discolored wattles, comb or legs

6. Report Sick Birds.



Call **1-866-536-7593** and you will be put in touch with a local regulatory veterinarian.

There is no cost for an investigation, if one is needed.

Wash your hands before
and after coming in
contact with poultry



Let's keep our
poultry healthy together
aphis.usda.gov



Thank You!

