

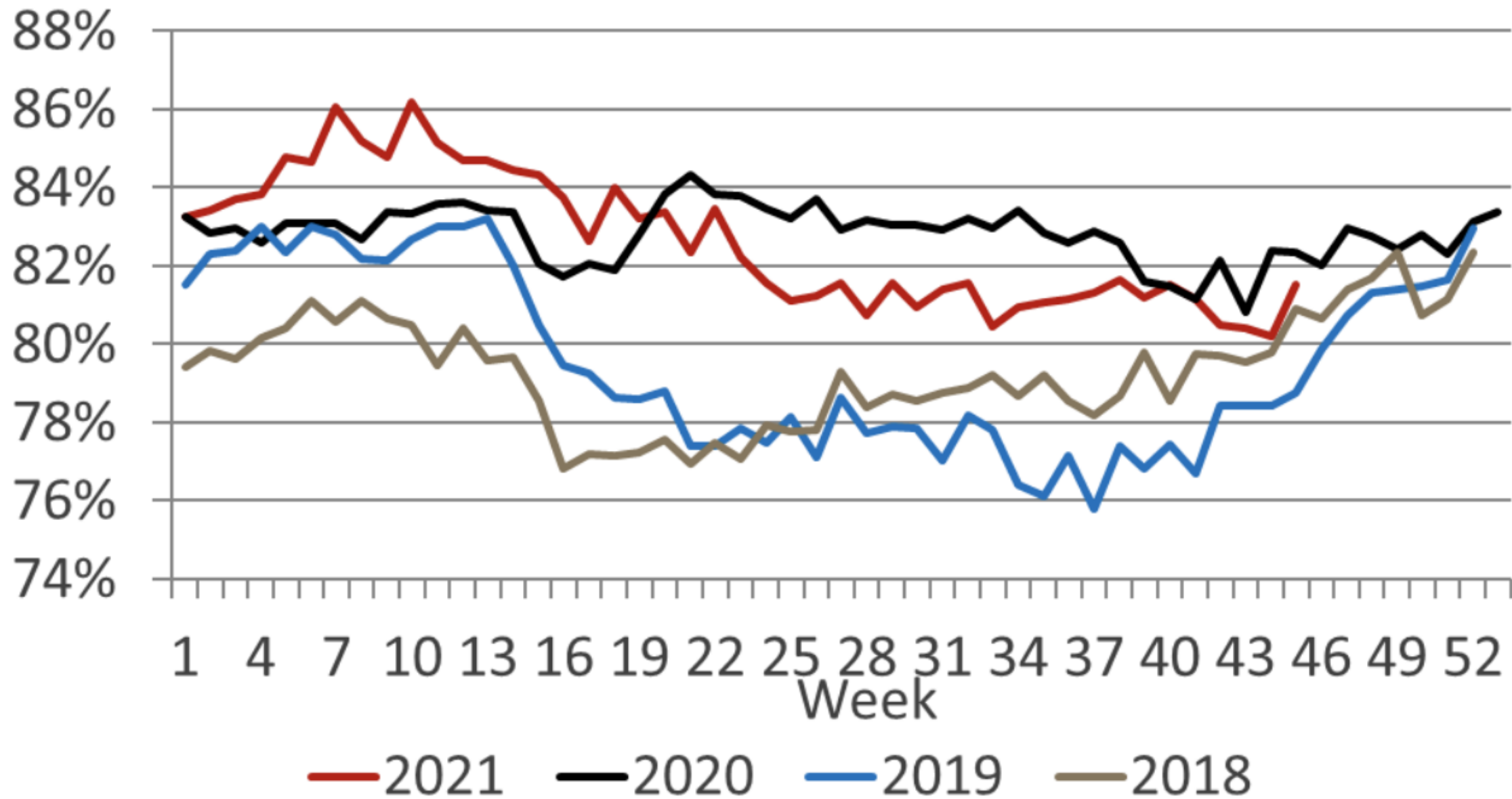
ULTRASOUND GUIDELINES COUNCIL UPDATE 2023!

WT

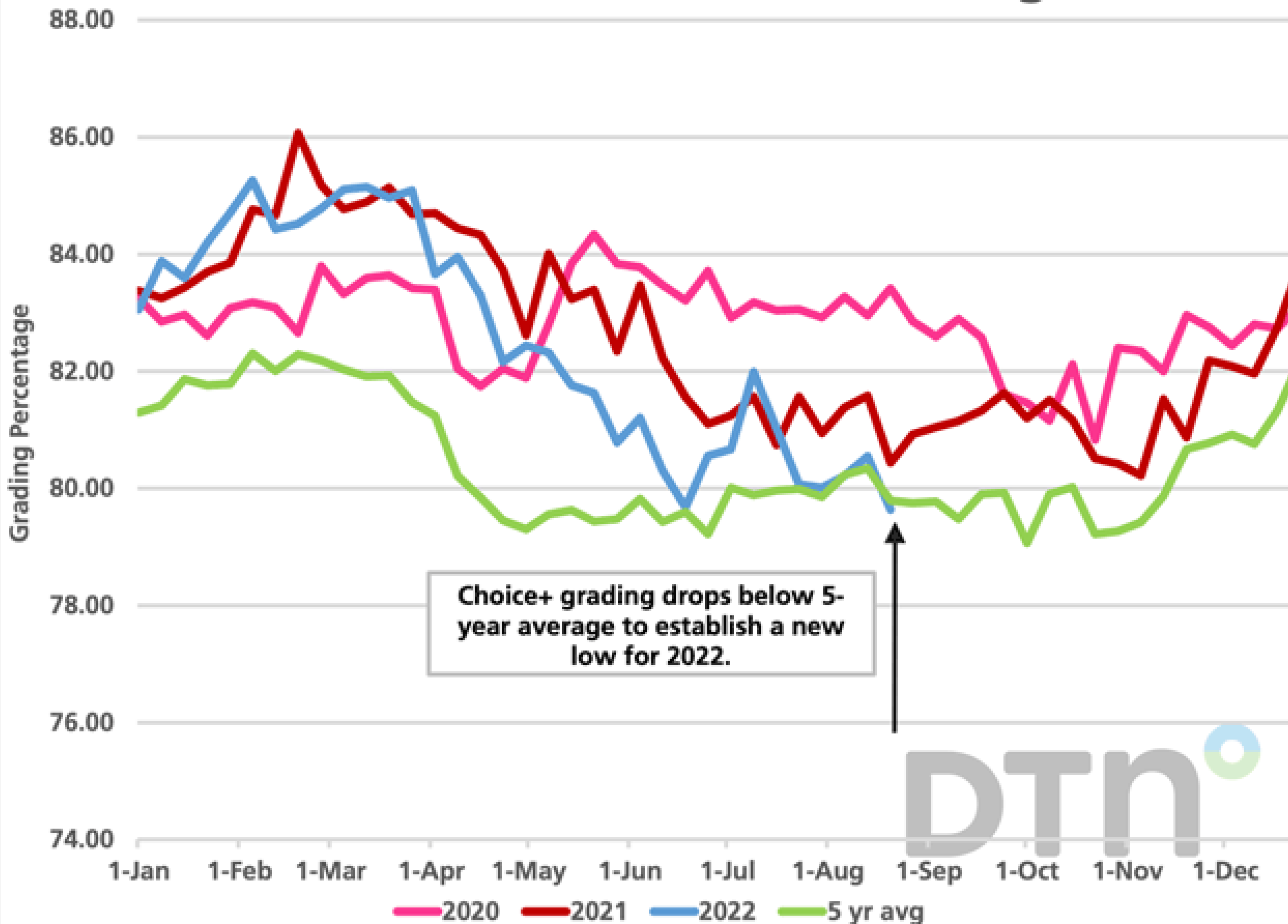


July 5, 2023
Tommy Perkins, Ph.D., PAS

% Choice & Prime Quality Grades, USDA

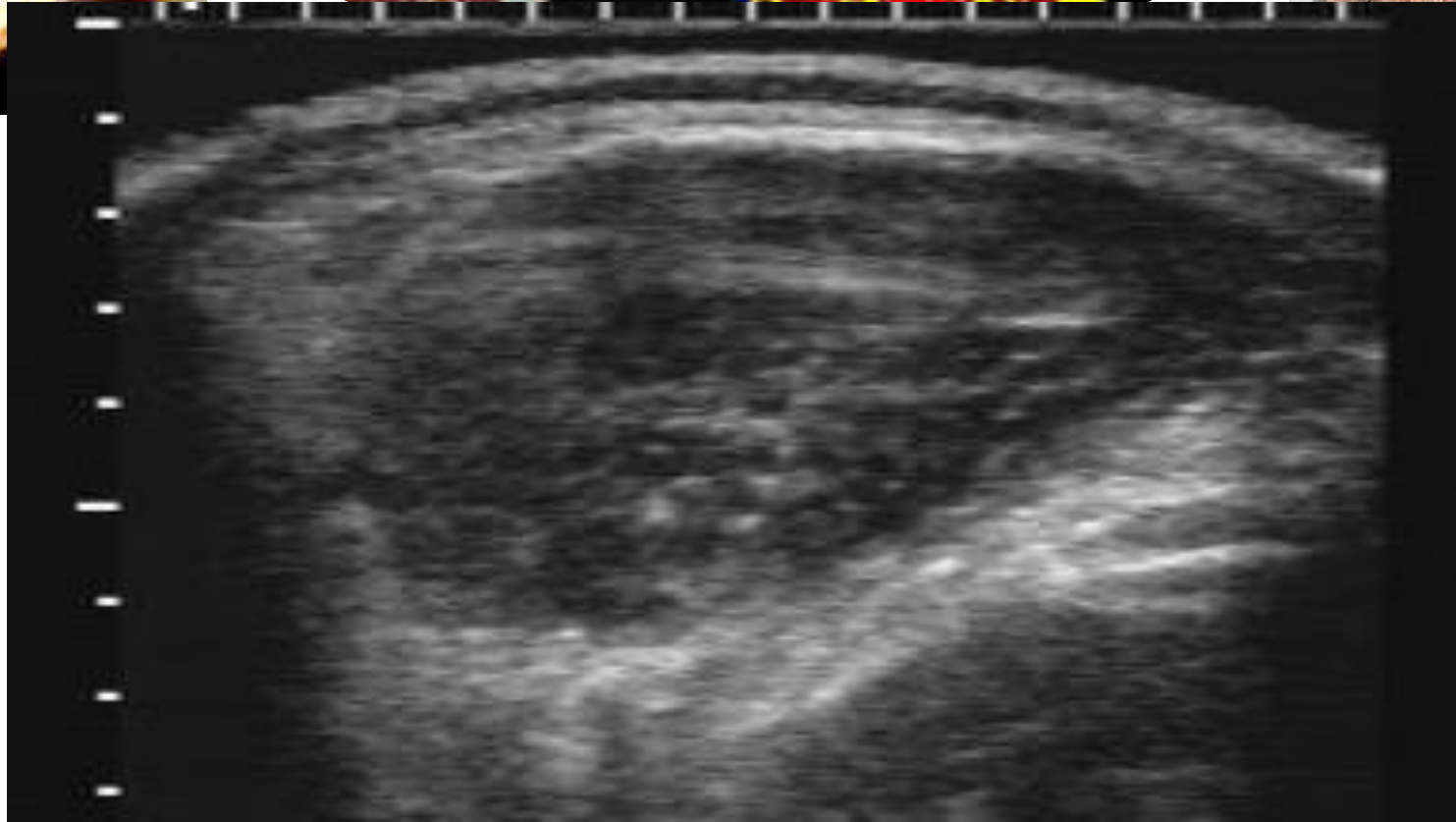
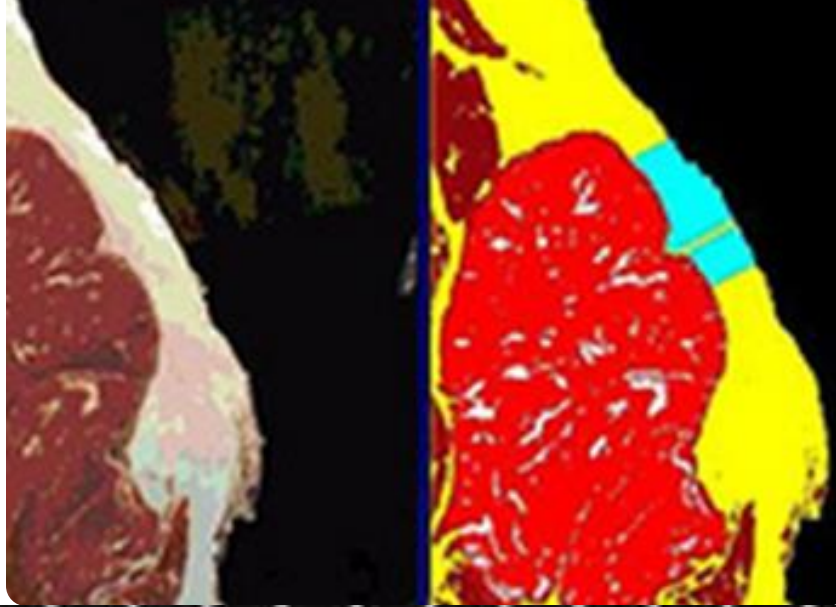


National USDA Choice+ Grading



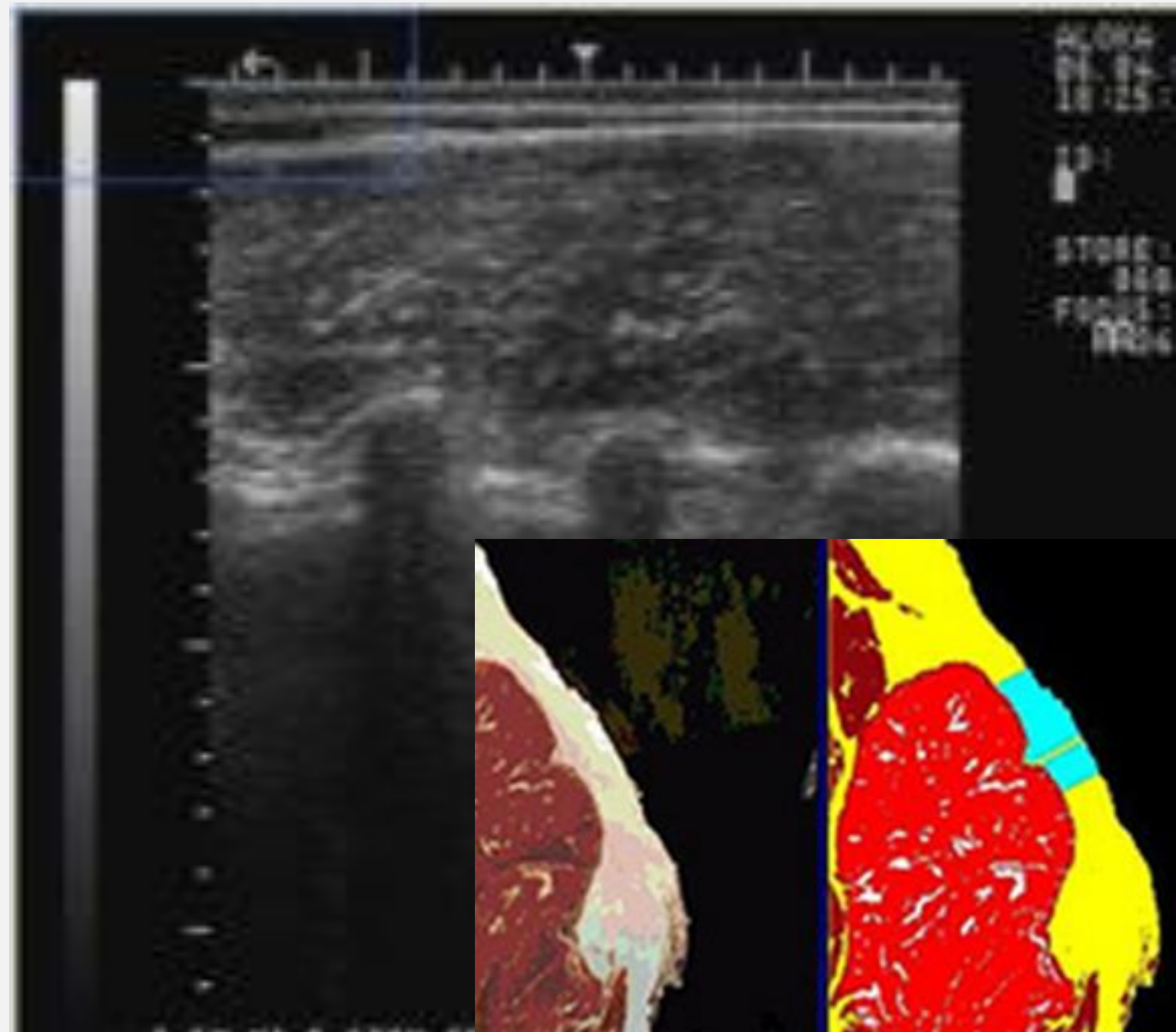
DTN^o

REA and FT??



Which carcass measurement technology is the "BEST"?

MS or %Fat??



Which carcass measurement technology is the "BEST"?

CAMERA GRADING ISN'T PERFECT

113220 HCW 780 Maturity A

1



The image displays four panels of a meat cut. The first panel shows the original color. The second panel shows the meat segmented into red (meat), yellow (fat), and cyan (bone). The third panel shows the meat with a green overlay, representing a camera-based grade. The fourth panel shows the meat with a yellow overlay, representing a different camera-based grade.

| Grade | SM | Choice | SM | Choice |
|-------|-----|--------|------|--------|
| YG | 2.4 | | 3.2 | |
| REA | 14 | | 12.6 | |
| PYG | 3 | | 3.4 | |
| NoneA | | | | |

Q Grade: Prime Choice Select NoGrade

Y Grade: Y1 Y2 Y3 Y4 Y5 NoGrade

Operator:

Properties: Dark Cutter Not Angus Hump Height Blood Splash Marbling Texture Light Muscling

Maturity: A B HB

UPDATED ALGORITHMS FOR ULTRASOUND

CARCASS DESCRIPTIVE DATA

| Trait | Min. | Max. | Avg. |
|-------|-------|-------|-------|
| HCW | 485 | 1016 | 801 |
| REAC | 11.49 | 21.33 | 15.44 |
| FTC | 0.04 | 1.08 | 0.74 |
| EE | .15 | 15.85 | 6.06 |

UPDATED ALGORITHMS FOR ULTRASOUND

ULTRASOUND MACHINES TESTED

| Unit | FT | REA | MARB |
|-----------|------|------|------|
| ALOKA 500 | 0.81 | 0.69 | 0.85 |
| EVO 2 | 0.94 | 0.69 | 0.87 |
| EVO 3 | 0.94 | 0.74 | 0.88 |

RESULTS

- New IMF models were approved for the Evo III for ILIA, UltraInsights, and CUP.
- New IMF models were approved for the Evo II for ILIA and UltraInsights (updated).
- A new IMF model for the “New Aloka” machine with the PXC200 frame grabber was approved for ILIA.

RESULTS

- Note: this change also impacts any technicians using the BIA ProPlus system. Images may still be collected and submitted to the lab(s) using this software, but interpretation of images is no longer approved since the model is embedded within the software.

RESULTS

-Software for the following combinations have been removed from the UGC

Approved list:

1. ILIA's Old Aloka-CX100
2. ILIA's Old Aloka-PXC200
3. ILIA's New Aloka-CX100.

SYSTEMS REVIEW COMMITTEE

- Investigating the completion of a research project to include 80 very high marbling cattle and 80 very low marbling cattle to determine software accuracy in estimating percent ether extractable fat using ultrasound technology both past and present.
- All software technologies and hardware will be invited.

SYSTEMS REVIEW COMMITTEE

- Very similar to the study done by William Herring et al. (1998)

Herring, W. O., L.A. Kriese, J. K. Bertrand, and J. Crouch. 1998. Comparison of four real-time ultrasound systems that predict intramuscular fat in beef cattle. *J. Anim. Sci.* 76:364.

- Animal Ultrasound Services, Inc., Ithaca, NY; CPEC, Oakley, KS; Critical Vision, Inc., Atlanta, GA (CVIS); and Classic Ultrasound Equipment, Tequesta, FL.

UGC CERTIFICATION 2022

- **55 Technicians**
 - **1 - Old Aloka**
 - **13 - New Aloka**
 - **1 - Aquilla**
 - **11 - EVO 2**
 - **2 - IBEX**
 - **27 - EXAGO**



UGC CERTIFICATION LIST

- 115 UGC Field Certified Technicians
 - 9 Canada
 - 5 Brasil
 - 111 USA



UGC CERTIFICATION 2023

- Hosted by West Texas A&M University, Canyon, TX
- September 13-15, 2023





E036

QUESTIONS?