DEBONING A CHICKEN OR OTHER FOWLS

The recent trend in poultry meat processing has been toward the merchandising of more convenience-type poultry products. Not yet available, however, are products such as a whole chicken completely without bones and in one piece, although boneless turkey and chicken rolls are available.

Would you like to have a fresh whole chicken, duck, turkey, goose, or other fowls all in one piece without any bones? You can "debone" a fowl very easily with little time and labor.

Although poultry processed in this manner is not a recent innovation, it was relatively unknown in Hawaii until 1965. Since then, this deboning process has become familiar to many in the State, principally through demonstrations, conducted at club meetings, at schools, and in private homes.

There is very little difference in the anatomy of the different species of fowls. As a rule, the larger the fowl the longer the time required to debone it. With a little experience, you could debone a chicken in about 15 or 20 minutes.

Figure 1. The only tools needed for deboning are a hook (8-inch stainless steel rod bent to the shape shown), a stout piece of cord, and a sharp, narrow-bladed knife.
Figure 2*. The skeleton of a fowl, for reference during the deboning process.

Figure 3. If you raise your poultry, kill and scald the fowl. Remove the feathers, making sure you do not tear the skin. Cut off the head and feet at the hock joint (between the tibia and metatarsus). Slit the skin on the back side of the neck, and remove the neck by cutting the flesh in a ring and twisting it off. Cut the skin around the vent and tie a string tightly around the vent.

If you purchase an eviscerated carcass sold in the markets as “ready-to-cook,” you need not do the above operations.
Figure 4. Holding the carcass in this position, exposing the breast meat. Scrape the flesh along both sides of the wishbone (clavicle), cutting it free from the attachment on the upper side. Remove the entire V-shaped bone.
Figure 5. Hold the wing with one hand and cut down and through the wing joint about \( \frac{1}{4} \)-inch to the outside of the white, shiny area of the shoulder (between the coracoid and humerus). Be sure not to cut through the skin on the underside of the wing. Cut the other wing the same way.
Figure 6. Hang the carcass on the large curve of the hook (which is 2 inches deep and 2 inches across), passing the end through the inverted V-shaped angle formed by the two bones on each side (coracoid and scapula). Suspend the hook from the cord which can be anchored to the top of any cupboard by a small nail. The height of the carcass should be such that the end of the tibia (drumstick) is about 2 inches from the working surface. Cut the ends of the breast muscles which are attached to the upper end of the coracoid.

*Note:* The carcass is hung in this manner to make the operation simple and less hazardous.
Figure 7. Cut and work the flesh downward and away from the bones with the knife and fingers of the free hand, rotating the carcass as you progress. When you come to the curved angle of the breastbone (sternum), scrape the flesh around this bone and continue downward. Be sure not to cut through the skin over the tip of the breastbone or along the back of the carcass where there is little flesh between the skin and the bones.
Figure 8. When you have scraped the flesh about halfway through the tenderloin muscles on the ilium (dark, round muscles above the thumb in the photo), stop scraping until you disjoint the legs. The tenderloin muscles are located in depressions in the ilium, so make sure to go deep when scraping these muscles.
Figure 9. To disjoint the leg grasp the carcass as shown and press on the hip joint (between the ilium and femur) with the thumbs and press outward on the leg with the fingers. Disjoint the other leg in the same way.
Figure 10. Hold the disjointed legs together and pull the skin and flesh from the upper part of the carcass over the legs, so you can see the leg joints more easily.
Figure 11. When scraping the portion of the carcass below the tenderloin muscles, pinch the skin with the fingers of the free hand as illustrated and pull away from the bones. This portion has no flesh and it is very easy to cut the skin if you are not careful.
Figure 12. When you have progressed to the portion shown by the knife blade, cut through the cartilage extending from the sternum and through the portion directly below the long bones on either side of the sternum until you hit the backbone. Although not shown in Figure 2, the long bones are called the “lateral caudal processes of the sternum.”
Figure 13. Cut through the ball and socket joint of the leg and work down and around the ilium and ischium until you see the end of the pubic bones (pubis in Figure 2). Cut the tail (pygostyle) so that it will remain with the meaty portion of the carcass.
Figure 14. Scrape the flesh from the knob of one of the leg bones (femur) and hang the exposed end on the the small angle of the hook (2 inches deep and \( \frac{1}{4} \) inch at the bend). Scrape the flesh away from the femur and on through the joint between the femur and tibia and fibula until you come to the joint between the tibia and fibula and metatarsus. Cut through the joint. Repeat the process on the other leg.

*Note:* It is recommended that, when working with a turkey, you leave the bone intact for the drumstick (tibia and fibula) because of the many tendons in this area.
Figure 15. The operation has progressed below the joint between the femur and the tibia and fibula.
Figure 16. The wings can be deboned in the same manner as the legs. Scrape the flesh from the end of the wing bone (humerus), and either hang the carcass on the hook or work this portion while the carcass is placed on the working surface.
Figure 17. After scraping the flesh from the end of the humerus, cut the wing off at the joint between the humerus and radius and ulna. This will make the job much easier.
Figure 18. Using the tail as the guide, turn the carcass right side out. You should have a finished carcass such as this.

Figure 19. If you deboned an eviscerated, ready-to-cook carcass, you should have these parts.
HOW MUCH MEAT IS LEFT AFTER DEBONING?
It is possible to get about 45 percent by weight of the eviscerated carcass. The rest of the carcass is excellent for chicken soup stock.

USES OF DEBONED MEAT
Deboned meat from a young chicken may be prepared in several ways. It may be stuffed with a variety of stuffings and baked or roasted. A deboned roaster-size chicken can be cooked in about 1 hour and 15 minutes, using high heat (400 F). This includes time in the oven for browning.

The deboned meat may be fried in deep fat, either in pre-cut serving pieces or whole, or it may be used for chicken hekka for those of you who do not like hekka with chipped bones. This is a safe way to prepare chicken hekka for your children, without worry about bones being stuck in their throats. For those of you who say that chicken hekka is not tasty without bones, you could leave the bones in the legs and wings.

Meat from a stewing chicken may be used in salads, casseroles, sandwiches, and in fried rice. It could also be used to prepare “chicken a la king.”