Table 8.1. Percentages of untrimmed wholesale cuts from crossbred goat carcasses.

Cut	Percent of Carcass
Leg	27
Loin	7
Rack	10
Shoulder	22
Neck, breast, flank, foreshanks	34

proportion of carcass weight than has been reported for lamb.

Table 8.2 illustrates edible product yield of between 77% and 78% of carcass weight. Carcasses from goats that are less than 8 months of age have almost no trimmable fat (fat greater than 0.1 in) on any of the wholesale cuts which contribute to the high edible yield found in our studies. Neither breed type nor sex class had significant effect on edible product yield in these young goats. Percentage bone was slightly lower in carcasses from Florida native goats than the other breed types. Also, female carcasses had lower percentage bone than did intact male or castrate goat carcasses.

Table 8.2. Edible and compositional yields of goat carcasses.

	Percent of Carcass
Edible yield	
Edible product	77.4
Kidney fat	1.5
Bone	21.1
Compositional yield	
Fat-free lean	68.4
Fat	10.5
Bone	21.1

Compositional analysis of goat carcasses revealed that they were high (69.4%) in fat-free muscle mass and relatively low in chemical fat percentage (10.5%). Breed type had no effect on fat-free lean yield. In contrast, sex class did appear to influence fat-free lean deposition in that intact male carcass had about 3 percent greater yield of fat-free muscle mass than did the castrated males or female goat carcasses. Breed type and sex class both had some effect on total fat deposition of the carcass. Florida natives had the highest fat content. In contrast, Nubian x Florida natives had the least percentage carcass fat. Spanish x Florida natives were intermediate in fat content to the two other breed types. As would be expected from fat deposition patterns of other meat animal species, intact males had the least carcass fat, females had the highest fat content, and castrates were intermediate to the other two sex classes. In general, young goats were significantly lower in carcass fat than would be encountered in beef, sheep or pork carcasses from market weight animals.

MEAT TENDERNESS

Shear tests (an objective test for meat tenderness) conducted in the studies generally averaged about 12 pounds (force required to shear a 1/2" cooked core of meat) for muscles of the leg and loin. Most literature reports values of 10 pounds or less for meat in the slightly tender or better range, which would indicate that goat meat can be somewhat tough, especially when cooked by a dry cooking method under rapid heating. Most cooking recommendations for goat suggest a low temperature/long time or moist heat cooking method to assure acceptable meat tenderness.

Breed type did not appear to influence tenderness values from muscles of the leg or loin. In contrast, meat tenderness was greater (lower shear values) for muscle from the leg and loin cuts from female carcasses than were noted from castrate or intact male carcasses.

NUTRIENT PROFILE

Table 8.3 presents a partial nutrient analysis of a 85 g (3 oz) cooked portion of carcass composite meat from goat, beef and chicken. Data from this table suggest that goat meat (carcass composite) was similar to chicken in total grams of fat, percent of calories from fat, and cholesterol. In addition, broiled goat meat was similar to beef in iron content. Other nutrients for goat meat were similar to that reported for beef or chicken (USDA, 1990: USDA, 1979, respectively). Data from other studies by the author revealed that breed type and sex class had no significant effect on vitamin or mineral content of broiled goat meat (Johnson et al., 1994a). Research by the author also suggests that although there were small differences between the nutrient profile of goat meat and similar samples reported for beef or