

Poultry and Eggs

POULTRY REFERS TO birds that have been domesticated for their meat and egg production. Poultry includes chickens, turkeys, ducks, geese, and pigeons. By contrast, game birds are those that forage for themselves and live in the wild. Some types of game birds are also raised domestically.

Per capita consumption of poultry products has increased at a much greater rate than beef and pork. Chicken, in high demand by the fast-food industry, is the fastest-growing protein source in the United States. Concern about nutrition, health, and wellness has also spurred interest in poultry; fat and cholesterol content of red meats work against their consumption by diet-conscious consumers.

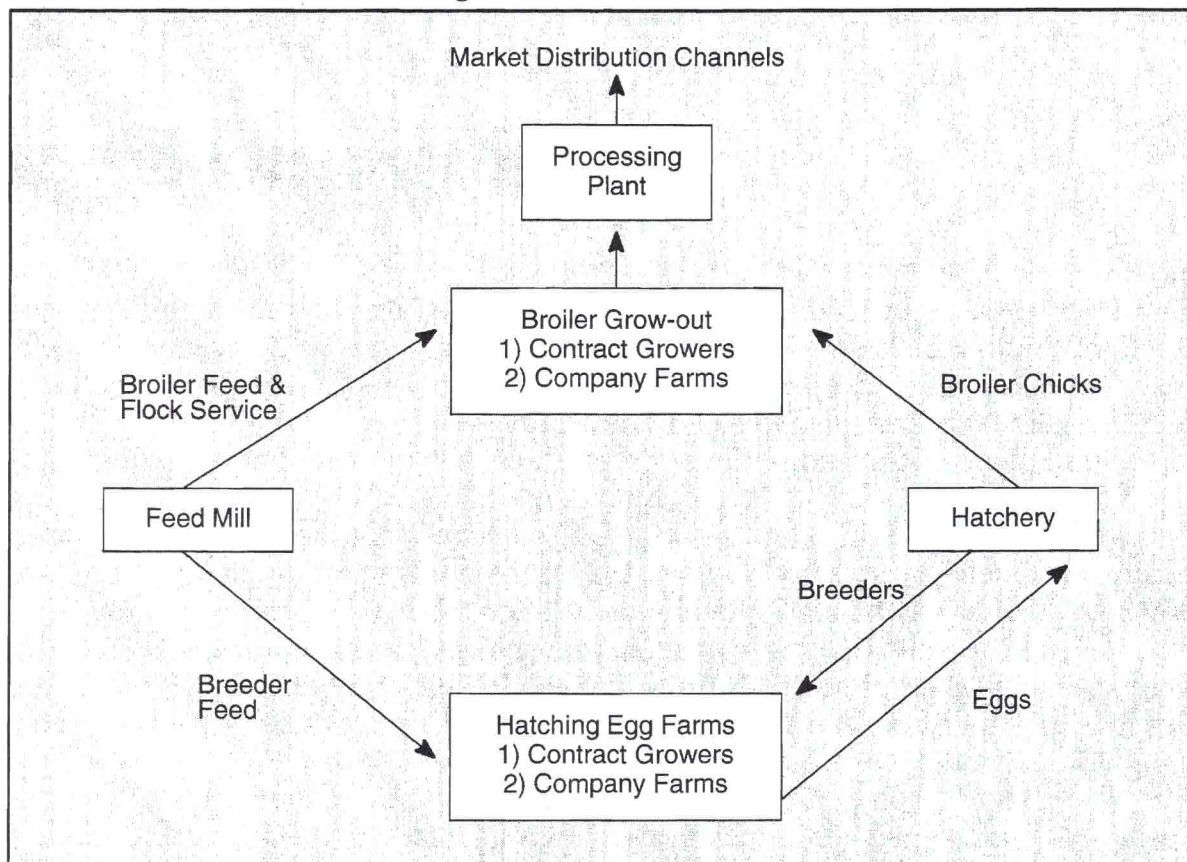
The short production cycle enables processors to react promptly to demand. Twenty-one days are required from egg to chick, then another 6 to 9 weeks in the "grow-out" stage, depending on the size required. By comparison, marketable weight hogs require 6 to 10 months and cattle require 2 to 3 years.

The costs of poultry production are considerably lower than those of pork or beef production. Since it takes about two pounds of feed to produce one pound of chicken, the feed-to-weight ratio is 2:1. By comparison, the feed-to-weight ratio for pork is approximately 3.5:1, and the feed-to-weight ratio for beef is 7:1. With corn and soybean meal at 5¢ and 8¢ per pound, respectively, the economic advantages of poultry production over pork and beef production become obvious.

One major development in the growth of the poultry market has been consolidation and integration of the various stages of production and marketing. Many broiler firms have their own hatcheries, feed mills, and processing plants. As illustrated in Exhibit 1, a feed mill provides breeder feed to hatching farms or to growers raising broilers. The hatching farm, which can be company-owned or under contract with the broiler firm, provides eggs to a hatchery which, in turn, provides more breeders to the hatching farm and supplies broiler chicks to contract growers or company farms. The contract growers or company farms care for the birds until they reach marketable weight, when they are moved to the processing plant and then into market distribution channels.

Like poultry production, egg production has been aided by large, highly specialized flocks. Hens live in controlled environments with automated feeders, waterers, ventilators, conveyors, and devices for candling (passing the egg over a light source and checking the yolk, air space, and any imperfections). Fortified feed has increased production and yield. In the 1950s, average annual production per hen was 120 eggs; by the 1980s, it was approximately 260.

In previous years, most egg products were marketed in shell form. Today, a large portion of production goes to processed egg products—frozen whole, yolk, or whites; liquid eggs; table-ready frozen eggs; hard-cooked, peeled eggs; tube

Exhibit 1 Functions of an Integrated Broiler Firm

eggs; and dried eggs. Annual demand per person in the United States has remained fairly constant for all forms of eggs. Price changes generally are caused by supply increases or shortages.

Types of Poultry and Game Birds

The USDA has grouped poultry into classes based primarily on maturity. Young birds have tender meat and are suitable for roasting, broiling, frying, barbecuing, and baking. Mature birds have tougher meat which should be simmered, steamed, or braised to be made tender. Practically all mature birds are further processed by mass-producers into items such as soups, pot pies, and stews. Since food service operations use young birds, the discussion focuses on this class. USDA classifications form the basis of the following descriptions.

Chickens

A limitless variety of processed chicken is available in products which may be boned, breaded, marinated, minced, rolled, and/or cooked. Chicken is categorized into a number of different classes depending on such factors as age and sex.

Broilers or Fryers. This category includes young chickens of either sex, usually between 9 and 13 weeks of age. They are tender-meated with soft, pliable, smooth-textured skin and flexible cartilage. They are purchased in both fresh and frozen

forms and may be whole eviscerated (with or without necks and giblets), halved, quartered, or cut-up (8 or 9 pieces).

Roasters. Roasters are young chickens of either sex, usually between 12 and 20 weeks of age. They have identical eating characteristics to broilers, but the cartilage is less flexible. They usually weigh between 4 and 7 pounds and are fatter than broilers. Roasting is typically the preferred method of cooking. Processing is usually whole eviscerated (with or without necks and giblets).

Capons. Capons are castrated male chickens, usually under 8 months of age, weighing between 6 and 9 pounds. The surgery retards the capon's muscular and sexual development and results in fat marbling throughout the muscle structure. These birds are large breasted, with a better ratio of breast to bone than fryers. They are usually marketed whole eviscerated (with or without necks and giblets) and are primarily used for roasting.

Hens, Fowls, or Stewing Chickens. This category includes female birds, usually more than 10 months of age, weighing from 4 to 7 pounds. They generally come from egg-laying operations and have been retired from production. Their general use is for soups and stews. The availability of these birds in the market is sporadic; when available, they are relatively inexpensive. Many large soup and further processors use these birds in preparing their products.

Rock Cornish or Cornish Game Hens. Members of the chicken family, Rock Cornish or Cornish game hens are prepared from Cornish chickens or from crossbreeding Cornish chickens and another breed of chicken. Rock Cornish hens are the most generally available. They are young, immature chickens (usually 5 to 6 weeks) weighing not more than 2 pounds. They are usually served bone-in and are available whole eviscerated, whole stuffed, halved, quartered, or in pieces—either fresh or frozen. Yield in edible meat from a 24-ounce bird, dressed and ready-to-cook, is about 45%.

Turkeys

Unlike chickens (which were brought to America by early settlers), turkeys are native to North and Central America. Extensive breeding in Europe eventually resulted in the "broad-breasted bronze or Beltsville" turkey which was reintroduced to America in the 1930s and has since become the most popular commercial variety.

In comparison to lighter hens and fryers, the heavy toms (male turkeys) are of greater importance since they account for approximately 90% of annual U.S. production. Consumption of turkey, like chicken, depends to some extent on the prices of competing beef and pork. While turkey production is spaced throughout the year, heaviest sales occur during the Thanksgiving and Christmas seasons.

Heavy-breed toms are preferred by boning facilities and processors. More mature, heavier birds return a better meat-to-bone ratio than smaller birds since the bone structure remains essentially constant beyond 20 pounds. However, the feed required per pound increases dramatically as the bird matures.

Exhibit 2 demonstrates this fact. The percent yield (ready-to-cook) of live weight increases from 77% of the 17.5-pound bird to approximately 80% of the

Exhibit 2 Turkey Growth and Yield Chart

Bird Age (Weeks)	Average Feed Consumption to Date	Average Live Weight	Percent Yield (1)	Ready-to-Cook Weight	Boneless Percent Yield (2)	Boneless Edible Meat Weight	Ratio of Feed:Edible Meat (3)
18	51 lb	17.5 lb	77%	13.5 lb	41%	5.6 lb	9.1 to 1
26	100 lb	26.8 lb	80%	21.5 lb	51%	11.0 lb	9.1 to 1
38	195 lb	36.0 lb	80%	28.8 lb	58%	16.7 lb	11.7 to 1

(1) Percent Yield	=	$\frac{\text{Ready-to-Cook Weight}}{\text{Average Live Weight}} \times 100\%$
(2) Boneless Percent Yield	=	$\frac{\text{Boneless Edible Meat Weight}}{\text{Ready-to-Cook Weight}} \times 100\%$
(3) Ratio of Feed:Edible Meat	=	$\frac{\text{Average Feed Consumption to Date}}{\text{Boneless Edible Meat Weight}}$

larger sizes. The boneless edible (cooked) meat yield greatly improves as the bird grows older and larger (from 42% for an 18-week bird to 58% for a 38-week bird). The ratio of feed to edible meat, however, increases from 9.1 (pounds of feed to a pound of cooked meat) for the smaller sizes to 11.7 for the 38-week birds—a negative factor for the grower.

Most of the weight gain in the older birds is in breast and thigh meat (which bring more money than the wings, drums, and other parts). All of these factors, in addition to investment and related costs, determine the weight and selling price at the time of processing.

Fryer-Roaster Turkeys. Fryer-roaster turkeys are young, immature birds of either sex that are tender-meated with soft, pliable, smooth-textured skin and flexible breastbones. They are usually under 16 weeks of age, eviscerated with neck and giblets included, and generally sold whole.

Young Turkeys. These birds are tender-meated with soft, pliable, smooth-textured skin and flexible breastbones. They may be of either sex; young tom turkeys or young hen turkeys may be specified. Toms are usually processed by 8 months of age. Heavier birds (more than 20 pounds) are used to make boneless cuts for both retail and food service. Hens are normally processed between 18 and 22 weeks and dress out between 12 and 16 pounds. Practically all are sold as whole birds in chain stores.

Yearling and Mature Turkeys. Yearlings are usually under 15 months, while mature birds are over 15 months of age. Both have coarser, tougher meat and normally are further processed into such items as soups and pot pies.

Processed Forms. Turkey products are available in many processed forms. Of primary interest to food service buyers are natural and formed breast meat, thigh meat, and combinations. Price range varies greatly, from natural oven-roasted breasts (toward the top end) to formed rolls made from scrap pieces (near the bottom of the range). Products are available in raw fresh, raw frozen, cooked fresh,

and cooked frozen forms. Rib bones may be left in or the breast may be completely free of bones.

Many convenience turkey products are also available. Diced and pulled meat may be used for stews and pot pies. Other products include turkey ham, turkey bologna, and turkey franks.

Other Poultry and Game Birds

In addition to the major categories of turkey and chicken, other types of poultry are available. Ducks, geese, and pigeons are categories from which hospitality operations may purchase. Purchasers may also find game birds available.

Ducks. Broiler ducklings or fryer ducklings are young birds under 8 weeks of age and usually weigh under 5 pounds. Roaster ducklings are over 8 but under 16 weeks of age and weigh under 7 pounds. The bill and windpipe in these classes should be soft and easily dented. Eviscerated ducks are available whole or split, usually frozen. Duck is also available precooked with sauce packed separately. Practically all production is in the white Peking strain (also known as "Long Island Duckling").

Geese. Young geese may be of either sex, but should have tender meat and a windpipe that can be easily dented. They are available whole and eviscerated, either fresh or frozen. They range in size from 6 to 14 pounds, but most weigh around 8 to 10 pounds.

Pigeons. Pigeons are mature birds of either sex, with coarse skin and toughened flesh. Squabs are young, immature pigeons of either sex and are extra tendermeated. They are usually under 4 weeks of age, and weigh about 1 pound before boning. These birds have dark meat and are low in fat.

Game Birds. This category includes such birds as pea-fowl, swans, quail, wild ducks or geese, and pheasants. Except in the fall season, when they have stored fat for winter, game birds are leaner and tougher than domestic fowl and, therefore, require different cooking methods. Banding or wrapping the bird with bacon or other fat is often used to retain moisture and to help baste during roasting.

Pheasant should have flexible bone cartilage. Domestic pheasant is less flavorful than wild pheasant and must be cooked with more flavorings. Dressed weight is usually 2 to 4 pounds. Pheasants are normally available frozen.

Quail are available bone-in, split, whole, whole drawn, partially boned, or stuffed.

USDA Role in Poultry Marketing

The USDA enforces several laws applicable to poultry, mainly in the areas of inspection, grading, and quality control. Those involved in purchasing management must be aware of these regulations since they have an impact upon the manner in which products move through market channels and the quality of products received.

Poultry Inspection

The Poultry Products Inspection Act was passed in 1957. It addresses sanitary conditions in poultry processing plants and also regulates additives and labeling. The act covers poultry prepared for both interstate and foreign commerce. Since 1968, the Wholesome Poultry Products Act has required that state inspection programs for intrastate (within state) shipments be at least equal to federal programs. Those states not maintaining at least "equal to" programs must have federal inspections. The 1968 act also strengthened enforcement of standards of poultry imported into the United States. Inspection is mandatory; costs are paid by the processing plant, which then passes these costs on to the next element in the distribution channel.

A "voluntary quality control system" became effective in 1980. Under this program, some processing plants are not required to have continuous on-site inspections but must be able to demonstrate that internal quality control programs are at least equal to those required by the USDA. On-site inspections by USDA personnel at irregular intervals are also conducted.

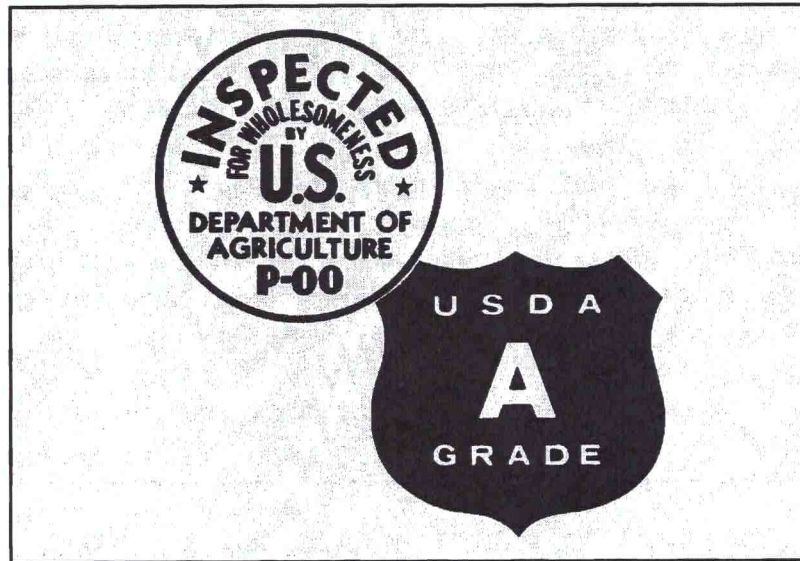
Most processing plants have adequate quality control programs responding to consumer concerns and competition. However, there is always a danger that "short cuts" may be taken in response to economic pressures. Voluntary quality control programs should not result in any loss of quality. Only further processing plants (those which manufacture other items besides the poultry products) may apply for these programs. Slaughter plants are still required to have on-location federal inspection, or state inspection, if approved. One of the key areas checked in these voluntary programs is wholesomeness (fitness for human consumption). The wholesomeness of raw materials is verified upon arrival at the plant and again before use. Also checked are: temperature of cooking oven or vessels; percentages of ingredients; accuracy of the weight of the finished product; storage temperatures; and sanitation of utensils, production lines, and packaging equipment. Plants with approved programs may display the stamp shown in Exhibit 3.

Poultry Quality Grading

The grading of poultry is a voluntary service. All poultry receiving quality grades must have been previously inspected for wholesomeness, although this inspection has no effect on the quality grade assigned. Costs of grading are paid by the party requesting the service. Thus, processors/sellers may have products graded if they want to display the USDA grade shield (see Exhibit 3) on their packages, and buyers may have grading performed if they want to assure that contract commitments have been satisfied. Federal grading is authorized by the Agricultural Marketing Services Act of 1946 and administered by the Food Safety and Inspection Service of the USDA.

Poultry grades are classified as USDA Grade A, B, or C. Standards of quality define the factors which determine the grade and include fat covering, fleshing, exposed flesh, discolorations, conformation of the bird, presence of pin feathers, and freezing defects (if the product is frozen). USDA grades are primarily appearance standards. They do not identify eating qualities. Thus, a mature chicken can be

Exhibit 3 USDA Inspection Stamp and Grade A Shield



Grade A, while a young, more tender chicken can be Grade B. As a practical matter, few birds below Grade A receive a grade. If the birds do not "make grade," they usually are further processed. Game birds may be inspected for wholesomeness and graded for quality; however, this is not mandatory under the 1946 act.

Many chicken processing plants today do not use the USDA grading service. Their products are usually sold directly to large hospitality customers or distributed as private label items purchased by chain stores. These customers have their own specifications and contracts with the processor and, in some cases, may also have their own inspectors in the plants. Many of these processing plants identify the product as "Plant Grade A." Since it costs about one cent per pound for the USDA grading service, quality grading done by the plant can be less expensive for the buyer.

Turkey processing plants may pack graded or ungraded products. Some ungraded products are marketed under retail private labels. Other ungraded products are further processed into such items as turkey rolls, hot dogs, sausages, and cooked breasts. These plant-graded birds are identified in the trade as "canner pack" and are shipped in carload or truckload lots without necks and giblets.

Poultry Specifications and Quality Control

As a result of USDA involvement in the processing of poultry, there is a great deal of standardization. Buyers writing purchase specifications for poultry should begin with USDA data. Some quality factors should be addressed as poultry specifications are developed. For example, although all poultry must be inspected for wholesomeness as required by the Poultry Inspection Act, this should still be specified by the buyer.

In terms of the quality grade, if a processor has paid for USDA quality grading, it will be shown on the package. However, buyers generally have somewhat different concerns depending on whether whole birds or poultry parts are purchased.

Exhibit 4 Breakdown of Chicken Parts by Weight and Percentage

	Bone-in Weight (oz)	Percentage Bone-in	Cooked Meat Boneless (oz)	Percentage Cooked Meat
Breast	15.1	33.6%	6.6	
Thigh	13.1	29.1%	5.2	
Drumstick	6.4	14.2%	2.7	
Wing	+5.4	+12.0%	+1.8	
Total for shell	40.0	88.9%	16.3	40.8%
Neck	3.0	6.7%	0.5	
Giblets	+2.0	+4.4%	+1.0	
Total for other parts	5.0	11.1%	1.5	30.0%
Total	<u>45.0</u>	<u>100.0%</u>	<u>17.8</u>	

If whole birds are intended for food service use, graded birds may carry a USDA grade or plant grade depending on the distributor. Small users should require the USDA grade. Large users may buy plant grade (which is less expensive); however, USDA Grade A equivalent should always be specified if the highest quality is desired.

Poultry parts generally carry the same grade as the bird before it was cut. The parts may be bone-in or boneless. The cuts must be made skillfully; parts must be similar in general appearance before and after cutting. Exhibit 4 gives a breakdown of various chicken parts by weight.

Buyer's Refinements

After developing specifications around existing USDA standards, buyers add the specific requirements of their companies. Clearly written specifications help ensure effective communication between buyers and sellers. Sample specifications are presented in Exhibits 5 to 8. Possible refinements to USDA standards may include such considerations as sizing, preservation and temperature, and cutting.

Sizing. The buyer should state the required size by weight. Five-ounce chicken breasts should not weigh six ounces. At 10¢ per ounce, this means 10¢ higher cost per portion and 10¢ lower profit by order. Remember that operators buy by the pound, but sell by the portion!

Preservation and Temperature. Improvements in refrigeration technology have aided poultry production, raising quality levels of products reaching the hospitality operator. As late as the mid-1960s, practically all chicken was refrigerated by use of chunked or shaved ice. Today, vacuum-sealed packaging is flushed with carbon dioxide (CO₂) gas to maintain quality and extend shelf life.

Poultry products are offered in several packs depending upon customer requirements. If purchased fresh (unfrozen), the product may be specified as ice pack, chill pack, or vacuum CO₂-flush. Some precooked chicken may be packaged fresh also. Ice pack is simply the traditional method of packing in crushed ice. Chill or dry pack involves cooling (in some cases actually freezing the bird about one-fourth

Exhibit 5 Sample Specification #1: Fresh Whole Broilers

Item:	Fresh whole broilers, weighing 2.75 pounds each, plus or minus 2 ounces
Grade:	USDA Grade A
Packaging:	Packed two birds per vacuum-sealed, CO ₂ -flushed bag; ten bags to each master carton; USDA data and production date to be displayed on exterior of carton
General Requirements:	Without necks or giblets
Specific Requirements:	Birds to be received within three days of processing
Handling:	Receiving temperature (internal product) not to exceed 34° F (1° C)

Exhibit 6 Sample Specification #2: Fresh Cut-Up Broilers

Item:	Fresh cut-up broilers, weighing 2.75 pounds each, plus or minus 2 ounces
Grade:	Plant Grade A
Packaging:	Packed two birds per vacuum-sealed, CO ₂ -flushed bag; ten bags to each master carton; USDA data and production date to be displayed on exterior of carton
General Requirements:	Without necks or giblets; eight-cut with keel bone split; separated at natural joints by using knives (no saw)
Specific Requirements:	Birds to be received within three days of processing
Handling:	Receiving temperature not to exceed 34° F (1° C)

Exhibit 7 Sample Specification #3: Fresh Turkey Breast/Thigh Roasts

Item:	Fresh, raw, boned, and tied breast/thigh roasts made from young tom turkeys; each roast to weigh 8 pounds, plus or minus 8 ounces
Grade:	USDA Grade A
Packaging:	One roast per vacuum-sealed, CO ₂ flushed package; five roasts to each master carton; USDA data and production date to be displayed on exterior of carton
General Requirements:	Composed of 60% breast, 40% thigh meat; all solid pieces to be used only from these two parts
Specific Requirements:	No skin, fillers, binders, or seasoning

Exhibit 8 Sample Specification #4: Frozen, Oven-Roasted Turkey Breasts

Item:	Fresh, oven-roasted turkey breasts from young tom turkeys; finished weight of 9 pounds, plus or minus 8 ounces
Grade:	USDA Grade A
Packaging:	Each roast individually vacuum-sealed; frozen at minus 40° F (4° C) or lower; four roasts to each master carton; USDA data and production date to be displayed on exterior of carton
General Requirements:	Natural shape; hand formed; no more than three solid pieces to each roast; breast meat only
Specific Requirements:	Skin-on; no broth or fillers

inch from the outside), packing in poly-bags, and then maintaining storage and transportation temperatures of about 30° F (–1° C) throughout the distribution cycle. This is difficult to do; some processors sprinkle CO₂ (pellets or flakes) into poultry cases before sealing in order to eliminate oxygen, inhibit bacterial growth, and maintain temperature. Bags can also be vacuum-sealed using a CO₂-flush to eliminate the oxygen. However packed, the internal product temperature should not exceed 34° F (1° C).

The bird should appear fresh, with firm, clean, and clear flesh; the skin should be dry and smooth with no stickiness. Likewise, there should be no odor from the skin or cavity and no blood should be present. Be sure to check the joints for blood traces as this may be evidence of storage at improper temperatures. If the product is frozen, it should be packaged to exclude air; there should be no discolored flesh or bones. After thawing (slowly in a refrigerator), the characteristics described above should still be present. The production date should be stenciled on the exterior of the carton.

Cutting. The fast-food industry usually buys broilers in a cut-up form: a standard eight-cut or the Kentucky Fried Chicken nine-cut (which separates the breast into 3 pieces). A few operations still buy whole broilers and portion them on-site. Poultry can also be purchased quartered and in other market forms. Most hospitality operators have little use for the neck and giblets; they generally buy only the shell (chicken carcass minus the neck and giblets). As with sizing, weight range is critical to portioning.

If cut poultry is required, the method must be specified. For fryers, should the keel bone be left in or removed? Should the tail be left on or off? Should the cuts be made by hand (with a knife) or by saw? What should the tolerance level be for mis-cuts (saw cuts that miss the joint)?

Other Considerations. If the item is breaded, the proportion of breading to product must be specified. If precooked or browned, the degree of each must be stated. If a cooked roast is required, the method of cooking should be addressed (for instance, dry roasted, steam-injected, or water-cooked).

Breast and thigh roasts should be made from solid pieces of these parts. Rolls may be of smaller formed pieces and generally have more binder in the form of broth, emulsified skin, and gelatin. Rolls with practically the same label can vary from good to virtually inedible; breast roast has a narrower tolerance. In the case of a mixed roast, the percentages of white and dark meat should be included, paralleling the percentages of the whole bird: about 65% white meat and 35% dark meat.

Marketing and Distribution Channels

The traditional local poultry distributor carried a variety of products which, in addition to poultry, included fresh eggs, cheeses, and other dairy items. This distributor carried out some further processing in the form of cutting and boning. As the fast-food chains emerged and grew in the 1950s and the 1960s, some became distributors for these chains and carried additional items, for instance, chicken patties. Other distributors concentrated on the remaining food service accounts available to them,

while still others de-emphasized distribution and concentrated more heavily on making further processed items, such as boneless breasts, patties, cutlets, and chicken Cordon Bleu.

Today, slaughter plants are also specializing. Many of these plants are still in the retail-chain commodity-broiler business, but others concentrate on cutting and sizing according to fast-food chain demand. Some plants provide prebreaded and/or precooked items, again in response to the food service chains.

Traditional poultry distributors also carried turkeys, with practically all sales concentrated around the Thanksgiving and Christmas seasons. Because of the growing trend toward further processing, turkey sales are now spread more evenly throughout the year. Since cooked turkey products generally are frozen, area distributors of frozen foods carry them in competition with distributors specializing in poultry. Manufacture of these items is on a mass production-line basis; local companies have been unable to produce them competitively.

Other poultry (for instance, ducks and geese) and game birds continue to be available through the traditional distributor. An exception is Cornish game hens: their popularity has caused many frozen food distributors to stock them.

Distributor markups vary with the size of the customer's orders and the type of service required. Generally, cents-per-pound over cost can be negotiated on fresh commodity products while percentage markups are used for further processed items. As with any cost-plus program, the costs must be known in order to manage the program.

Poultry Pricing

Until the mid-1960s, auctions for live chickens were fairly common throughout the United States. The prices established at these auctions were public information and provided buyers with a base from which to judge the cost of their processed broilers. As the industry consolidated and integrated its operations, however, there were no longer any meaningful auctions. Buyers were left with competitive bids as the only means to determine prices.

The present situation requires that buyers be knowledgeable about poultry pricing methods. They must use reliable price references and understand geographical differences in poultry pricing. The examples given in this section provide buyers with a framework for establishing their own systems. Buyers must develop systems which best complement their companies' needs.

Price Sources

The hospitality buyer has access to a number of price sources for broilers. Most local newspapers carry daily quotes as does *The Wall Street Journal*. Buyers should understand that these broilers are intended for the retail chain stores; the neck and giblets are retained in the cavity of the bird and the added weight is reflected in the price. The hospitality buyer can use these numbers as a reference, but generally not in negotiations with local distributors.

Two market reports are frequently used although others are available. *Poultry Market News Report* is published three times weekly by the Agricultural Marketing

**Exhibit 9 Poultry Market News Report, Friday,
April 11, 1986**

PRELIMINARY REPORT of prices negotiated for trucklot sales of ready-to-cook icepacked and CO ₂ packed Broiler/Fryers to be delivered to first receivers at major market areas week of April 14-18, 1986 (Cents Per Pound)			
U.S. GRADE A (Includes Branded Product)			
MARKET AREAS		MAJORITY	
BOS/NEW ENGLAND		46.50-50.00	
CHICAGO		46.00-47.00	
CINCINNATI		Too Few	
CLEVELAND		Too Few	
DENVER		51.50	
DETROIT		47.00	
LOS ANGELES		52.00	
NEW YORK		49.00-50.00	
PHILADELPHIA		Too Few	
PITTSBURGH		47.00	
ST. LOUIS		Too Few	
SAN FRANCISCO		52.50	
SOUTHEASTERN AREA FOB DOCK EQUIVALENT			
MISSISSIPPI		47.00-48.00	
WOG BROILERS—(Without giblets)—Prices Paid Per Pound in Trucklot and LCL Quantities Delivered First Receivers Week of April 14, 1986			
MARKETING REGIONS	MAJORITY	WTD. AVG.	LOADS
East	52.00-53.00	52.56	39
Central	51.75-53.00	53.21	84
West	56.50-58.00	57.59	96

Source: USDA, Agricultural Marketing Service, Poultry Division.

Service of the USDA. This publication reports national pricing for broilers and turkeys, and also gives prices for some raw components (Exhibit 9). *Urner Barry's Price-Current* by Urner Barry Publications is published five days each week. In addition to broiler and turkey information, it reports prices and market data for a number of other items, including cooked poultry, eggs, and dairy products (Exhibit 10).

Geographical Differences

Poultry pricing is developed independently in the major producing areas around the country. For instance, *Poultry Market News Report* identifies the primary producing areas as: Southeast, South Central, West, and Delmarva (Delaware, Maryland, and Virginia).

Exhibit 10 Urner Barry's Price-Current, Friday, April 11, 1986

CHICKENS (Trucklot)				
Prices delivered warehouse based on current negotiations. (Deliveries 1-7 days.)				
	Northeastern Area		Midwestern Area	
	Today	5 Day Avg	Today	5 Day Avg
Plant Grade, 2 1/4 lbs. & up	.4700	.4500	-	-
U.S. Grade A, Sized 2-3 1/2 lbs	.4800	.4600	.4700	.4500
U.S. Grade A, 3 1/2 lbs & up	-	-	-	-
Canner Pack, Trim or Better	-	-	-	-

WOG CHICKENS		CUT-UP CHICKENS	
(Without Giblets)		Eight Piece Cut	Nine Piece Cut
2 1/4-2 1/2 lbs	.5500	.5900	.5900
2 1/2-2 3/4 lbs	.5500	.5900	.5900
2 3/4-3 lbs	.5500	.5900	.5900

CHICKEN PARTS		
TRUCKLOT prices delivered warehouse—based on current negotiations. (Deliveries three to seven days.)		
	Northeastern Area	Midwestern Area
Breasts	.95	-
Breast, front halves	.75	.75
Legs	.39	.38
Leg quarters	.30	.30

Source: Urner Barry Publications, Inc., Toms River, New Jersey. Reprinted with permission.

Labor cost advantages are the major reason for rural producers' expansion into further processed items. In addition, they can add more product value at the source and reduce transportation costs by removing inedible matter (bones, fat, and cartilage) before shipping over long distances.

Producers closest to a metropolitan area have a freight advantage over producers in rural areas, but may also have higher production costs. Prices for poultry, regardless of where it is produced, tend to equalize in the major metropolitan consumption areas. For instance, Arkansas producers competing in California tend to have lower prices FOB their plants (prices prior to distribution) than California producers, who are often faced with higher labor and overhead costs. Similarly, producers in the Delmarva region (closer to the major Eastern markets) normally have higher prices FOB their plants than Georgia or Alabama producers who compete in the same markets.

Within the producing areas, prices trade in a narrow range on an FOB basis. For example, Alabama and Mississippi poultry are often very close in price. When an imbalance does occur, it is typically caused by unusually high or low production in one of the areas. This is generally caused by weather affecting an area of consumption, transportation, or production.