



Home Processing of Poultry

Preparing the Chicken for Slaughter

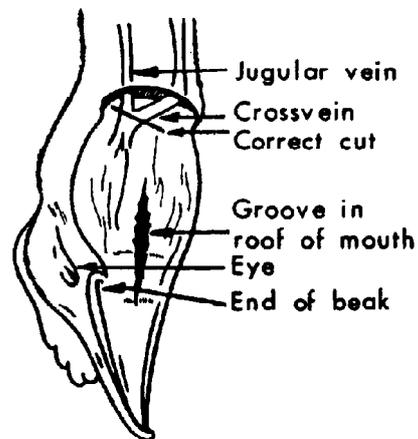
Birds that are to be slaughtered should be taken off feed long enough before processing (about 12 hrs.) to allow the crop and intestinal tract time to empty. A full digestive system increases the chance of contamination of the carcass during removal of the viscera. Handle birds as gently as possible. Distraught birds will be harder to pick and excitement can cause bruising.

Slaughter Procedure

When slaughtering birds their heads should be position downward to facilitate bleeding and restrained to prevent struggling and damage to the carcass.

The best method is to make a cut just behind the jaw. The cut should sever the jugular vein without cutting the esophagus or windpipe. This is a humane method of slaughter because the bird becomes unconscious due to loss of blood from the brain. Bleeding takes about 2 minutes.

Any method that involves beheading or wringing the neck accomplishes the killing but fails to produce a properly bled carcass. The heart stops when the spinal cord is severed.



Scalding

DO NOT PLUG IN THE SCALDER WITHOUT FIRST FILLING WITH WATER!!
THE ELEMENT WILL BURN OUT IN A FEW SECONDS!!

We recommend filling the scalding with hot water. Then it will take about 30 minutes to come to temperature. Our scalding is preset for 150 degrees and will handle 3 birds at a time.

Scalding involves submerging the carcass in hot water to relax the muscles holding the feathers. For small groups of birds a large bucket can work well. For larger numbers of birds a thermostatically controlled scalding is best.

Scalding is a critical step in processing. The plucker will give you squeaky clean birds with no pin feathers when you master the scald. If the scald is too hot or too long, skin will tear. If it's too short or too cold, feathers will stick.

We recommend scalding at 145-150 degrees for a minute. Waterfowl and mature birds may need a higher temperature and longer submersion. A small amount of soap (like dish detergent) may be added to help water penetration and loosen feathers.

Plucking

Birds should be plucked immediately after scalding. Plucking works best if heads and feet are removed first. Drop in 2-3 birds, open the water valves, and turn it on. Check in 20 seconds and give more time if necessary. Should you get a bad pick you can scald and pluck again.

Evisceration

Evisceration involves the removal of the contents of the body cavity. To remove the head cut around the neck just behind the head, and twist. The neck skin should then be split down the back. A second cut made around the base of the neck followed by a twist will usually separate the neck from the body.

Next the esophagus, trachea and crop should be separated from the neck skin. They can be left attached and be pulled from the body with the viscera.

The body cavity can be opened by making a small cut near the vent, extending the cut around the vent, being careful not to cut the intestine or contaminate the carcass with fecal material.

After the abdomen is open the viscera can be removed through the opening. It is very important to remove all the viscera, including the lungs that are attached to the back. After all the contents of the cavity are removed the bird should be thoroughly washed inside and out.

After the viscera have been removed the heart, liver, and gizzard should be separated and saved. The ends of any parts of the vascular system that may be attached to the heart should be removed by trimming off the top to expose the chambers. The heart should be washed and squeezed to force out any remaining blood. The green gall bladder should be carefully trimmed away from the liver. Next the gizzard should be split lengthwise and the contents washed away. The lining should then be peeled away from the rest of the gizzard.

After the evisceration procedure has been completed the carcass should be cooled as soon as possible. Ice water or a refrigerator can be used but the ice water will do the job a little faster. If birds are to be frozen the gizzard, heart, and liver can be wrapped in waxed paper and placed inside the body cavity. The birds can then be placed in a moisture-vapor proof bag and frozen.

USING SHRINK BAGS

Drain birds from chill tank. With the birds sitting on the drying rack with their "head" up, slide a bag down over the chicken. Take one bird off the rack, turn it upside down and push it all the way in to the bag. Squeeze the legs together and gather the bag tightly around the legs. Then spin it to form a "pigtail" out of the excess bag material. Close the bag with a ziptie. Then either pierce the bag at the breast area, (over the breast bone) or pierce the bag at the base of the clipped end of the bag by the legs to let the air out.

Place (dip) into 170-200° F hot water. Swirl the bag around in the water or use a pair of tongs to hold the bird down (it may want to float). There should be a rush of air and bubbles so be careful not to get burned. **Only dip bag as long as it takes to shrink (1-2 seconds). Do not wait until air bubbles stop as water will enter back into the bag.** Then put your label right over where the bag was pierced at the breast. No need to close the hole if you pierced it at the feet end.

Do NOT place the bird back into ice water as water will leak back into bag. Finished product should look like this:



Clean Up

The Featherman plucker is made to be washed down. A pressurized spray down should remove most loose feathers. Some feathers may need to be removed by hand, especially from underneath the drain. Avoid wetting the motor unnecessarily.

Don't hesitate to contact us if you have questions, comments, or ideas for improvement!