



# THE CHICKEN DIGESTIVE TRACT



BY MELISSA MILLER  
@WILMATHEWONDERHEN



**A chicken's digestive tract begins at the their beak and ends at the cloaca (vent). This is a simple breakdown of how food travels from their beak to the cloaca.**

We'll look at the reproductive system In another pdf.

## Digestive Facts

- A chicken doesn't have teeth. They break down their food through mechanical and chemical means.
- Their digestive system begins at the beak. The beak is used to collect, moisten, and break down the food into smaller pieces. This is where the magic begins!
- The Oesophagus takes the food down into the crop to be stored. This is where we get the term "food boob." The crop is located on the right side of the breast. You'll notice at roosting time it's usually full from foraging all day.
- From the crop food will slowly travel down to the Proventriculus. Food will mix with digestive acids and enzymes.
- Food will then travel through a powerhouse muscle called the gizzard! This is where grit they've eaten throughout the day ends up. The combination of grit and the contraction of the gizzard are what grind up their food.
- From the gizzard food then travels through the small intestine, and pancreas. Fat is broken down with the help of bile and the gallbladder. The intestines digest and absorb nutrients your chicken needs. The undigested food then flows into the large intestines and out the cloaca. Chicken's will pass a combination of urine and feces called semi-urates.
- Chicken's poop will vary depending on types of food and the amount of water consumed through out the day. Get familiar with your chicken's poop! Also, broody poop is the most explosive gross mess on the face of this planet.



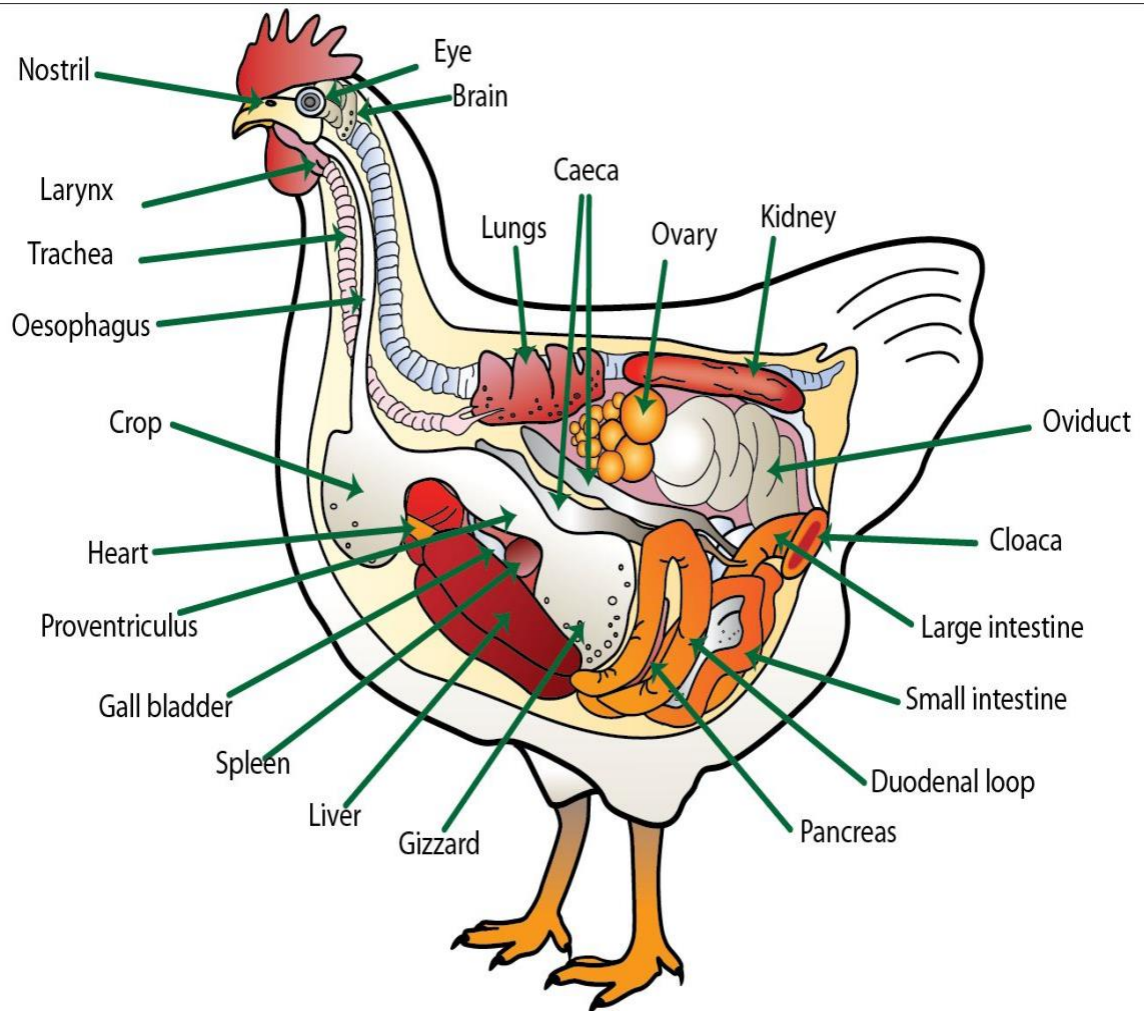
## There are many moving parts to your chicken's digestive system and issues can arise when one of those parts are not functioning correctly.

Here are a few of the most common issues seen in backyard chicken keeping.

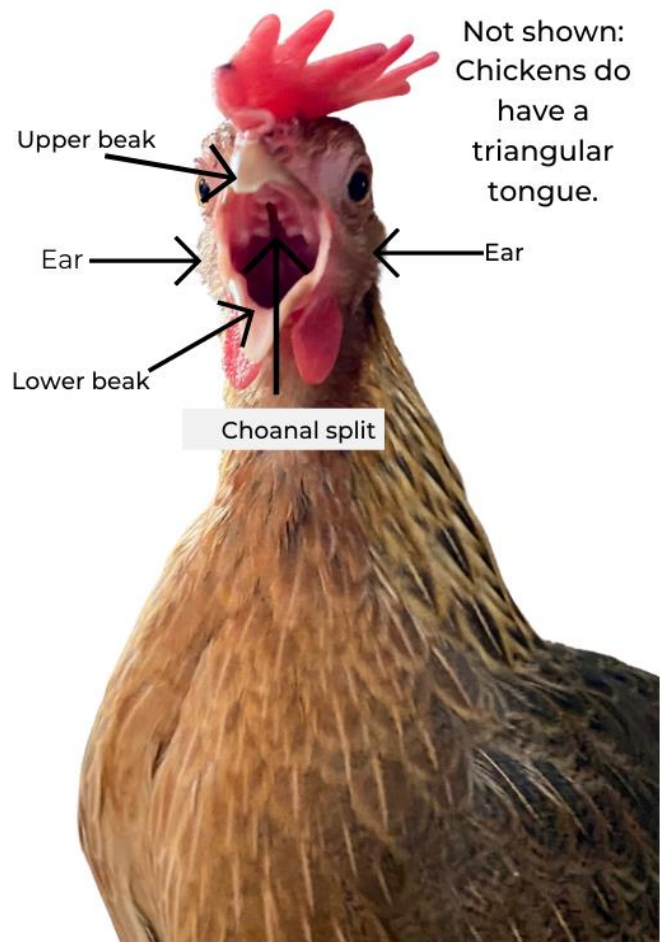
- **Impacted crop.** Sometimes a chicken will eat items that's not good for them. Crop impactions happen when the normal function of the crop is compromised. Resulting in a mild to sever blockage of food. The crop is a temporary storage holding pouch. Items such as string, hay, twine, feathers, plastic, and long blades of grass can get stuck in the pouch, and this will cause a backup of the digestive system. Always have chicken grit available for your flock. Crop impaction can occur with certain diseases and muscular problems. The crop will appear extended and hard. Your chicken's crop should be flat in the morning. They digest their food overnight. Gently massaging the crop to try and break up the binding. Carefully offer vegetable oil in a dropper. Please only offer slow drops at a time and to the side of their beak. Your chicken can aspirate if done incorrectly. This can lead to sour crop. An impacted crop may require a veterinarian.
- **Candidiasis.** Often referred as **Sour Crop**. This is an infection of the chicken's crop and is caused by a build up of Candida. Sour Crop is the result of an imbalance of a chicken's natural microflora. An imbalance can be the result of the overuse of antibiotics, malnutrition, stress, and illnesses. Having an impacted crop can lead to sour crop. As the undigested food sits in the crop it will disrupt the natural flora within the crop causing it to "sour" with an overgrowth of yeast. A chicken with sour crop will have a delay in emptying of their crop and will have a sour smell to their breath. You may notice a full crop in the morning. The crop may feel squishy and be full of fluid. Your chicken may stop eating, become lethargic, not actively foraging, and in severe case die. Separating the chicken in a quite area, offering water only for 24 hours, and a gently crop massage in a downward motion. Rechecking crop in the morning. A chicken's crop should be flat to their chest come morning time. **PLEASE DO NOT TURN YOUR CHICKEN UPSIDE DOWN TO TRY AND MAKE THEM VOMIT.** This is careless and can cause your chicken to aspirate. Isolate your chicken in a quite warm place.



- **Intestinal Parasites.** There are many different types of parasites that can invade your fluffy friends' bodies. Intestinal parasites can wreak havoc on a chicken's overall health and wellbeing and can lead to death in certain cases, if left untreated. **INTERNAL PARASITES: Cecal worms, Tapeworms, Coccidi (Coccidiosis), Tapeworms, Roundworms, Capillaria.** Any veterinarian should be able to perform a float test to determine the worm load and advise treatment. There are many different types of parasites and not all treatments will work on specific parasites, and Fenbendazole should never be given during a molt. It can cause damage to new feather growth. You'll end up with a very odd-looking chicken.
- **Canker** (Trichomoniasis). An infectious disease caused by protozoan parasite. Wild birds sharing your chickens drinking source and feed can spread this to your flock. Canker affects the upper gastrointestinal system and causes lesions inside your chicken's mouth and esophagus. As the lesions grow, it makes it very difficult for your chicken to swallow and make breathing difficult. Medication and removal of the lesions require a veterinarian.
- **Cloacitis.** Commonly called vent gleet. Stress and a lower immune system can cause a yeast infection. But vent gleet can be from bacterial, fungi, protozoa, or parasites. A veterinary can run tests to determine the type and treat accordingly. This can be spread to the flock through matting. Soaking your chicken in an Epsom salt bath, trimming butt feathers if needed, and cleaning the area with a solution of betadine. Without knowing what is causing the issue, treatment is just a bad guessing game.
- **Coccidiosis. Cecal or Intestinal,** A deadly protozoa parasite if left untreated. Young chicks can be seen huddled together, decreased appetite, pale skin, slow to grow, and bloody diarrhea. Coccidiosis can spread quickly through a flock. Chickens peck at each other and at bits of food, coming in direct contact with the parasite. Keeping your chicken's coop, run, and waters clean, dry, and providing plenty of space, is a key to prevention. There is a vaccine for coccidiosis. You'll need to ask who you've purchased your chicks through to see if they've been vaccinated or if they offer the vaccine. There are medicated feeds on the market, but you'd want to verify if your chicks have been vaccinated before feeding medicated feed. Medicated feed IS NOT a cure. Its only purpose is to build up immunity and that's not a guarantee. **\*Personally, I provide a little dirt from my property to our little chicks. This will help them build up immunity to the area they'll be living in. I've never vaccinated a chick in over 10 years. We've never had a single case of Coccidiosis here and have never used medicated feed. Please consult a veterinarian for further questions on the vaccine.**



Hen's anatomy. *Photo credit by poultryhub.com*



A look inside a chicken's mouth. *Photo credit by Miss Pumpkin*

We encourage you to seek out a local veterinarian before an emergency arises. There are many things that can be treated at home. But for the best outcome and proper pain management a medical professional is required. There's no safe OTC pain medication for our birds.