

Bird Breakdown: Exploring Yields and Cuts of Poultry

Dressing Percentage

To better understand the amount of meat you may expect from different types of poultry, the first step is to recognize the difference in live weight compared to carcass weight. When a bird is harvested, certain parts of the animal such as the feathers, feet, blood, and viscera (internal organs) are removed. The post-harvest hanging weight, known as the hot carcass weight, includes the lean (meat), adipose tissue (fat), and bone.

Dressing percentage is the difference between live animal and hot carcass weight and is influenced by factors such as muscle, fat cover, and size, which largely depend on the breed, diet, and age of the bird. These factors help determine how much meat the carcass may yield (Table 1).

> Dressing Percentage = (Hot carcass weight ÷ Live weight)

Species	Туре	Dressing %	Avg. Live Weight (Ibs.)
Chicken	Commercial broiler	72 – 75	6.5
	Heritage heavy breed	68	9
Turkey	Young hen	80.5	17
	Young tom	80.5	41
Duck	Pekin	65 - 70	8
Pheasant	Free range / hunted	71	2.8

Table 1. Dressing percentage and average liveweight of different species and types of poultry.

Carcass Chilling & Fabrication

After harvest, birds are washed and then cooled via water chilling or air chilling. Carcass weights fluctuate slightly due to the chilling process. Air chilling results in an average carcass weight *loss* of 1.6% due to natural evaporation, while water chilling causes a carcass weight *increase* of 5 to 10% due to absorption of water while in the chill tank. In commercial operations, absorbed water is declared on the label. Chilling is followed by fabrication, which breaks down a carcass into smaller parts for retail.

Common Cuts

Due to a relatively small body size compared to larger species of livestock, poultry is often available as a whole bird at the butcher shop or grocery store. They are typically found as ready-to-cook (RTC) carcasses without giblets (WOG), though some do include the giblets (heart, liver, and gizzard) and neck. Consumers may see giblets more commonly with whole turkeys for Thanksgiving. Giblets and neck account for roughly 7% of live bird weight. The RTC carcass is around 60% meat and 40% skin and bones.

Birds are cut into four main parts: breast, wing, thigh, and drumstick (Figure 1). Portions of the back are attached to the thigh and breast when cut into the main parts. Parts can be further cut into various retail cuts. Birds may also be quartered. As the name suggests, each quarter is approximately 25% of the carcass, though breast quarters are slightly heavier (Table 2).

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Figure 1. Diagram of main parts of poultry

carcasses: breast, wing, thigh, and drumstick. Neck and back are also shown.

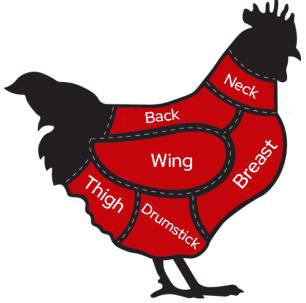


Table 2. Examples of common retail cuts from a broiler chicken and the proportion of the ready-to-cook WOG.

Parts	% of Carcass	Common Retail Cuts	
		Whole breasts	
Breast	40	Boneless skinless breasts	
		Tenderloin	
		Whole wings	
Wing	12	Wing flat	
		Wing drumette	
Think	32	Whole thighs	
Thigh	32	Boneless thigh	
Drumstick	16	Whole drumsticks	
		Boneless drumstick	
	26-28	Breast quarter – half the	
		breast with wing and back	
Quarters		attached	
	24-26	Leg quarter – thigh and	
		drumstick with back attached	

Further processed products – Poultry can be purchased in more convenient forms such as breaded boneless products (chicken patties, tenders, nuggets, etc.), breaded bone-in products (wings, drumsticks), and deli meats (cold cuts).

Example Calculations

Live weight x Dressing % = Hot carcass weight

Commercial broiler: 6.5 lbs x 74% = **4.8 lbs** Heavy heritage breed: 9 lb. x 68% = **6.1 lbs** Turkey hen: 16 lbs x 80.5% = **12.9 lbs** Duck: 8 lbs x 67% = **5.4 lbs** Pheasant: 3 lbs x 71% = **2.1 lbs**

> Hot carcass weight x (100% ± chill %) = Chilled carcass weight

Commercial broiler: 4.8 lbs x (100% + 5%) = **5.0 lbs** Turkey hen: 12.9 lbs x (100% - 1.6%) = **12.7 lbs**

For More Information

Contact your <u>local Livestock Educator</u> or the Wisconsin Department of Agriculture, Trade, & Consumer Protection. For additional information, visit the following resources.



National Chicken Council



National Turkey Federation



Safe Handling and Preparation of Poultry - USDA Food Safety & Inspection Service

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