

A partnership between Cornell University and the CCE Associations in these five counties:
Allegany, Cattaraugus, Chautauqua, Erie, and Steuben Counties.

Poultry Carcass Breakdown

Breaking down a whole poultry carcass into its parts is a way to potentially increase the value of your chicken, while offering customers more purchasing options. With practice, this process can take less than 2 minutes per bird.

Step 1: Collect your supplies

Start with a whole and cleaned carcass, cutting board, and sharp boning knife. Boning knives are optimal for this task because of their thin, flexible blades that average 7" in length. A sharpening steel is good to have on hand to hone the blade of the knife in-between every 5 birds or so. Beginners may need to hone their blades more frequently because of the tendency to hit bone.

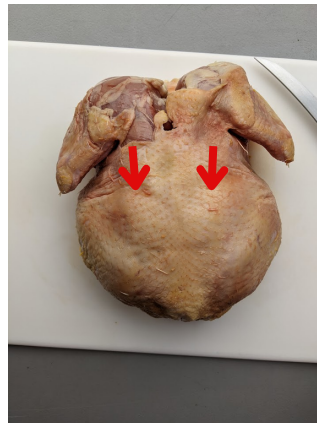


Step 2: Removing the legs

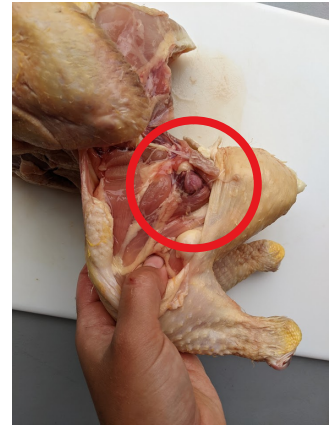
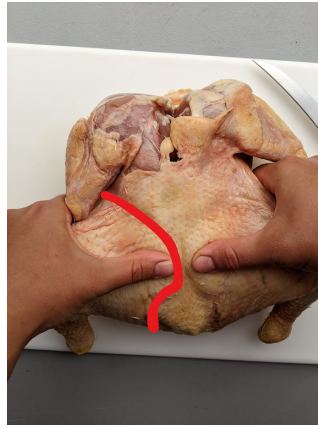
A. Position the chicken on its back with the vent area facing you. The skin attaching the drumstick and thigh to the breast of the bird needs to be cut through to reveal the muscle underneath. Pull the drumstick away from the body of the bird to tighten the skin. Cut through, biasing the breast if you intend to have boneless skinless breast, and biasing the drum if you intend to have skin-on breast. Stop cutting through the skin when you reach the muscle of the thigh on the top and bottom of your cut line. You should have cut about 1/2 of the way around the leg quarter.



B. Flip the chicken on its back, with the vent area facing you. Locate the "oysters" or two bumps of muscle in the lower middle of the back, which indicate where the thigh connects to the body of the chicken. Placing your thumbs on the "oysters", wrap your fingers around the leg quarter so that it fills your hand and your fingers on the underside are pressed up against where the thigh attaches to the body. Press down on the oysters and use your fingers to pull the thighs away from the body, dislocating the thighs at the hip joints.



C. Use your knife to cut along the bones of the body and around the now dislocated hip joint, cutting through the cartilage of the hip joint if necessary, to remove the leg quarter. The red line in the leftmost image shows the path that your knife will follow. The ball of the hip joint is circled in the rightmost picture. Sometimes the white cartilage cap is present, but sometimes it isn't, making the bone appear red.



D. To split the leg quarter into a thigh and drumstick, place the leg quarter skin-side down on your cutting board. Observe the natural fat seam that separates the thigh and drumstick. Place your knife parallel to the fat line on the drumstick side of the leg quarter. Cut straight down. Your knife should cut through the cartilage of the joint, revealing two white bone ends.



Step 3: Removing the wings

A. Hold the chicken up by the wing you wish to remove, bending the wing up towards the back of the body to reveal the "armpit". The attachments to the wing are tucked into this crevice, just behind the lobe of breast tissue. Push the blade of the knife into the crevice of the wing, angling at a 45 degree angle towards the body. Until you dislocate the wing joint, the cutting should be done while holding the chicken by the wing to allow for the easiest and cleanest cuts.



B. Draw the knife to cut through the skin and muscle, down to the joint. You should feel or hear three distinct pops as you sever the three tendons on the underside of the wing. Once these connections are severed, dislocate the wing. The ball joint is larger than the hip joint and is typically shiny and white. Then, cut around the joint to cut the remaining tendons and remove the wing.



Step 4: Removing the breast

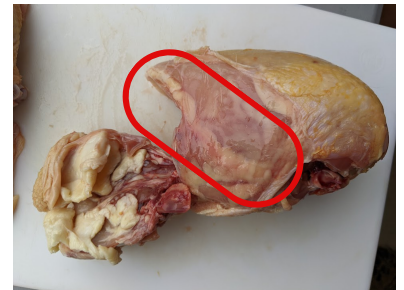
A. Set the carcass down breast side up, with the side of the breast you'd like to remove facing towards you. The side that you will start on will depend on your handedness. The following images show how a right-handed person approaches this process. Find the hard cartilage of the breastbone, circled in this image. It is located where the two halves of the breast come together.



B. You will work on one side of the breast at a time. First, make a cut parallel and as close to the breast bone as you can. Gently work your knife straight down until you hit bone. You should be able to pull about 2/3 of the breast tissue away from the carcass at this point.



C. Flip the carcass 90 degrees so that it is laying on the opposite breast you are working on. Where the breast attaches to the side and back of the bird, you will see a fat line running along the rib cage. It is circled in red in the image to the right. Place your knife at the base of the fat line in the center of the bird, angling the tip such that it doesn't hit bone. You should feel it resisting slightly on the bones below the muscle as you cut without actually cutting into the bone. Hold the blade at about a 20-30 degree angle in comparison to the cutting board.



D. Run the knife towards the vent side of the bird first to fully remove the back portion of the breast. Flip the blade 180 degrees and pull the breast that you've freed towards the front of the carcass to reveal where it is attached underneath. Then remove the rest of the muscle. You will need to take care to cut around the wing joint and wishbone, which is located around where the neck attaches. Cutting into these will leave cartilage in the meat. This can be trimmed out later.



Step 5: Remove skin and debone as desired

At this point, you can make decisions as to which parts to sell as skin-on or skinless and which to sell as bone-in or boneless. These decisions will depend on personal and market preferences. The remaining carcass following deboning can be used for soup bones.

