Goat Meat Carcass Evaluation and IMPS Cuts

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Goat meat has traditionally been consumed by individuals having an ethnic or religious identity with it. As a lean red meat alternative, goat meat has less fat and higher polyunsaturated: saturated fatty acid ratios than more conventional red meats. There are several difficulties in making goat meat more widely available to consumers. Approximately 80% of the U.S. goat population is in Texas. Goat meat consumers traditionally are clustered along the eastern and western coastal areas. Goat meat is often cooked as an entire carcass or cut into cubes for use in stews and curried meats. Shipment of live goats or unwrapped goat carcasses long distances from sites of production to sites of consumption decreases the quality at market endpoints. For these reasons, a marketing system to facilitate the movement and trading of live goats and goat meat, and a means to communicate the traits desirable in goats and goat meat are needed to provide goat meat to a wider segment of consumers and to encourage growth of the goat production industry.

Goats have different growth and development patterns than other small ruminants so data on live goat measurements of different breed types, ages, and sex classes are necessary to establish classification groupings of live goats. Selection criteria based upon age, sex, class, weight, and conformation (muscling and shape) were developed to assist in the marketing and price differentiation of live goats.

Carcass evaluation traits were measured in relation to useful industry classification characteristics and palatability differences. It is recommended that goat carcass evaluation include determination of sex, class (doe, wether, buck), age, or physiological maturity (kid is less than 14 months, yearling is 14 to 22 months, adult is specified to nearest year of age), hot and cold carcass weights, body selection/conformation group, estimated percentage of kidney and pelvic fat, external fat cover score, and color of lean in flank and rear leg. Sex, age, and weight classes allow sorting into uniform groups of carcasses. Conformation is related to amount of lean meat, and in lower conformation carcasses, associated with lower meat palatability. Goats typically have from 2 to 4% kidney and pelvic fat with very little fat in the heart and rib areas. External fat is deposited in a layer over the ribs rather than over the back except when goats have been finished on a high concentrate diet. A subjective fat covering score is more descriptive of the external fat compared with depth of fat over the *Longissium dorsi*. Color of lean is important to some ethnic customers and it assists in differentiating relative animal age and time postmortem.

The Institutional Meat Purchase Specifications (IMPS) were designed to provide a means for raw primal and portion goat meat cuts to enter into higher value institutional meat channels in a manner consistent with other meat species. The availability of IMPS to describe goat meat would likely foster purchases by non-traditional buyers, improve communications among different segments of current goat meat markets, and increase the variety of goat meat cuts. The goat meat IMPS were based on a target of institutional cuts weighing 1 to 2.5 kg, resulting in five styles of fabrication into primal cuts based upon five ranges of cold carcass weights. The five styles were designated platter, roasting, barbecue, Southern, and hotel. The platter goat is a carcass with rear trotters removed and the legs telescoped into the body cavity. The roasting style for carcasses of 6.8 to 9 kg has three major body primal cuts along with neck and shank. The barbecue and Southern styles have the entire forearm removed before fabrication of the body into three and four major primal cuts, respectively. The hotel style for carcasses weighing more than 18 kg reflects more traditional methods of fabrication into five primal cuts, shanks, and neck. Purchasers could also specify selection class, sex, maturity, breed, diet, fat limitations, cut thickness or portion weight, and other parameters such as netting or tying, packaging and packing, and quality assurance.

The development of live goat classifications should improve marketing channels while the availability of relevant carcass evaluation traits could facilitate communication among producers, processors, and purchasers. The IMPS cuts for goat meat will expand the available markets and allow merchandising of uniform products to more segments of the meat-consuming population. The development of standardized market terminology could promote growth of the entire goat meat industry.

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