





# My first year with chickens

A week-by-week guide to a happy, healthy flock





# Welcome to raising chickens

Congratulations on your new chicks! It's time to bring them home and quickly fall in love.

This year will be filled with many milestones for your family to celebrate—from watching your chicks grow and gain their feathers to building a coop together and then celebrating your first farm fresh egg. You are in for a year of many firsts—and, most excitingly, a year of fun!

Raising backyard chickens is especially exciting when you have a partner in the process. That's why we created this guide. Keep this book handy as your chicks grow. You can simply flip to the pages that match your chicks' age for quick tips on what to do each week.

We learned many of these tips from our own backyard coops on our farm in Missouri. Our Ph.D. nutritionists, feed formulators and flock caregivers work with our backyard chickens each day. For us, life is just better with chickens.

We love spending time with our flock and hope you will too. If you have any questions as you go, please connect with us online or stop by your local Purina® retailer. We are happy to be with you each step of the way.

Enjoy the journey!
Your friends at Purina

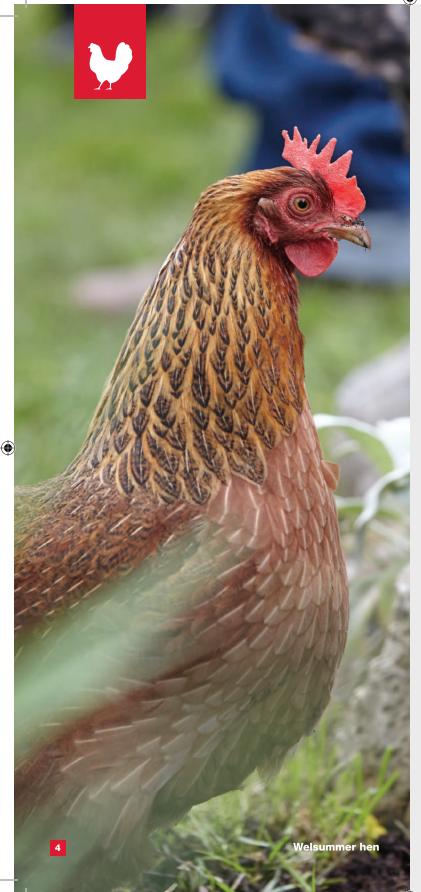






www.purinamills.com/chicken-feed





# Your year in a page

Before chickens: What to do  City rules, breed selection	6
Before chickens: What you'll need Supply checklist, starter feed selection	8
Setting up Brooder guide	12
Week 1: Welcoming chicks home	14
Weeks 2–3: Keep the growing going	16
Week 3: Prepare the coop  Coop location, types of coops, building considerations	18
Weeks 4–5: The teenage stage Gender identification, feather changes	22
Weeks 6-8: It's coop time  Transitioning from brooder to coop	24
Weeks 9-14: A time of exploration Free-ranging, dust bath DIY, nest boxes	26
Weeks 15–17: Egg-ticipation Choosing a layer feed	28
Week 18: Welcome to adulthood  The first egg, egg gathering, storage	30
Mature hens: It's egg-laying time Egg goals, treats, lighting, cold weather care	32
Year two and beyond Introducing new birds, molt, retirement	36
Other fowl and mixed flocks	38
Stay connected	39





### **Before chickens:**

### Make sure chickens are allowed.

Before buying your first chicks, make sure they're allowed where you live. Many townships, villages and cities have embraced the benefits of backyard flocks; however, chicken keeping is not yet permitted everywhere. Talk with your city representatives to learn of any chicken ordinances and local laws. Ask for a file to keep on hand. Then, share the good news with your neighbors.

# Questions to ask your city officials before buying chickens

- ✓ How many birds are allowed?
- ✓ Are both hens and roosters acceptable?
- Are there rules on where the coop can be built?
- What do I need from my neighbors before starting?
- ✓ Do I need a permit to raise chickens and/or build a coop?
- ✓ Who can I contact if I have to unexpectedly part ways with my chickens?

Think about where you'll keep your chickens once they are grown. Each bird will need 4 square feet of indoor space and 5–10 square feet of outdoor space when full-grown. See pages 18–21 for coop building tips.

### Determine the number of birds you'd like.

The number and gender of birds in your flock hinges on your local ordinances and flock goals. Remember that young chicks grow into full-grown birds. Create a budget for: the time you can spend with your flock, bird housing needs, a plan for egg collection and use, and what you'll do with the birds when they retire. Then start small with a flock of 4 to 6 chicks.

### Choose your breed.

There are hundreds of backyard chicken breeds. Some have fancy, colorful feathers while others can produce up to 300 farm fresh eggs each year. With a match for everyone, the fun part is selecting the breed that's right for you.

To pick your perfect poultry pal, outline your flock goals and climate. Will you be raising chickens for eggs, meat, show or pets? And, do you live in an area where it gets hot or cold?

A few popular chicken breed choices are:

Egg Layers				
	Ancona, Blue Andalusian, Campine, White Leghorn			
	Australorp, Orpington, Plymouth Barred Rock, Rhode Island Red, Susse			
	Ameraucana, Araucana, Cream Legbar			
	Marans, Penedesenca			
	Barnevelder, Welsummer			
	Easter Eggers, Olive Eggers, Favaucana			
<b>Dual-Purpose</b>	Rock, Jersey Giant, Sussex, Wyandotte			
Meat Birds	Cornish Rock, Red Broiler, New Hampshire			
Heat-Tolerant	Ameraucana, Leghorn, Minorca, Rhode Island Red, Turken			
Cold-Tolerant	Araucana, Australorp, Minorca, Orpington, Barred Rock, Wyandotte			

P

Visit Purina Poultry on Pinterest for quick facts along with hen and egg photos of popular backyard breeds.







### What you'll need:

Now that you know the breed for you, it's shopping time! The most important starter supplies are for the chicks' first home, called a brooder. Bring this checklist to your local Purina® retailer to purchase supplies to keep your chicks comfortable.

Plan for your chicks' adult home as well. Chicks will move to the chicken coop at 6–8 weeks. Find more information about chicken coops on pages 18–21.

### **Checklist for new chicks**

- ☐ Safe, clean, draft-free room or building
- ☐ Heat lamps and/or brooder stove
- ☐ Litter and/or shavings (pine wood shavings ideal)
- ☐ Brooder guard (circular and expandable, 3-4 sq.ft/chick)
- ☐ Feeders (4 in./chick)
- ☐ Waterers (One qt. waterer/12 chicks)
- ☐ Sanitizing solution
- □ Cleaning brushes
- ☐ Rake
- ☐ Pitchfork or shovel (for large areas)
- ☐ Egg flats or shallow pans (Use first, then transition to feeders)
- ☐ 25-watt incandescent or equivalent CFL or LED light bulbs
- □ Purina<sup>®</sup> Chick Strong<sup>™</sup> starter-grower feed
- ☐ Thermometer

# What to ask when getting new chicks

- ☐ Right breed for me?
- ☐ Male of female?
- □ Vaccinated for coccidiosis?
- ☐ When should I switch to a layer feed?

### **Purchasing chicks:**

Make sure chicks are from a credible U.S. Pullorum-Typhoid Clean hatchery that vaccinates chicks for Marek's Disease or a hatchery that participates in the NPIP (National Poultry Improvement Plan) program.

You may be able to pick up chicks at your local Purina® retailer during Purina® Chick Days. You can also order chicks from a hatchery online or from a breeder. When purchasing, be sure to ask the correct questions, including: breed, gender and if the chicks are vaccinated for Marek's disease and coccidiosis.

### Choosing a complete feeding program:

Your flock's feed will play a big role in their early growth, long-term health and the quality of eggs they produce. Map out a complete feeding program in advance. You will need one complete starter-grower feed for baby and growing chicks and one complete layer feed for when your birds turn 18 weeks old.

For both stages, look for a complete feed that is research-proven and made to match your flock goals. The complete feed should make up at least 90% of your bird's diet, so it should include all the nutrients they need at the correct levels with no need to add any supplements.

See the next page for tips on selecting a startergrower feed and pages 24–25 for pointers on choosing a complete layer feed.

#### For under 18 weeks

Pick one starter feed:



### For over 18 weeks

Pick one layer feed:













### **Choosing a starter-grower feed:**

To provide all the nutrition chicks need for a strong, healthy start and a lifetime of success, look for a Purina® Chick Strong™ starter-grower feed.

Purina® Chick Strong™ starter-grower feeds have everything chicks need without a need to supplement, including: 18 percent protein to support early chick growth, vitamins and minerals for development and ingredients such as prebiotics and probiotics to support chick health.

# What to look for in a starter-grower feed

### 18% protein, 1.25% calcium

Bone and body growth

## Prebiotics & probiotics



# Amino acids, like lysine and methionine

Skeletal, muscle and feather development

## Marigold extract

Brightly colored beaks, feet, legs and overall appearance

### Calcium, phosphorous & trace minerals

Bone strength

### Vitamins A, D, E, K and B

Overall health and growth



Learn more about each starter-grower feed at www.PurinaMills.com/chicken-feed

### 10

 $\bigoplus$ 

### **Choosing a starter feed**



Medicated vs. Non-medicated: Complete starter feeds come in two different formulas: medicated (with amprolium, this is not an antibiotic) or non-medicated. Feed a medicated starter feed to chicks not vaccinated for coccidiosis and a non-medicated starter feed to chicks who were vaccinated for the disease. If you are unsure that the chicks were vaccinated, then choose the medicated starter feed. Do not switch between medicated and non-medicated starter feeds, continue with the same feed until you transition to a layer feed.

### **Ducks, geese and mixed flocks:**

For ducks, geese, and other non-laying poultry, feed Purina® Flock Raiser® crumbles or Purina® Duck Feed from day 1 through





adulthood. When the ducks and geese begin to lay eggs you can continue to feed Purina® Flock Raiser® or Purina® Duck Feed but provide supplemental oyster shell so hens get the calcium they need. Another option is Purina® Game Bird Layena®. Be sure to offer the males in the flock Purina® Flock Raiser® or Purina® Duck Feed if you are feeding a layer feed. When hens stop laying eggs for the season, return them to Purina® Flock Raiser or Purina® Duck Feed.





## **Setting up the brooder**

The chicks are almost here! Prepare by setting up a brooder at least 24 hours in advance.

- Disinfect all materials prior to use. Choose a
  disinfectant that is safe for animals and doesn't
  leave a residual film. A mixture of 10 percent
  bleach and 90 percent water can work well.
  Rinse thoroughly. Keep disinfectants handy so
  you can clean materials weekly.
- 2. Place your brooder in an area that is warm, draft-free and near electricity.
- Set up your brooder. Provide at least 3 to 4 square feet per chick in a brooder that is circular and expandable. Avoid having square corners as chicks could get trapped.
- 4. Add absorbent wood shavings to the floor of the brooder, 3 to 4 inches deep, to keep the area dry and odor free. Do not use cedar shavings or other types of shavings that have a strong odor. Remove wet bedding daily, especially around waterers.
- 5. Assemble a heat lamp or radiant heater about 20 inches above the bedding in the center of the brooder. Provide 2.5 to 3 feet between the lamp and the guard walls so chicks can cool down if needed. The temperature under the heat lamp should be 95° F on day one. Once chicks arrive, you will adjust temperature each week.
- 6. Place starter feeders in the brooder. Provide 4 linear inches of feeder space per bird. Start with clean egg cartons or slips of paper as feeders for easy access. Have low-lying or trough feeders on hand for day two when you will transition from the starter feeders to your everyday feeders. Feed should be available to the chicks at all times.





- Place your bag of complete starter feed in a place where it will stay dry, at room temperature and away from rodents.
- 8. For every 25 chicks, fill two 1-quart waterers with water and place in the brooder. Be sure to place the waterers away from the heat lamp. The first thing you should do when chicks arrive is show them where water is by dipping their beaks into their water.



Visit your local Purina® retailer to see if they will have chicks available for purchase in-store.







# Week 1: Welcoming chicks home

Congratulations! Backyard chickens are now a part of your family. Your happy, healthy flock starts today. Now that your chicks are home, the main elements they need are: warmth, water and feed.

**Warmth:** Ensure the heat lamp or radiant heater you set up yesterday is working properly. Use a thermometer to confirm the brooder temperature is 95° F at chick level. Watch chicks closely for the first few hours to make sure the heat lamp isn't too close or too far away. If chicks gather around the perimeter, they're too hot. If they huddle under the heat lamp, they're too cold.

**Water:** Without a mother hen to teach chicks to drink, it's a good idea for you to show them. Dip each chick's beak into the water that you set up yesterday. Monitor the group to confirm all chicks are drinking within the first couple of hours.

**Feed:** Provide a complete feed with at least 18 percent protein to provide the necessary amino acids to support early growth. The feed should also include prebiotics and probiotics for immune health and vitamins and minerals to support bone health.

- For organic chicks: Purina® Organic Starter-Grower
- For layer chicks that have been vaccinated for coccidiosis: Purina<sup>®</sup> Non-medicated Start & Grow<sup>®</sup> feed
- For layer chicks that have not been vaccinated for coccidiosis or if you are unsure whether they were vaccinated: Purina<sup>®</sup> Medicated Start & Grow<sup>®</sup> feed
- For meat birds and mixed flocks: Purina® Flock Raiser® crumbles, Purina® Duck Feed or Purina® Meat Bird Feed.

Place multiple feeders with starter-grower feed in the brooder. During the first few days, you can also place clean egg flats, shallow pans or simple squares of paper with feed in or on them to provide more options for the chicks to find feed. These extra feeders can be removed once the birds have learned to eat from the regular feeders (usually within a day or two).

**Consistent lighting:** Provide 18–22 hours of light for the first week. Reduce the day length to 12 hours of light until the birds are 10 weeks old. Add 15 minutes of light each week thereafter until a 16-hour day length is achieved. This will prepare the birds for egg laying. Use one 25-watt bulb for each 100 square feet (10' x 10') of floor space.

**Bird handling:** Build a bond with your chicks by gently holding and petting them each day. Spending time together can imprint chicks and help them form family-friendly personalities. Be sure to wash your hands with soap and water before and after handling the chicks.



Buff Orpington chick, Barred Rock chick



White Crested Black Polish chick



<del>(</del>

Sign-up for e-tips as your chicks grow by visiting www.PurinaMills.com/chicken-feed







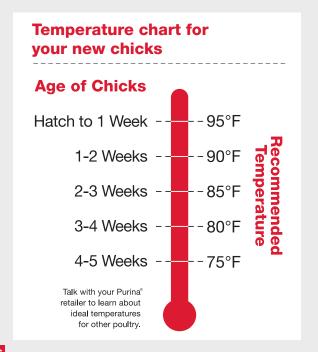
## Week 2–3: Keep the growing going

Your chicks are growing—they are now two weeks old! You're probably noticing they are very social and can provide hours of entertainment. Each day, you will get to know their unique quirks and personalities.

Things to do this week:

**Provide light:** After the first week, reduce the day length to 10-12 hours per day.

**Adjust temperature:** The biggest change you'll need to make this week is temperature. Older chicks do not need it to be quite as warm. Starting at week two, lower the temperature by 5° each week until you reach a minimum of 70°F at week six. If using a radiant heater, adjust the heater height to account for the growth of the birds.



**Remove brooder guard:** Chicks should be able to find the heat source by day ten. At that time, you can remove the inside brooder guard if you have one.

Move feeders and waterers: After the brooder guard is taken out, move the feeders and waterers farther from the heat source. This will give chicks more space for exploring as they become more active. It can also help keep the feeders and waterers cleaner and from being heated by the heat lamp. Raise the feeders and waterers until they are at back height of the growing birds.

**Remove training feeders:** If you haven't done so by now, remove the training feeders. Make sure chicks always have complete starter feed and water. The level of feed in the feeders can be decreased a little each week until they remain at least half full. This will help reduce the amount of feed waste.

**Keep it clean:** Remove any foreign material in the feeders and waters on a daily basis. Wash the waterers once a week with soap and water. Keep bedding dry by removing wet and soiled litter each day and replacing it with clean, dry bedding.

**Listen to your chicks:** When everything is right, chicks will emit a soft cheeping. A chick that is stressed will have a shrill, higher pitched or very rapid cheep. Translate this as a call for help and look for the problem. Stress could be caused by chicks being too hot or cold, wet litter or they may be hungry



f

Visit Purina Poultry on Facebook to connect with other chicken enthusiasts and for chick-focused tips.



(





# Week 3: Prepare the coop

Your chicks are changing each day and are likely filled with personality. In addition to the steps provided on the previous page, now is a perfect time to plan ahead.

Around week six, chicks will trade in the brooder for the coop. Be ready in advance by deciding on a location and design of their new home.

### **Coop location**

Everybody loves a little "chicken TV" so be sure to place your coop near a window. This way, you can keep an eye on the flock when they're playing in the yard.

Beyond a window view, answer these questions while location scouting:

- Are there rules about where the coop can be built? Some cities have regulations about distance to neighbors, buildings, roads or property lines.
- 2. Is the area protected from stressors including heavy sun, wind, predators and loud noises?
- Is the spot flat? A flat area simplifies the process.
- 4. Does the area have good drainage?
- 5. Does the coop location provide both sun and shade for the birds?
- 6. Is the location close to utilities, including water, electricity and feed storage?

### Coop design options

Once you've determined a location, consider your chicken coop design—we call this Coopitecture™. There are several types of Coopitecture™, so your first design decision is to choose a type of structure. Based on available space, selected breeds and your backyard goals, choose the type of housing that works best for you.

### **Chicken Tractors**



Chicken tractors are best suited for small flocks that live in big yards. The structures are built similarly to a wheelbarrow, with two wheels and handles for mobility. Routinely moving

the structure helps birds explore new areas, control insects and fertilize the lawn.

### **Chicken Wagons**



Chicken wagons work well for those wanting a large, movable coop; for instance, if you have rotational pastures and a large flock. The wagons are on four wheels and include a ramp

for birds to enter. The wagon can easily be moved to different paddocks or various parts of the yard.

### **Chicken Coops**



Chicken sheds, or stationery coops with runs, are the most common form of coops. They work well in both rural and urban areas because they require minimal space and provide

both outdoor and indoor access. This type of coop is easily maintained and the easiest to predator proof.



<del>(</del>

Check out our Coopitecture™ board on Pinterest for coop inspiration!









### **Coop considerations**

Once you've determined your coop location and the design type, it's time to map out the logistics. Some flock raisers like to build their own coops with blueprints while others work with builders or purchase prebuilt coops.

When we built our 12 coops at the Purina Animal Nutrition Center, we worked with a coop builder. We focused on safety and comfort for our birds and convenience for our flock care team.



Here are a few points we kept in mind:

**Space:** Each bird should have indoor and outdoor access. Provide at least 4 square feet of indoor space and 5–10 square feet of outdoor space per bird. Account for additional space in case you add more birds to your flock later.

**Access:** The coop should be an enjoyable space for your family. Keep in mind your own height. Build the coop tall enough so that you can easily enter to take care of the flock. It's best if you can stand inside.

**Ventilation:** Fresh air is essential during all seasons. The coop should have windows on all four sides and ventilation holes at the top. Even if you live in a cold climate, don't completely seal the coop from fresh air as ammonia buildup can be hazardous to birds.

**Electrical outlets:** You may want electricity as birds get older. Outlets can be used to power additional lighting and automatic light timers as days get shorter, water heaters during the winter or fans during the summer. We suggest lighting incandescent 40-watt or LED 9-to 13-watt bulb per 100 square feet of coop space.

**Predator-proof:** Use galvanized welded wire or hardware cloth instead of chicken wire. Chicken wire can stretch and allow predators access to the run. If your windows and doors have traditional mesh screening, add a layer of hardware cloth to those openings to prevent predators from getting in the coop. The opening in the wire mesh shouldn't be larger than ½" x ½".

Bury galvanized wire underground to prevent burrowing predators. To do this, bury wire 6 inches underground, parallel to the walls of the coop and run. Then, bend the wire 90 degrees to run the wire out from the coop parallel to the ground for 12 inches. Finally, cover the wire with dirt. If a predator tries to dig under the coop or run, they hit the buried welded wire and stop digging.



An area for feed and water: Designate areas for feeders and waterers. It's a good practice to place the feeders and waterers in the run, so chickens eat outside and sleep inside. Don't forget about feed storage. You should have a place that keeps feed dry and away from rodents.

**Roosts:** Provide at least 1 foot of roosting space per bird for sleeping. Chickens like to sleep off the ground. A board that measures 2"x4", with the wide edge facing up can work well for a roost. Consider roosts for laying pullets and hens but avoid them for meat birds.

**Nests:** Build nesting boxes with easy access for egg removal. A general rule is to provide one 1-foot cube nest box for every four or five hens. The hens will take turns using the boxes. Keep the nests up off the floor in the darkest corner of the coop. On our farm, we built nesting boxes with outdoor access so that we can collect eggs without disturbing the hens.



See videos that feature our 12 backyard coops by visiting PurinaMillsTV on YouTube.











## Weeks 4–5: The teenage stage

Your chicks are now in the 'tween' stage! In chicken years, birds are teenagers around 4 to 5 weeks old.

Soon you will notice several changes that include new primary feathers and a developing pecking order. Your birds are also now referred to differently. Pullet is the term for a teenage female while a young male chicken is called a cockerel.

Things to do this week:

**Watch them change:** Your chicks' fluff should slowly disappear as mature feathers grow. Chickens will usually be fully feathered by 5 to 6 weeks of age. Their wattles and combs should also start growing larger and becoming a deeper red.

**Identify the gender:** At 5 to 7 weeks, you will be able to distinguish males from females. As compared to pullets, the combs and wattles of males often develop earlier and are usually larger. Females are typically smaller in size than males. If you are still uncertain of gender, you'll be sure who the males are when you hear them attempting to crow.

**Keep them in the brooder:** Keep chicks in the brooder until week 6. Prevent crowding by ensuring 1–2 square feet per bird. The temperature should now be between 70–75°F to help them get ready to move outside. Your chicks require less heat because they are now larger and can better regulate their body temperature.

Adjust feeders/waterers: Additional feeders and waterers may be needed so all chicks can eat and drink at the same time. When evaluating feeders also look at space. Your chicks are taller, so their feeders should be as well. Place a container under the bottom of the feeder to raise the feeders to the height of the bird's back while standing. This will help keep litter and curious chicks out of the feed and water.

**Provide energy:** Continue to offer a complete starter-grower feed, like Purina® Start & Grow®, Purina® Flock Raiser® or Purina® Organic Starter-Grower, to provide the added energy needed. Chicks should have access to free-choice starter-grower feed until week 18.

Keep an eye on the pecking order: As chicks mature, they naturally establish a pecking order. This determines each chick's social position in the flock. The pecking order will decide who eats and drinks first and ultimately who "rules the roost." Although pecking order establishment is normal, be watchful for excessive pecking in chicks as it may indicate a more serious problem.

Maintain good sanitation practices: Bigger chicks make bigger messes, so you will need to be more diligent about keeping the brooder clean. Keep a close eye on your chicks for signs of possible health issues. Chicks that are sick may appear lethargic or their feathers will be fluffed out from their body, have diarrhea or be unwilling to eat. Healthy chicks will eat and drink often and actively play as a group.



<del>(</del>

Teenage chicks can look pretty comical.
Visit us on Facebook to see photos of other teenage birds.









# Weeks 6-8: It's coop time

Between weeks 6 and 8, your chicks will experience rapid growth and will need twice the floor space they started with. It's time to start the transition to the coop.

Here are a few tips to make the transition smooth:

Remove the supplemental heat: At 6 weeks old, birds are fully feathered and can tolerate cooler temperatures. Birds can easily tolerate temperatures into the 50's at this age, and cold-tolerant breeds can tolerate temperatures into the 40's. Give birds a few days to adjust to the colder temperatures if they have been in a warm space prior to going outside.

**Move brooder into the coop:** Maintain consistency by carrying the brooder outside and placing it inside the coop. You can also use a portable pet carrier. Set the brooder or carrier in the coop, so chicks can take in their new surroundings.

Release chicks inside the coop: Open the brooder or carrier to allow chicks to explore the coop. Make sure you show the birds where the feed and water are. If you are confining the birds to one part of the coop, then be sure that they have access to feed and water.

**Allowing chicks to free range:** If you are going to let your birds wander outside of the safety of their coop and run, then they should be supervised until they are acclimated to their surroundings. Remember they are still easy prey for predators.

**Keep it clean:** Sanitation is still important. Remove manure, wet litter and old feed waste daily. Disinfect feeders and waterers weekly and occasionally clean and sanitize the coop with warm water and an appropriate cleanser.

Keep young birds separate from older birds until they reach the same size. This allows you to monitor the birds closely, prevent fighting and any possible illness from spreading to either group.

One way to help both groups acclimate to each other is to place the two groups in side-by-side runs. Place the groups next to one another for one week to help the birds become familiar with each other. This can also alert you to potential personality clashes that may be difficult to resolve.

Another strategy is to let the new group free-range first and then introduce the existing flock. This places the focus on new surroundings rather than new flock members.

In either case, add additional feeders and waterers to the run to prevent the new birds from being deterred from eating and drinking. During the introduction period, a new pecking order will be established.

### Watch the group closely after the introduction.

Content birds will continue their routines without changes in personality or feed consumption.

Consistency is especially important during transitions, so continue providing free-choice, high-quality, complete feed and fresh water.



Dominique



<del>(</del>

Have you signed up for our e-tips? Sign-up today at www.PurinaMills.com/chicken-feed







## Weeks 9–14: A time of exploration

This is a time for your family to really get to know each bird's personality. During this time, birds are naturally inquisitive, will have high energy levels and enjoy exploring the backyard.

As you've done since day one, spend quality time with your flock to continue forming a bond. Help them grow strong and prepare for their first egg by keeping the coop and backyard comfortable.

Things to do during this time:

**Allow chickens to explore.** You can now start letting your chickens explore the backyard during the day. Before opening the coop, offer the flock their complete starter-grower feed and fresh water. Make sure they eat their breakfast before foraging in the yard for dessert. A complete feed should comprise at least 90 percent of their overall diet.

Train chickens to return to the coop. Growing birds will gain more confidence each day and start to explore new places. Train them to come back to the coop by offering treats and using vocal cues. Start with small periods of supervised time in the garden and work up to longer periods. Maintain a routine with how and when you let the chickens free-range.

### Make your yard and garden chicken-friendly.

Chickens are a great way to help control insects and weeds while providing natural fertilizer. Be aware that their foraging isn't limited to the plants you don't like. Protect your garden and flower beds with fencing. When harvest is over, you can then open the gates and let the chickens enjoy.

**Keep them hydrated.** For every seven birds, place one gallon of clean, cool water in a shaded area. Check water levels in the morning and evening and refill as necessary. Birds don't sweat, which makes drinking water important to help cool the birds' body temperatures. In warm temperatures, chickens will drink up to twice as much water as normal. If chickens do not have quality water, they are less likely to eat, which could stunt growth. Wash waterers weekly with a mixture of 10 percent bleach and 90 percent water. Rinse thoroughly.

**Prepare for the first egg.** Your first farm fresh egg is just around the corner, often happening at week 18. A rooster is not necessary for egg production. Prepare by setting up nesting boxes and choosing a complete layer feed.

**Set-up nesting boxes.** Provide at least one 1-foot cube nest box for every four hens. The hens will take turns using the boxes. Line each nest box with a thick layer of straw or other bedding to cushion the eggs and keep them clean and unbroken. Keep the nests up off the floor in the darkest corner of the coop. Be sure all the nest areas have a uniform environment. If the hens decide one nest is preferable to the others, they may all try to use that nest.

**Offer a dust bath.** Chickens take a different type of bath than you might expect. They often dig a shallow hole, loosen up all the dirt and then cover themselves in it. Dust baths can also prevent external parasites such as mites and lice.

### **Chicken Dust Bath DIY**

- Find a container at least 12" deep, 15" wide and 24" long.
- Combine an equal blend of sand, wood ash and natural soil.
- Watch your birds roll around in the bath and clean themselves!





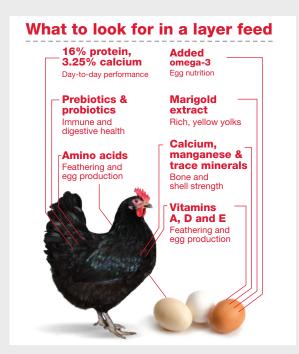




# Weeks 15–17: Egg-ticipation

Your pullets are nearing maturity and the first egg is just around the corner. Egg-producing pullets will typically begin laying at about 18 to 20 weeks and will need to be switched to a complete layer feed. Choose a layer feed today so you're ready for the transition at week 18.

Laying hens require different nutrients to stay healthy and produce quality eggs. The biggest difference is calcium. Chickens need to eat 4 grams of calcium per day to form an eggshell each day. If the feed does not provide enough calcium, hens may pull the nutrient from their bones, eventually causing a weak skeletal structure. Purina layer feeds that include the Oyster Strong® System are made to provide this necessary calcium, so there's no need to supplement with oyster shells.





The feed you select can also impact the nutrition profile of a hen's eggs. For added nutrition, look for a complete feed that includes omega-3. It's been shown that hens fed Layena®+ Omega-3 can produce eggs with 250 mg omega-3 fatty acids per egg.¹

**Lighting:** At 16 weeks of age, it is time to get those ladies prepared for laying eggs. Egg laying is controlled by many things, but day length is key to getting your hens ready for laying. Increase their day length to 16 hours of light by supplementing the natural day length with one 40-watt bulb for each 100 square feet (10' x 10') of floor space. Set the light on a timer if necessary.

Roosters: Roosters do not need added calcium, like hens do. If you have a rooster, continue feeding him a complete feed that's high in protein, like Purina® Flock Raiser® crumbles or Purina® Organic Starter-Grower. Roosters can be fed in feeders placed higher or in a different area.



When fed a diet of Layena®+ Omega-3 exclusively for at least 3 weeks. Based on large egg (56 g). Results may vary with factors such as total diet and hen health. A typical store bought egg contains 50 mg of Omega-3 fatty acids per large Egg (USDA: National Nutrient Base).







# Week 18: Welcome to adulthood

Most laying breeds are considered adults when they turn 18 weeks. Most excitingly, this is the time when many hens will lay their first egg.

Things to do this week:

**Introduce layer feed.** When birds reach 18 weeks old or when the first egg arrives, slowly switch hens to a complete layer feed. It is important to make the transition over time to prevent digestive upset.

For our hens in Missouri, we mix the starter-grower and the layer feed evenly for four or five days. After that, stop adding the starter-grower feed and just continue to add layer feed. If the layer feed is in crumble form, you can transition a little faster. If you are switching to the pelleted layer, it may take a little longer for the birds to recognize the new feed form.

**Teach hens to lay in nesting boxes.** After a hen begins laying eggs, it's her tendency to lay in the same spot moving forward. Create several comfortable, clean and cozy nesting areas to prevent hens from becoming competitive in the coop. Then, show hens to the nest boxes. Some hens may easily find the boxes themselves, while others may try to hide eggs in other places. Place a golf ball or fake eggs in the nesting boxes to give them the idea of where to lay.

**Watch for your first egg.** The first eggs may be irregular. They are sometimes small, have soft shells, have no yolks or double yolks. After a week or so, egg production should become more consistent, with peak performance at about 30 weeks of age.

Collect eggs frequently. Now it's time for the thrilling part of raising chickens: a daily treasure hunt for eggs! Gather eggs 2–3 times per day. Frequent egg gathering serves two purposes. First, it helps keep the eggs clean by reducing exposure to environmental bacteria and potentially eliminating the need for washing. Second, it lessens the opportunity for hens to learn the bad habit of egg eating. This is when a hen finds a broken egg, tastes it, likes it and begins breaking eggs.

**Store eggs based on preference.** The decision to refrigerate eggs is a personal preference. Eggs are laid with a protective layer called a cuticle or bloom, which helps keep bacteria out. This natural barrier means that eggs can remain unwashed and stored on the counter at room temperature.

Washing eggs removes the cuticle; therefore, washed eggs should be refrigerated to prevent contamination. If you choose to wash your eggs, be gentle and quick, using water only. Be sure to use water that is warmer than the egg. Dry and cool the eggs as quickly as possible.

Fresh eggs that are stored on the counter should be used within a few days, while refrigerated farm fresh eggs can typically last up to 30 days.



Buff Orpington, Welsummer, Buff Orpington, Speckled Sussex hens



The first egg is a worthy time for a happy dance. Take a video and share it on our Facebook page!





# Mature hens: It's egg-laying time

Now that your hens are laying, you've entered the fun phase that we like to call "pets with benefits!" Not only will your hens make you smile, they'll also make you breakfast. Take time to observe your farm fresh eggs. You'll likely notice vibrant yolks, stiff whites and exceptional flavor. You can begin to expect nearly one egg each day per laying hen. High-producing hens can lay up to 300 eggs per year; however, most hens will lay about 200–250 eggs.

**Six eggs per week:** It takes approximately 25 hours for a hen to produce one egg, so six eggs per week is an ideal goal. Breed, housing, weather, management, parasite load and nutrition can all affect your hen's rate of lay.

Feed them what they need: Hens are now channeling many of their nutrients into their eggs. Not only does flock nutrition impact the eggs they produce, it also contributes to each hen's overall health. To provide the nutrients she needs, continue feeding free-choice complete layer feed. Refill the feeders in the morning and evening.

A complete layer feed can also bring your eggs to the next level. For strong, protective shells, make sure your layer feed includes Purina's Oyster Strong® System. The large particle calcium breaks down slowly, so hens receive calcium when they need it most—when they are forming eggshells at night.

Another way to level-up your eggs is with omega-3. Hens are excellent at channeling nutrients from their feed into their eggs. By feeding Purina® Layena®+ Omega-3, hens can produce eggs with 250 mg omega-3 fatty acids per egg.





<del>(</del>



Introduce treats: Mature hens can be offered treats and snacks, like Purina® Farm to Flock™ Treats, Purina® Flock Block™, Purina® Scratch Grains or

table scraps. Be sure to not overdo them, though. If you feed high levels of treats, hens will likely eat more of them than their fortified feed causing them to miss out on essential nutrients.





**Consistent lighting:** Egg production is impacted by light. When days get shorter, egg production naturally decreases. To maintain consistent performance, provide at least 16 hours of light per day with one incandescent 25- or 40-watt or LED 3-9 watt bulb per 100 square feet of coop space. Use an automatic timer to maintain a consistent sleep schedule.

Ensure cold weather comfort: Birds will spend more time inside the coop during fall and winter. Ensure a comfortable space and prevent boredom by providing 5–10 square feet per bird, adequate feed and water space, access to a dust bath, fun coop toys and a place for them to peck, like a Purina® Flock Block™.

Chickens, especially cold-tolerant breeds, can withstand winter temperatures without supplemental heat.

- Provide plenty of food and water. Be sure the water doesn't freeze.
- Keep the coop draft-free, but don't seal it completely. Some air needs to be exchanged to prevent ammonia buildup.

- Keep the coop dry. Remove any wet spots in the litter.
- If you feel it is necessary to provide a source of heat, only provide enough heat to raise the temperature a few degrees. The hens will adjust to the cold temperature.



Welsummer, Barred Rock, Buff Orpington, Speckled Sussex hens

Flock health: Through all ages, be sure to practice good flock biosecurity. Prevent access between wild birds and your flock and always wash your hands thoroughly after spending time with your birds. Bird symptoms of illness may include: decreased feed consumption, huddling, depression, closed eyes, respiratory signs (such as coughing and sneezing), watery greenish diarrhea, excessive thirst or swollen wattles and combs. Look for birds with their feathers fluffed out from their body. Be observant of your flock. Understand the personalities and mannerisms of your birds so that you will notice a change when something isn't right. If you notice any signs of illness, contact your local veterinarian. The earlier you can detect a problem, the easier it is to resolve.

Celebrate egg laying season by visiting your local Purina® retailer.

Many stores host Purina® Flock-Tober® festivities each fall.







## Year two and beyond

At this point, you've likely been bitten by the chicken lover's bug. You've joined thousands of American families who have fallen in love with backyard chickens. Caring for your adult hens will be similar to weeks 18–52, but here are a few new experiences to expect:

Chicken math: In the chicken world 1+1 can equal 12. After conquering year one, it might be time to add new breeds and personalities to the flock. Keep new birds in a separate room or coop for 30 days to ensure they are disease-free. Work with the existing flock first and wash your hands between groups. Follow a similar quarantine plan for new chicks, as older hens can transmit disease to chicks and pullets. For chicks, though, the separation should last for 18 weeks or until both groups are mature. After the quarantine period, gradually introduce the new group of similar size and traits into the established flock. See page 21 for more tips. Always tend to the youngest birds first and move to the next oldest and so on.

**Molt:** Around 18 months, birds will likely go through their first molt. Often in late fall/early winter, hens will take an annual vacation from laying eggs and focus on replacing their feathers. Expect about 8–16 weeks of feather loss and regrowth each year.

Molting chickens need high protein levels for feather regrowth, so switch to Purina® Flock Raiser® or Purina® Organic Starter-Grower when you notice feather loss. Do not provide extra calcium as it can extend molt. When hens start laying again, transition back to your Purina® complete layer feed.

**Retirement:** Hens can lay eggs for up to five years and beyond. Continue feeding them a complete layer feed until egg production stops. When hens retire, they no longer need the added calcium and should then be switched back to a complete starter-grower feed, like Purina® Start & Grow® or Purina® Organic Starter-Grower. An all-flock feed, like Purina® Flock Raiser® crumbles will also work well.

### **Molt:**

A vacation from egg laying to replace feathers



Annual event starting around 18 months



Signaled by shorter days



Lasts 8-12 weeks



Egg production decreases



A high-protein feed can help with feather regrowth

Visit your local Purina® retailer or www.purinamills.com/chicken-feed for more in-depth management tips on caring for meat birds and mixed flocks.









# Other fowl and mixed flocks

Chickens aren't the only birds that can be a part of your flock family. Backyard flocks may also include other fowl, like ducks, geese, turkeys, quail and meat birds.

Each poultry species is unique and should be cared for according to its unique needs. A quick feeding guide is included below for meat birds and mixed flocks.

Bird	Weeks to Market	Feed (lbs/bird)	Raising for Meat Production	Weeks to First Egg	Feed (lbs/bird)	Raising for Egg Production
Broiler Chickens	6	10-12	Purina® Flock Raiser® or Purina® Meat Bird	-	-	-
Layer Chickens	-	-	-	18-20	15-21	See pages 11 and 29
Duck	7-8	8-11	Purina® Duck Feed or Purina® Flock Raiser®	26	55-70	Starter-Grower: Purina® Duck Feed or Flock Raiser® Layer: Purina® Duck Feed or Flock Raiser® with Purina® Oyster Shell or Purina® Game Bird Layena®
Goose	15-20	40-60	Purina® Flock Raiser®	26	70-90	Starter-Grower: Purina® Duck Feed or Purina® Flock Raiser®
Turkey	14-18	60-100	0 to 8 weeks: Purina® Game Bird & Turkey Startena® 8 weeks to finishing: Purina® Flock Raiser®	28	110-220	<b>0 to 8 weeks:</b> Purina® Game Bird & Turkey Startena® <b>8 weeks to lay:</b> Purina® Flock Raiser® <b>Layer:</b> Purina® Game Bird Breeder Layena®

<sup>\*</sup>Feed intakes are based on commercial production animals. Growth rates and feed intakes of heritage breeds are likely to be slower and higher, respectively.

## Stay connected

We are happy to be with you each step of the way—celebrating memorable moments, answering questions and sharing in the joy of backyard chickens.

We would love to hear your story and share more flock fun with you online. Each of our channels offers a unique, educational experience. Please connect with us on the platforms that work best for you.

For additional and more in-depth chicken raising information, visit www.purinamills.com/chicken-feed.



Get e-tips all year long! Sign up at PurinaMills.com/chicken-feed



**PurinaPoultry** 



**PurinaPoultry** 



**PurinaMillsTV** 







### **Purinamills.com/Chicken-Feed**







PPO7359BR-R1

© 2020 Purina Animal Nutrition LLC. All rights reserved.