

WASHINGTON LAMB OF MERIT

Purpose of Program

1. To create an awareness of current market demands.
2. To recognize exhibitors and breeders for producing high-value carcasses.
3. To provide information about carcasses produced in youth shows.
4. To identify selection, breeding, nutrition, and management practices that result in desirable carcasses.
5. To promote and improve the educational value and public image of youth shows.

Requirements for the Washington Lamb of Merit

1. **Hot Carcass Weight.** Must weigh 55 to 80 pounds.
2. **Adjusted 12th Rib Fat Thickness.** Must have an *adjusted* fat thickness of 0.15 to 0.25 inch.
3. **Muscling.** If ribbing is possible, the minimum ribeye area requirement is equal to $2.5 + [(hot\ carcass\ weight - 55) \times 0.02]$ or:

<u>Hot Carcass Weight</u>	<u>Minimum Ribeye Area Requirement</u>
55	2.5
60	2.6
65	2.7
70	2.8
75	2.9
80	3.0

Ribbed and unribbed carcasses must have a leg conformation grade of High Choice or better. (Carcasses should be ribbed, if possible, because ribeye area can be determined more objectively than leg conformation grade. Ultrasound measurements can be used if a carcass measurement is not available.)

4. **Yield Grade.** 2.9 or lower, reported to the tenth of a yield grade (the 1/100th decimal digit is dropped; for example: a yield grade of 2.99 is reported as 2.9).
5. **Quality Grade.** Low Choice through High Prime.
6. **Carcass Acceptability.** Carcasses must have acceptable color and firmness of fat and lean, and be free from defects that may significantly reduce carcass value. For example, carcasses with excessive (greater than 5%) muscle, fat, or bone removal due to bruises or localized infections should be eliminated.

7. **Average Daily Gain.** Minimum of 0.60 pound per day. Lambs must be fed a minimum of 60 days before the show.

Requirements for the Washington Lamb Carcass of Merit

Identical to the Washington Lamb of Merit except Average Daily Gain is not included. Use Lamb Carcass of Merit if an initial live weight cannot be obtained at least 60 days before the show.

Changes in Merit Requirements

Individual programs may need to adjust the requirements outlined in this bulletin. If requirements are changed, add the local county or area name to the name of the merit program.

Placement of Carcasses

Neither the Washington Lamb of Merit nor Lamb Carcass of Merit programs have been designed to rank carcasses. Instead, these programs award a superior level of achievement in producing high cutability and quality carcasses. Many good ranking systems are available and can be designed to use Lamb of Merit data. Select a ranking system that is consistent with demands of local producers and packers. You can obtain ranking systems through your county Extension office. Do not rank carcasses when different individuals collect data from several plants.

Procedure and Definition of Terms Recorded or Used in Washington Lamb and Lamb Carcass of Merit Programs

1. **Initial and Final Live Weight.** Use similar pre-weighing conditions for both initial and final live weights. The initial weight should be taken at least 60 days before the final weight at the show. Final weights are not as critical since hot carcass weight divided by 0.50 is used as the final weight for average daily gain calculations. A typical dressing percentage for lambs with the kidney fat removed is 50%.
2. **Average Daily Gain.** $[(\text{Hot carcass weight} / 0.50) - \text{initial live weight}] / \text{days on test}$.
3. **Kidney and Pelvic Fat.** Fat accumulated in the abdominal cavity of the carcass. As of June 1992, kidney and pelvic fat should be removed prior to obtaining hot carcass weight. The amount of kidney and pelvic fat remaining in the carcass should not exceed 1% of carcass weight.
4. **Hot Carcass Weight.** Dressed carcass weight immediately after slaughter prior to chill. If chilled weights are recorded, convert to a hot carcass weight basis by dividing by 0.98 (most carcasses shrink about 2% during the chilling process).
5. **Dressing Percent.** $(\text{Hot carcass weight} / \text{actual final live weight}) \times 100$.
6. **Adjusted Fat Thickness.** Measured between the 12th and 13th ribs over the midpoint of the longissimus (ribeye) muscle perpendicular to the outside surface of the fat. This measurement may be adjusted to reflect an unusual distribution of fat on other parts of the carcass such as the lower rib.

7. **Ribeye Area.** For carcasses ribbed between the 12th and 13th ribs, ribeye area is the cross-sectioned area of the longissimus (ribeye) muscle (use a plastic lamb and pork grid to measure to the nearest 0.05 inch). All adjacent secondary muscles are excluded in the measurement. Ultrasound measurements can also be used if carcass measurement is not available.
8. **Leg Conformation.** Visual estimate of the proportion of edible meat to bone in the leg. Superior leg conformation is reflected in legs that are very wide and thick in relation to their length and very plump, full, and well-rounded in appearance. Leg conformation scores are coded as follows: 15 = Prime+, 14 = Average Prime, 13 = Prime-, 12 = Choice+, 11 = Average Choice, etc.
9. **Yield Grade.** Value determined by a formula using adjusted fat thickness. Carcasses with a lower yield grade number will yield higher percentage of salable red meat. Yield grade = $0.4 + (10 \times \text{adjusted fat thickness, inches})$.
10. **Quality Grade.** A composite evaluation of the quality or palatability-indicating characteristics of the lean and the conformation of the carcass. A USDA grader (or another qualified and experienced person) should determine the final quality grade and quality grade factors of conformation, maturity, flank streaking, firmness of lean, and external fat. If graded by anyone other than a federal grader, make a notation to that effect. Prime lambs have no advantage over Choice lambs because there is little or no advantage in eating quality, and Prime lambs are usually fatter than Choice lambs.

Reference Material

Information about lamb carcass evaluation:

1. American Meat Science Association. 2001. *Meat Evaluation Handbook*. Fax: 217-398-4119 or <<http://www.meatscience.org>> or mail: 1111 North Dunlap, Savoy, IL 61874.
2. Boggs, Donald L., Robert A. Merkel, and Matthew E. Doumit. 1998. *Livestock and Carcasses: An Integrated Approach to Evaluation, Grading, and Selection*, 5th Ed. Kendall/Hunt Publishing Company, Dubuque, Iowa, 52002.
3. Romans, J.R., W.J. Costello, C.W. Carlson, and K.W. Jones. 2001. *The Meat We Eat*, 14th Ed. The Interstate Printers and Publishers, Inc., P.O. Box 50, Danville, Illinois 61834-0050.

Lamb carcass evaluation equipment:

1. Lamb Ribeye Grids and Fat Probes. NASCO West, Fax:: 209-545-1669, Phone: 800-558-9595, or <http://www.enasco.com/prod/Home> at 4825 Stoddard Rd., P.O Box 3837, Modesto, CA 95352-3837.



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