

AMS MEAT TENDERNESS FORUM

March 27, 2007 Hilton Kansas City Airport



MARTIN E. O'CONNOR, CHIEF Standards, Analysis and Technology Branch

AGENDA

- BACKGROUND
- CONSIDERATIONS
 - FACTORS WHICH AFFECT TENDERNESS
 - Methodologies
 - COMMENTS & FEEDBACK
- SCIENTIFIC APPROACH
 - USDA CERTIFIED/VERIFIED
- DEVELOPMENT OF WORKING GROUP
 - INDUSTRY
 - GENETICS TO RETAIL
 - ACADEMIA
 - TECHNOLOGY PROVIDERS
 - USDA













- RECOGNITION FOR NEED
 - -Standardized Minimum Marketing Claims
 - TENDERNESS
 - GRASS FED
 - NATURAL
 - ETCETERA





Marketing Claims Update

- Proposed 13 Livestock and Meat Marketing Claims
 - Over 13,000 comments
- Voluntary
- USDA Certified





Process Verified



Grass (Forage) Fed Claim

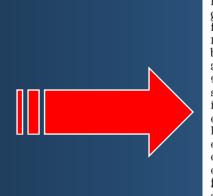
Grass Fed Claims—Background: This claim refers to the feeding regimen for livestock raised on grass, green or range pasture, or forage throughout their life cycle, with only limited supplemental grain feeding allowed. Since it is necessary to assure the animal's well being at all times, limited

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products containing lower levels of external and internal fat (including marbling) than grain-fed livestock products.

Claim and Standard:

 Grass Fed.—Grass, green or range pasture, or forage shall be 80% or more of the primary energy source throughout the animal's life cycle.



United States Standards for Livestock and Meat Marketing Claims Relating to Live Animal Production, Grass (Forage) Fed Claim

Background: For the purpose of this claim, forage is any edible herbaceous plant material, other than separated grain, that can be grazed or harvested for feeding. This claim applies to ruminant animals whose sole energy/feed source throughout their life span is derived from grass (annual and perennial), forbs (legumes, brassicas), browse, forage, or stockpiled forages. Hay, haylage, baleage, silage, ensilage and postharvest crop residue without separated grain may also be included in the feeding regime. Consumption of seeds naturally attached to herbage, forage and lifetime of the ruminant specie, with the browse or grain in the immature stage is acceptable. Grass and/or forage must be 99 percent or higher of the energy sour

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one percent of the total energy consumed during the animal's lifetime) due to inadvertent exposure to nonforage feedstuffs or to ensure the animal's well being at all times during adverse environmental/physical conditions is permissible. Additionally, routine mineral and vitamin supplementation is permissible.

Claim and Standard

Grass (Forage) Fed—Grass (annual and perennial), forbs (legumes, brassicas), browse, forage, or stockpiled forages, and post-harvest crop residue without separated grain shall be at least 99 percent of the energy source for the exception of milk consumed prior to weaning. Routine mineral and vitamin supplementation may also be included the feeding regimen. Grass (forage) d claims will be verified, as provided 7 CFR part 62, by a feeding protocol nat confirms a grass or forage-based diet that is 99 percent or higher.

Authority: 7 U.S.C. 162:1-1627.

Dated: May 9, 2006.

Lloyd C. Day,

Administrator, Agricultural Marketing Service.

[FR Doc. E6-7276 Filed 5-11-06; 8:45 am] BILLING CODE 3410-02-P

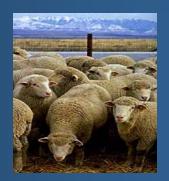


Naturally Raised

Listening Sessions

December 11, 2006 – Washington, DC
January 17, 2007 – Denver, CO
January 18, 2007 – Seattle, WA







CONSIDERATIONS

• FACTORS WHICH AFFECT TENDERNESS

• METHODOLOGIES

• COMMENTS & FEEDBACK



FACTORS AFFECTING TENDERNESS

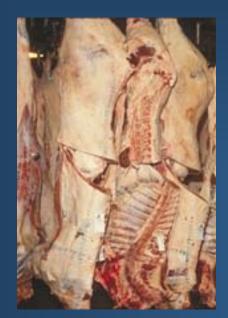
- AGE
- RATION
- GENETICS/BREED
- MARBLING
- CHILLING RATE
- IMPLANTS
- COOKING METHOD
 & DONENESS

- INGREDIENT
 ENHANCEMENT
- AGING POSTMORTEM
- MUSCLES
- ULTIMATE PH
- PROCESS
 STRATEGIES
- MORE...



SCOPE OF THE CLAIM "TENDERNESS"









METHODOLOGIES

- BELT GRILL COOKERY
- OPEN-HEARTH ELECTRIC GRILL COOKERY
- WARNER-BRATZLER SHEAR FORCE MEASUREMENT
- LONGISSIMUS SLICE SHEAR FORCE MEASUREMENT
- MORE...





COMMENTS & FEEDBACK

- RELATIONSHIP BETWEEN
 METHODOLOGIES SHOULD BE DEFINED
 WBS = (0.106283 X SSF) + 2.27
- STANDARD SHOULD BE WORTHWHILE
- TIERED CERTIFICATION
- THE AMSA TENDERNESS GUIDELINES
 1995



COMMENTS & FEEDBACK (CONT'D)

- APPROPRIATE AND DEFINITIVE SAMPLING IS NEEDED TO DETERMINE EXPECTED VARIATION
 - HOW ARE ANIMALS SORTED (GRADE, WEIGHT, AGE, LOCATION, AFFILIATION, NATIONAL POPULATION, BREED)
 - THIRD PARTY STATISTICIAN NEEDED
 - WHAT WILL THEN BE THE APPROPRIATE SAMPLE SIZES
- DIFFERENCES BETWEEN A POTENTIAL "CERTIFIED TENDER" PRODUCT AND A "PROCESS VERIFIED" PRODUCT THAT INCLUDES TENDERNESS TESTING
- THE ACCEPTED STANDARD SHOULD SHOW HIGH CORRELATION TO SENSORY PANELS AS CERTAIN LEVELS OF TENDERNESS
 CAN BE DISCERNED BY THE GENERAL POPULATION





TENDERNESS

SCIENCE THROUGHOUT THE SUPPLY CHAIN

DR. JEFF SAVELL MODERATOR
 -SCIENTIFIC RESEARCH
 -CONSUMER STUDIES
 -OPEN DISCUSSION



