

2020 Edgecombe Summer Fun Poultry



When you hear the word “poultry” most people think of chicken and yes, while this is true there are many other types of poult. Do you know of any others? **Poultry** is defined as domestic fowl, including chickens, turkeys, geese and ducks that are raised for the production of meat and eggs. There are actually 6 types of poultry recognized by the USDA and those are Chicken, Duck, Goose, Guinea, Pigeon, Turkey. They also fit into 3 categories based on what they are used for including laying, meat producing and dual-purpose. **Laying** hens can produce up to 23 dozen eggs in their first year. An example of a Laying breed is the White Leghorn. **Meat-producing** poultry are very efficient at converting the feed they eat into meat. A popular breed is the Cornish Game hen. The final category is **dual-purpose** and they are the classic backyard chicken. They are usually larger and hardier. A popular breed is the Rhode Island Red.

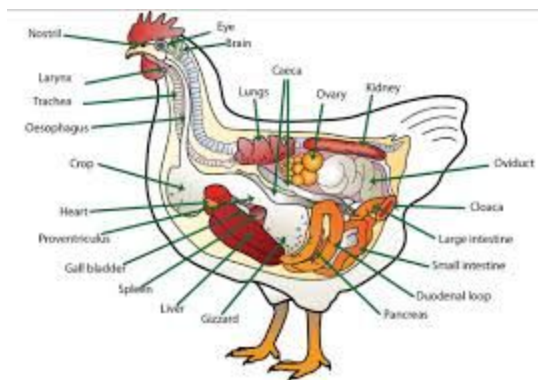
Poultry is the number 1 agricultural industry in North Carolina and NC is ranked #3 nationally. The poultry industry produces almost 150,000 jobs and has an economic impact of over \$37 Billion dollars, making up to 41.8% of NC total farm income in 2017.

- [Farm Life 360° - Virginia Chicken House](https://youtu.be/3PJqcXTpZlg) (0:45 seconds)
(<https://youtu.be/3PJqcXTpZlg>)

- [What does the inside of a Sanderson Farms chicken house look like?- Sanderson Farms](https://youtu.be/6UdZTgRuHMU) (0:44 seconds) (<https://youtu.be/6UdZTgRuHMU>)

Being that they are one of the largest industries, it is important to manage their growth, health, and sustainability. In order for farmers to get the most out of their chickens, they must know how to properly feed and take care of them. Much like the digestive characteristics of other livestock, poultry have their own unique type of system. The poultry digestive system begins with the beak and ends with the cloaca. They do not have teeth and can't chew their food, so the particle sizes must be small enough to swallow whole or be broken by their beak.

The digestion process starts with the saliva, much like other animals. Once swallowed the feed travels to the crop through the esophagus. The **crop** is where the feed is stored until it is ready to be digested further in the proventriculus. The **proventriculus** is the true stomach. The ventriculus, or the gizzard, is where the food is ground up into smaller pieces. It is very muscular and is strong enough to smash rocks that the chicken may have eaten. The digested and mashed feedstuff then moves to the small intestine for nutrients to be absorbed. Next is the

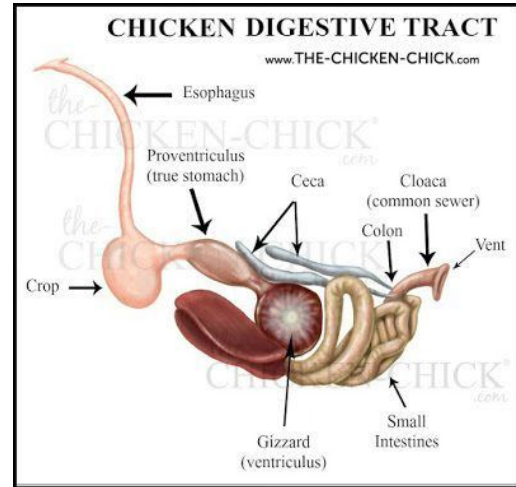


2020 Edgecombe Summer Fun



ceca, where the small intestine and the colon join. The **ceca** absorbs water and begins fermentation for the production of vitamins. These vitamins are not absorbed by the cecum and rather move to the colon for the final stage of digestion. The remaining feedstuff that is not absorbed is now considered waste. Chickens do not urinate and the feed waste is then combined with the urinary waste (uric acid crystals) and is expelled from their body.

- [Virtual Chicken- Full Digestive System](https://youtu.be/n3BW6m1HyII)
(https://youtu.be/n3BW6m1HyII)



Name: _____ Date: _____

Bird Digestive System

cloaca	colon
small intestine	gizzard
proventriculus	crop
esophagus	gallbladder
spleen	liver



Summer Fun

Playdoh Digestive Tract

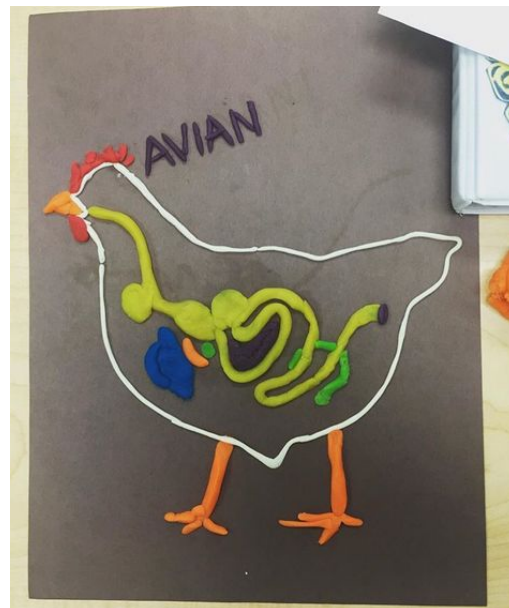
Now that you know a little bit more about poultry and specifically chicken, let's test your knowledge by making a Playdoh sculpture of the chicken digestive system. This activity will be a hands on way to learn about the digestive system in poultry and help you remember the different parts.

Materials

- Playdoh
- Construction paper
- Writing utensil

Instructions

1. Fill out the chicken digestive tract worksheet to quiz yourself of the different parts, so you have an outline of where your playdoh will go.
2. Do your best drawing of a chicken on your construction paper.
3. You may outline the digestive system or do it from memory with the playdoh.
4. Start at the mouth, and add playdoh for the next parts of the digestive tract following the path of food.



Sources:

<https://www.nutrenaworld.com/blog/the-poultry-digestive-system>

<https://poultry.extension.org/articles/poultry-anatomy/avian-digestive-system/>

<https://www.ncpoultry.org/facts/facts.cfm>

<https://www.nutrenaworld.com/blog/types-of-poultry>