



# Pillars of Beef Chain Success

Executive Summary: The 2011 National Beef Quality Audit

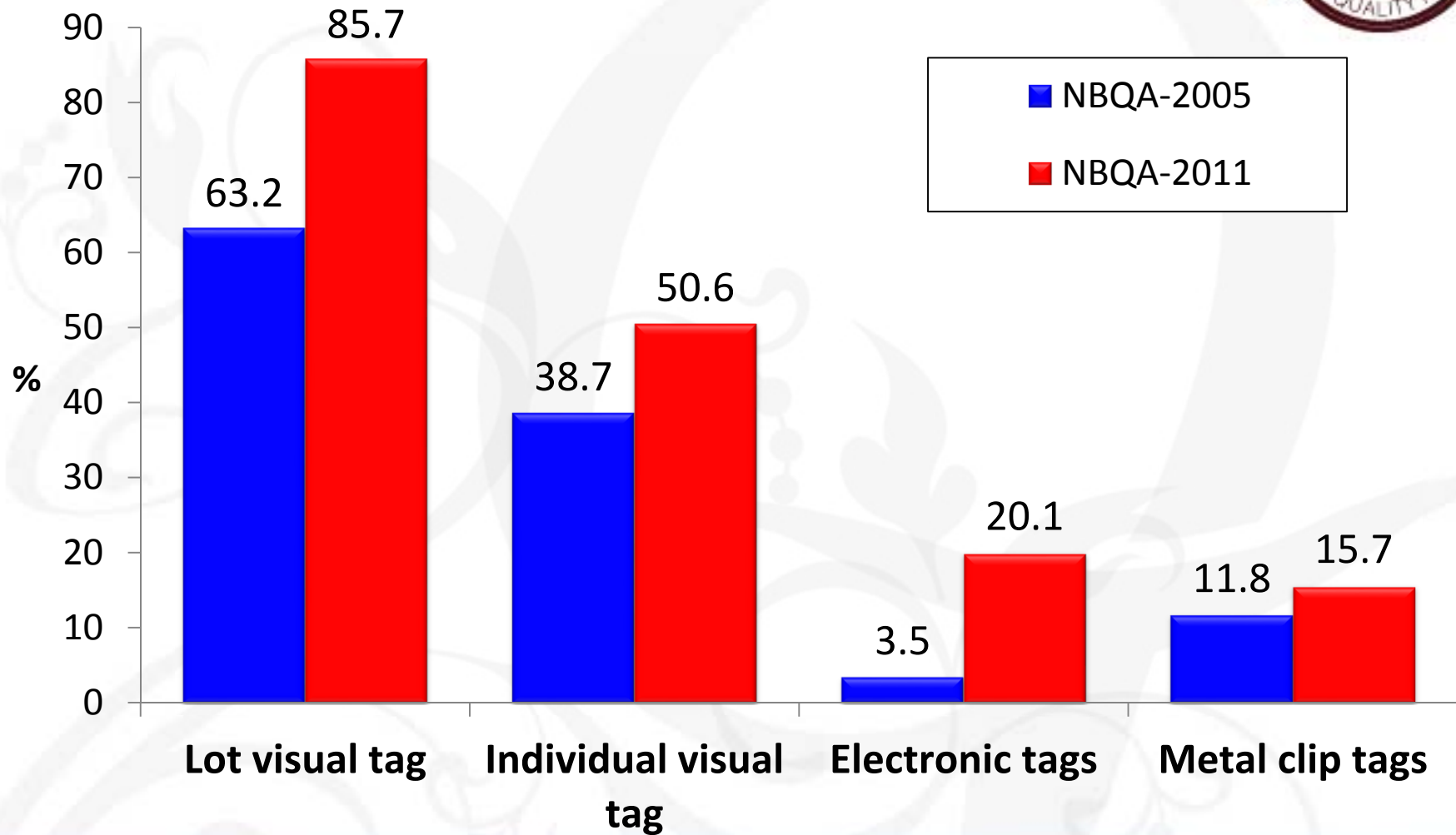


# Typical Week in 21<sup>st</sup> Century Beef Packing Plant

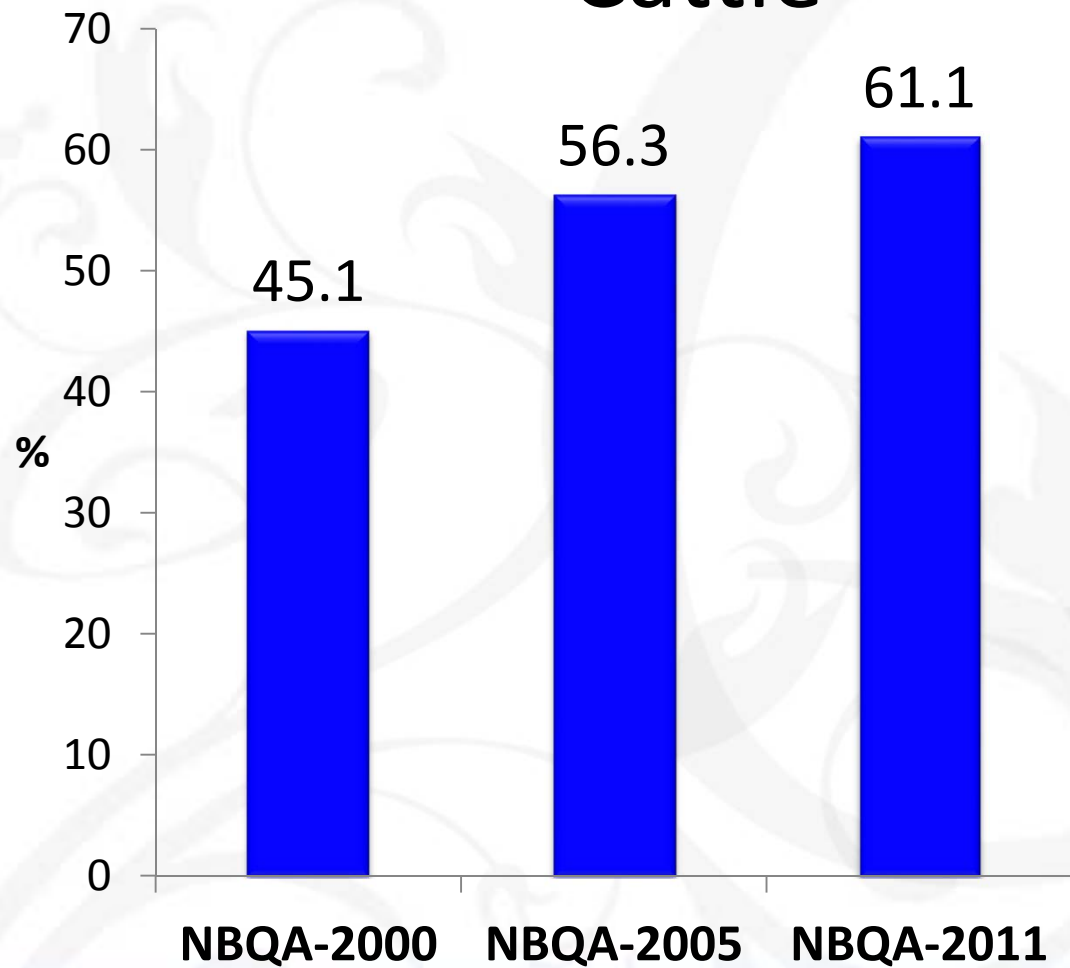


Shift	Monday	Tuesday	Wednesday	Thursday	Friday
A-shift	U.S. cattle	Non-hormone treated cattle	Canadian cattle	Age and source verified	U.S. cattle
B-shift	U.S. cattle	Mexican cattle	Canadian cattle	Branded beef program	U.S. cattle

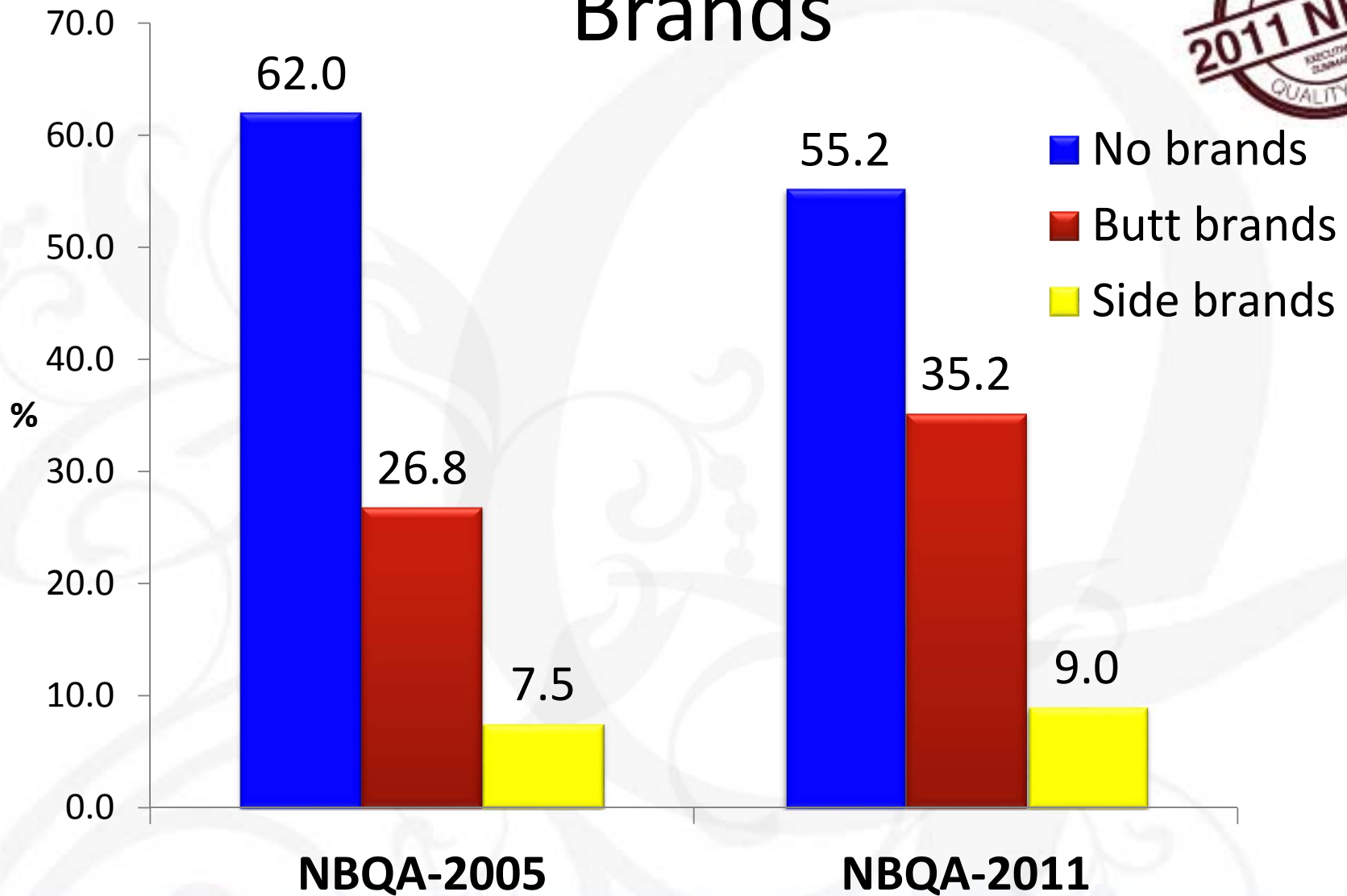
# Types of Identification



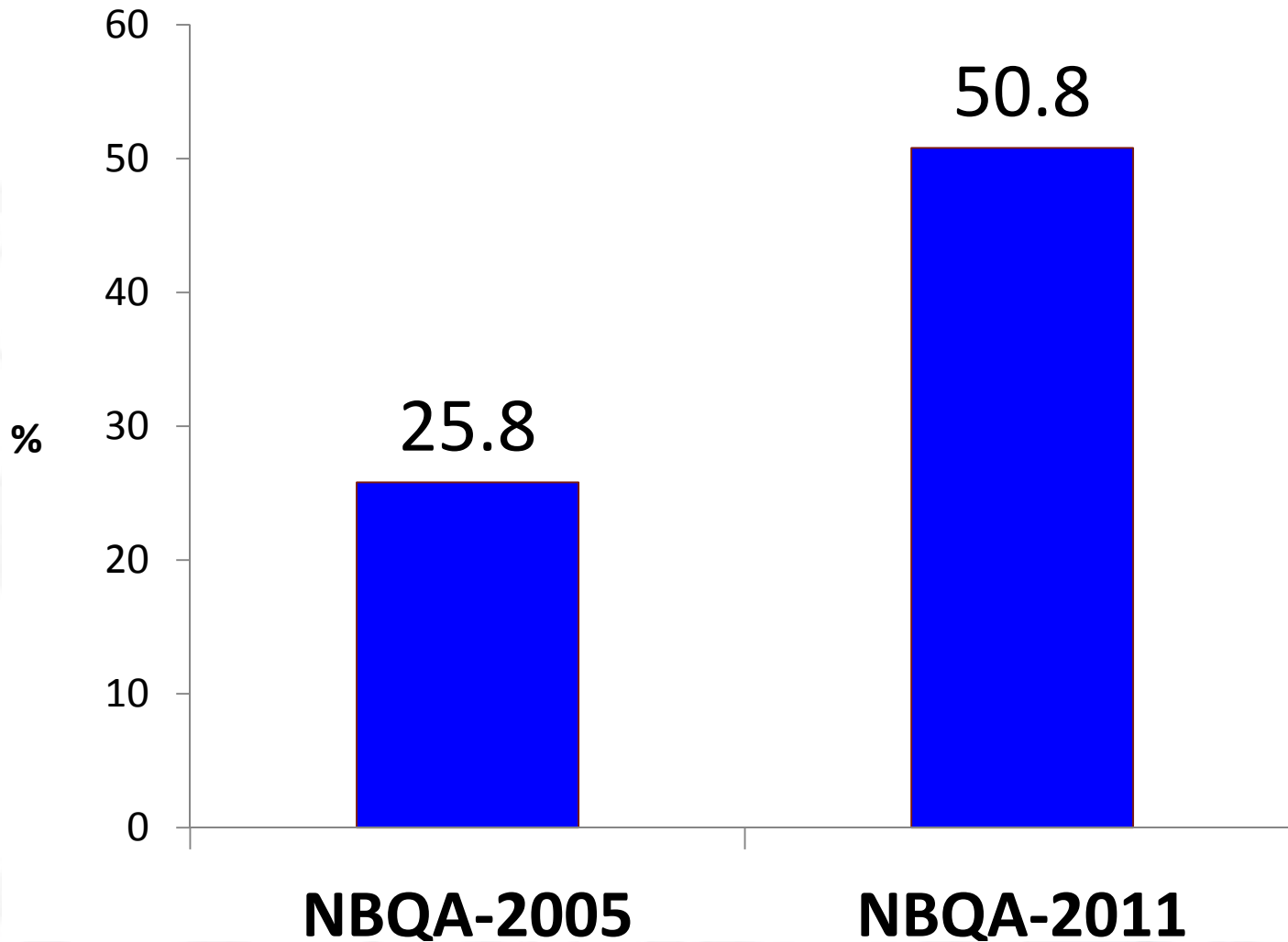
# Predominantly Black-Hided Cattle



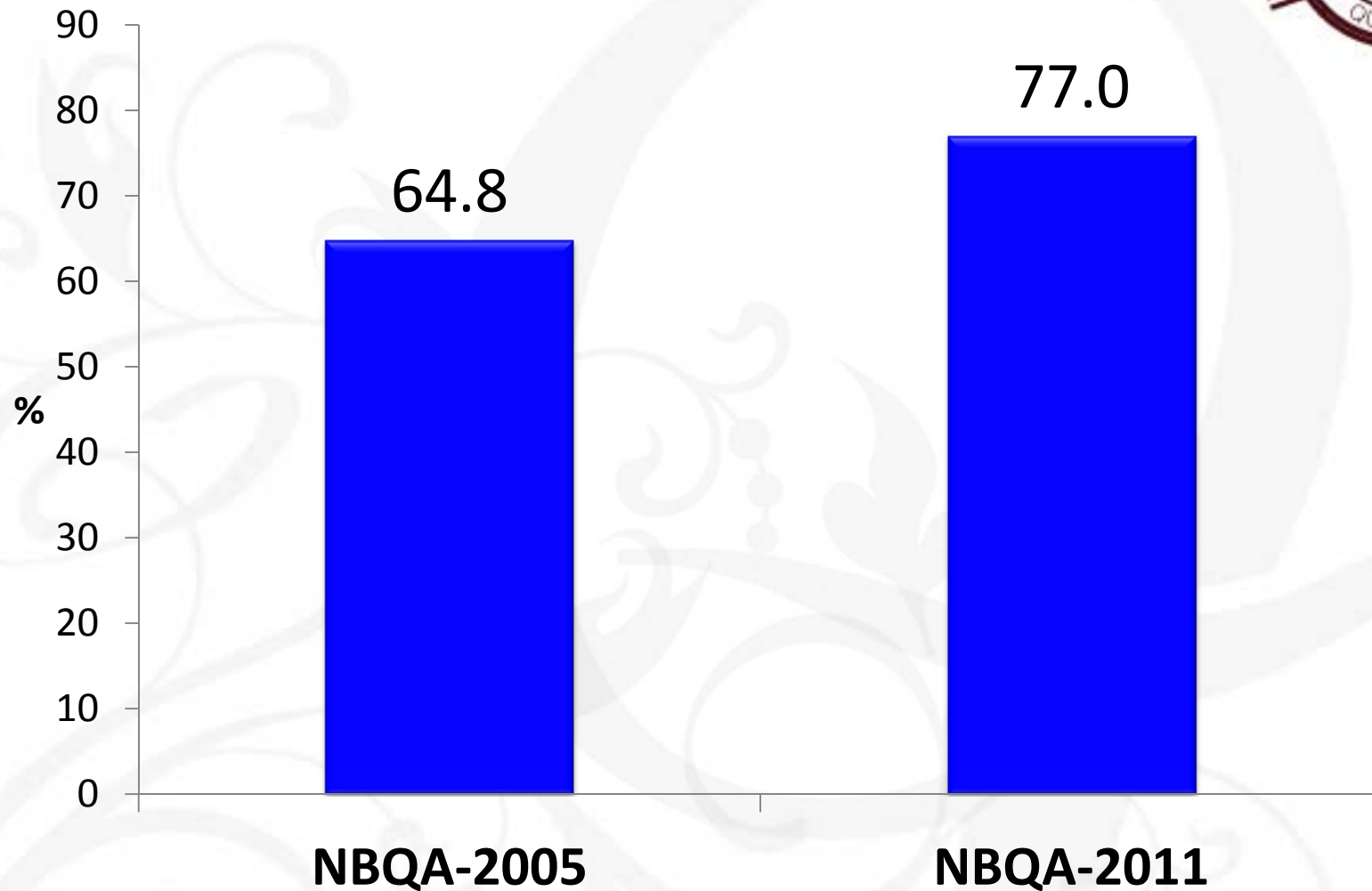
# Brands



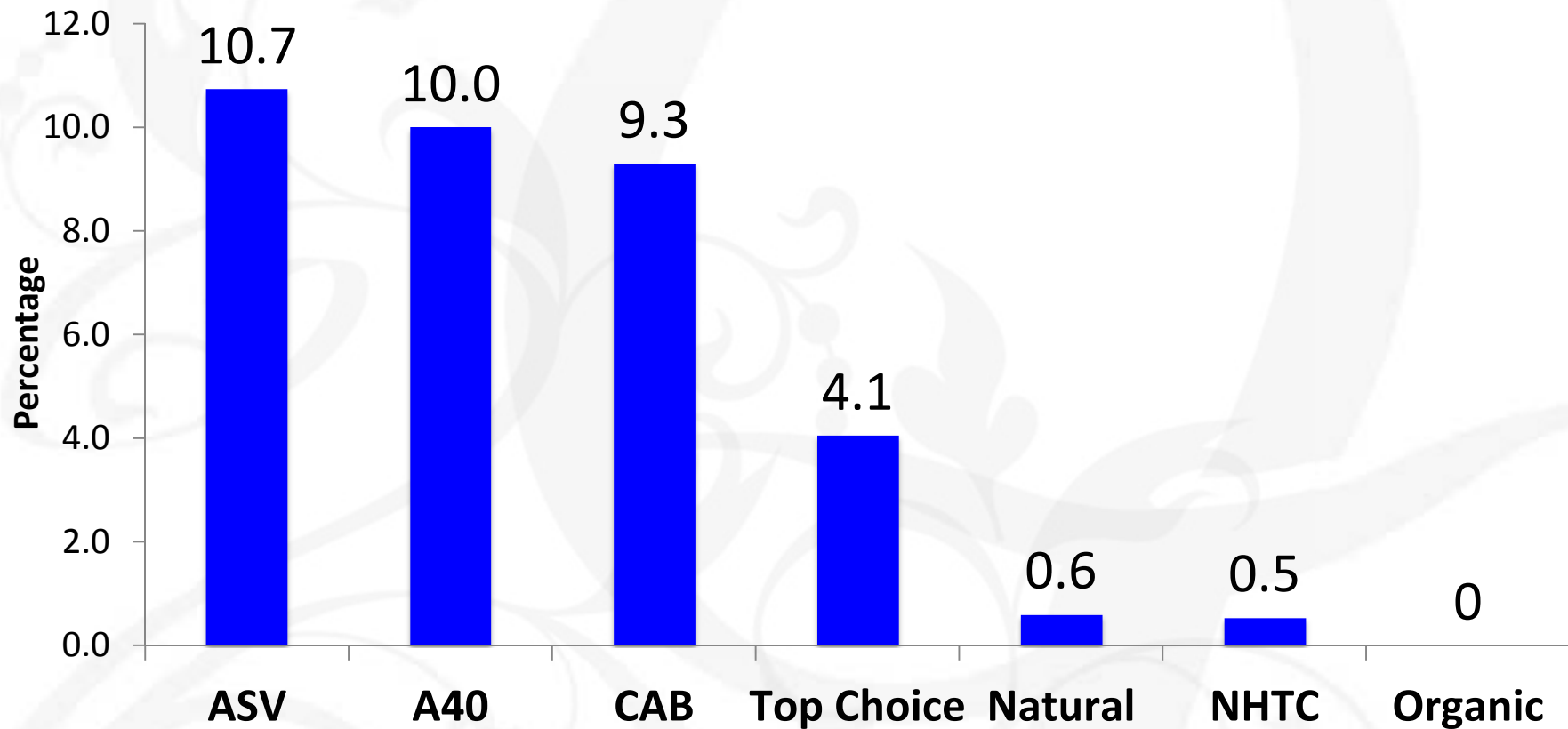
# No Mud and/or Manure on Hide



# Carcasses Without Bruises

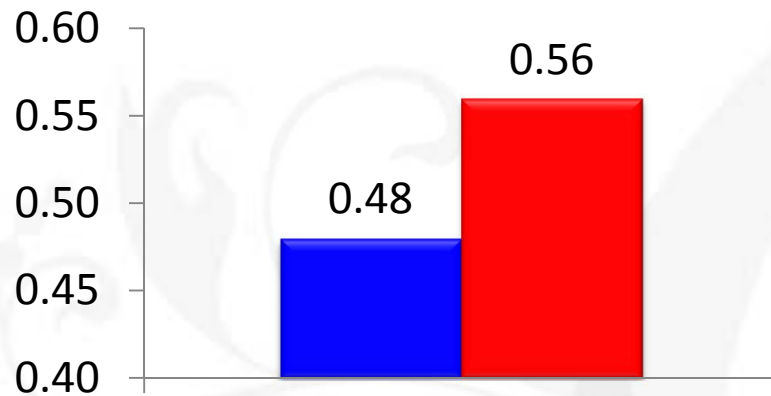


# Certified and/or Marketing Programs: Cooler Assessment

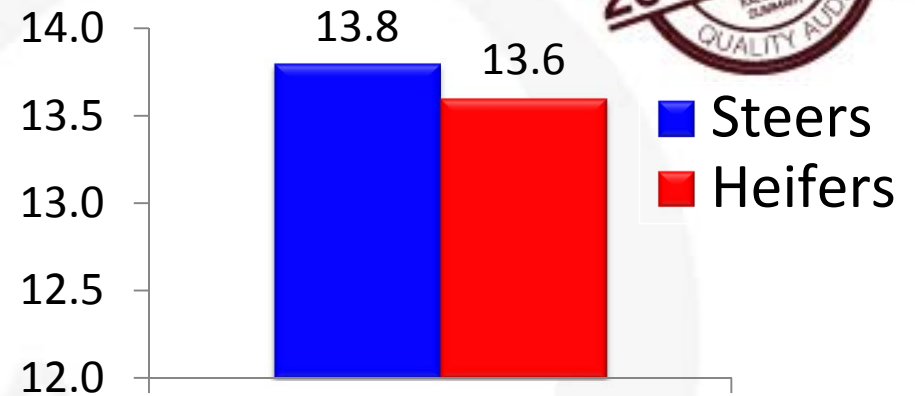




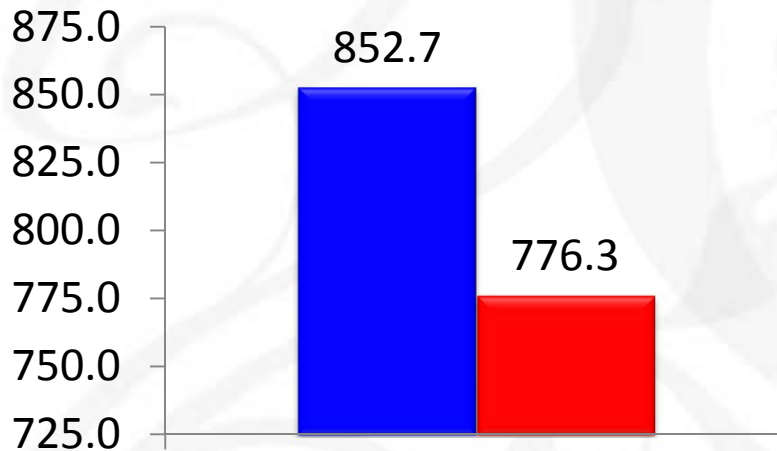
# Carcass Traits: Steers versus Heifers



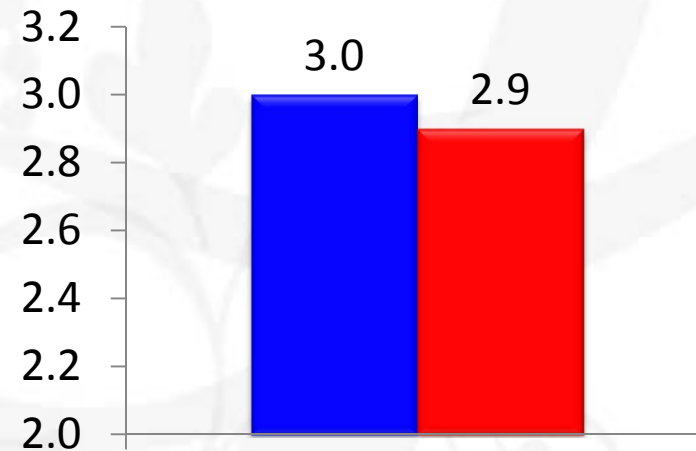
Fat thickness, inches



Ribeye area, square inches

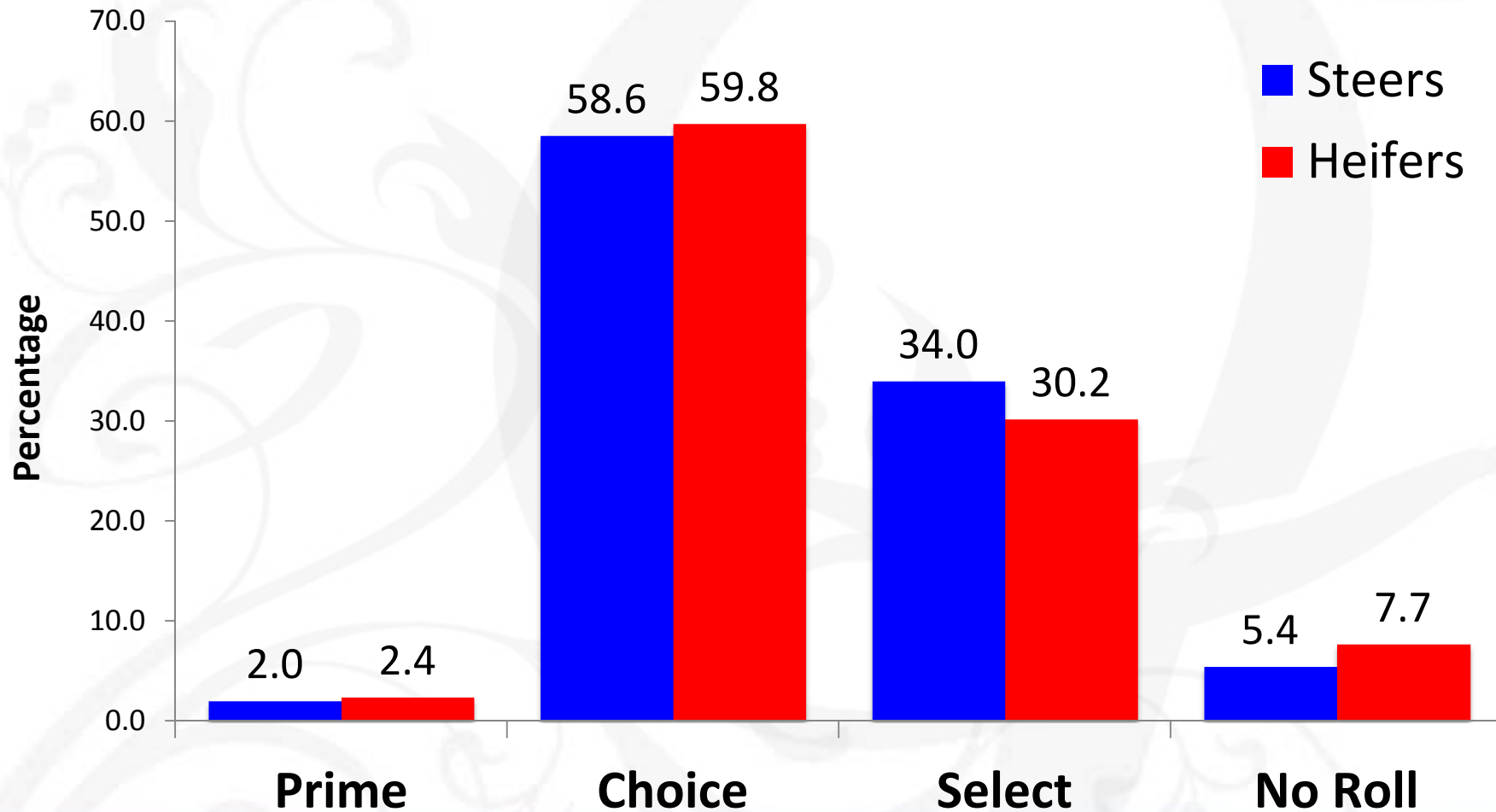


Carcass weight, pounds

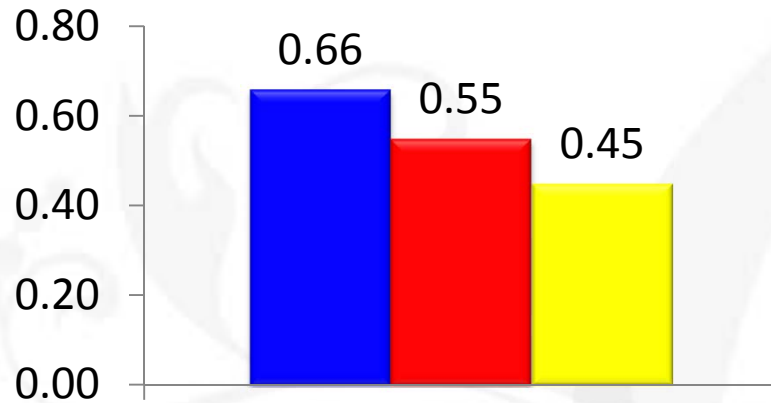


USDA yield grade

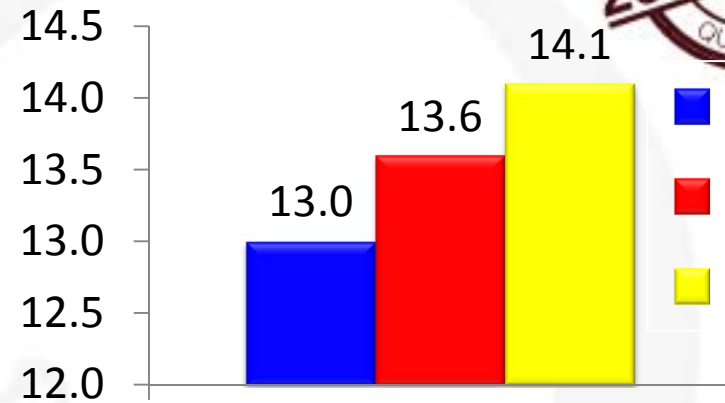
# USDA Quality Grade Distribution by Sex Class: Cooler Assessment



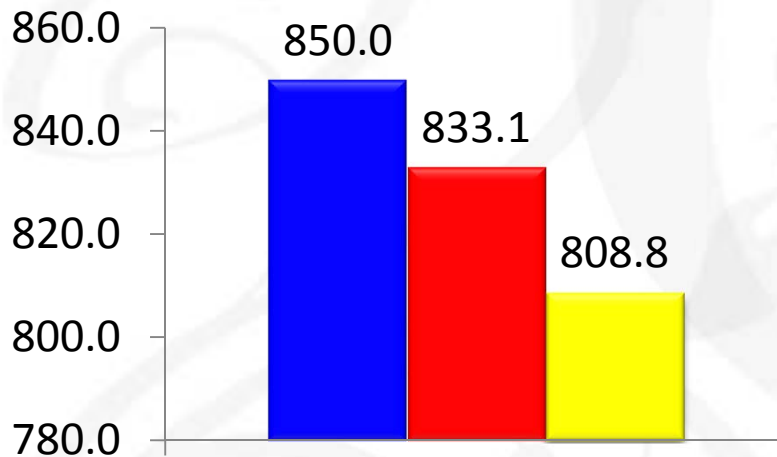
# Carcass Traits: USDA Quality Grades



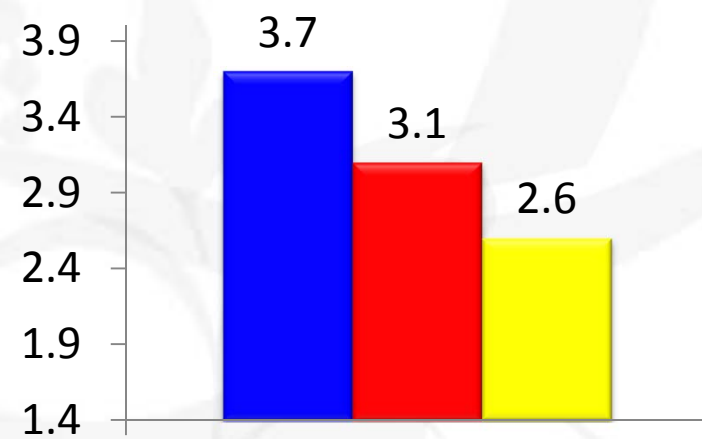
Fat thickness, inches



Ribeye area, square inches



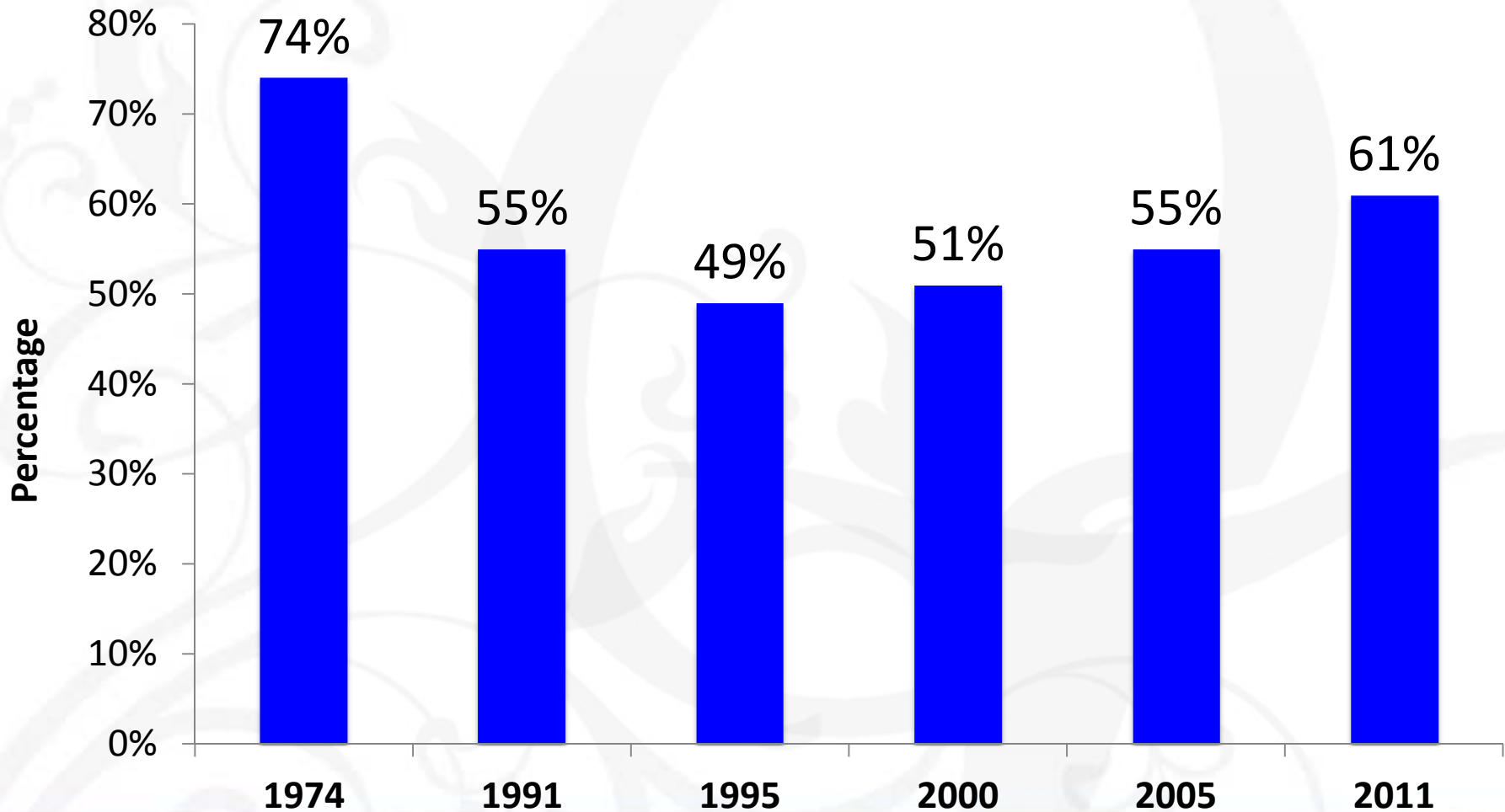
Carcass weight, pounds



USDA yield grade

- Prime
- Choice
- Select

# Changes in Prime and Choice Over Time: Cooler Assessment



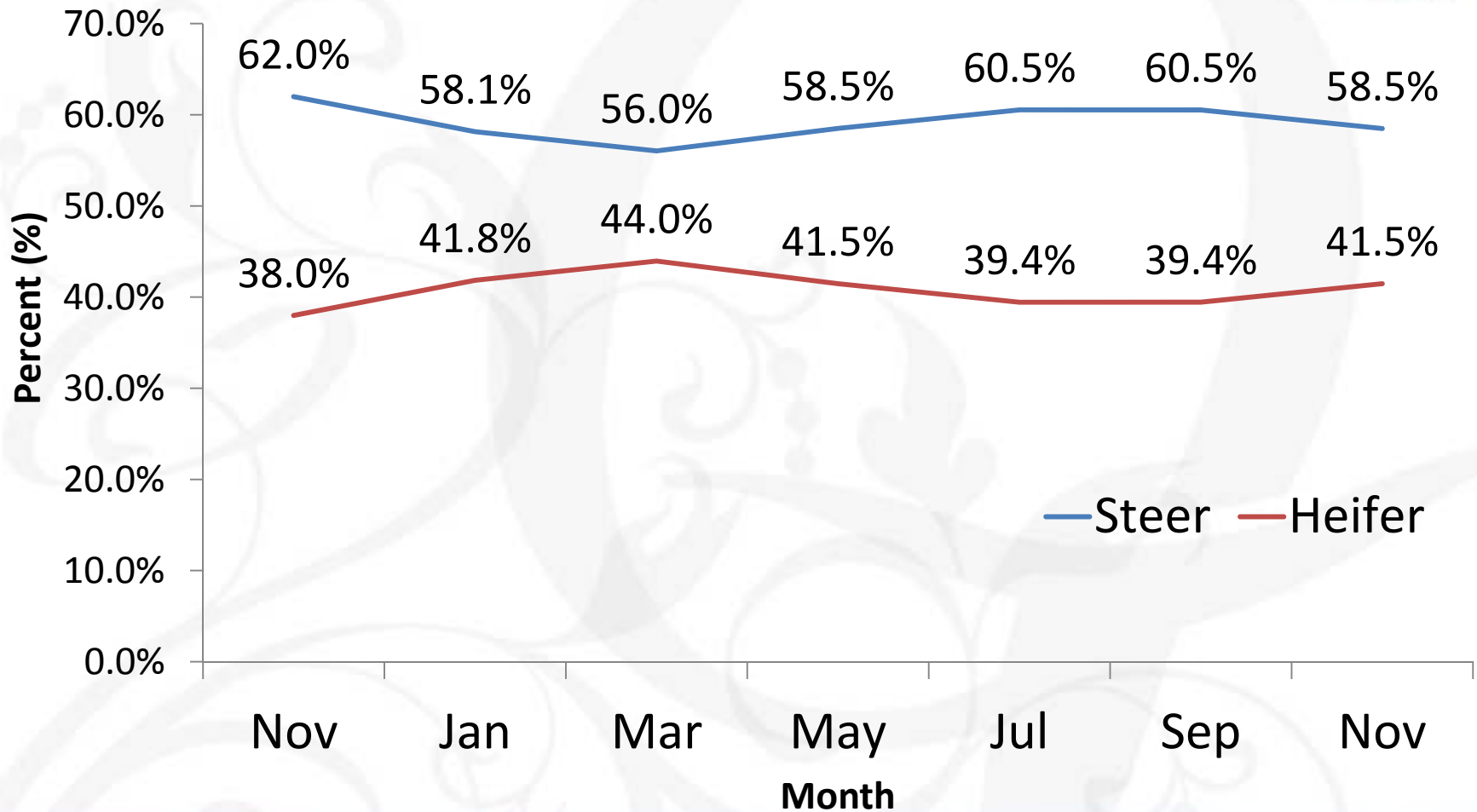


# NBQA-2011: Instrument Grading

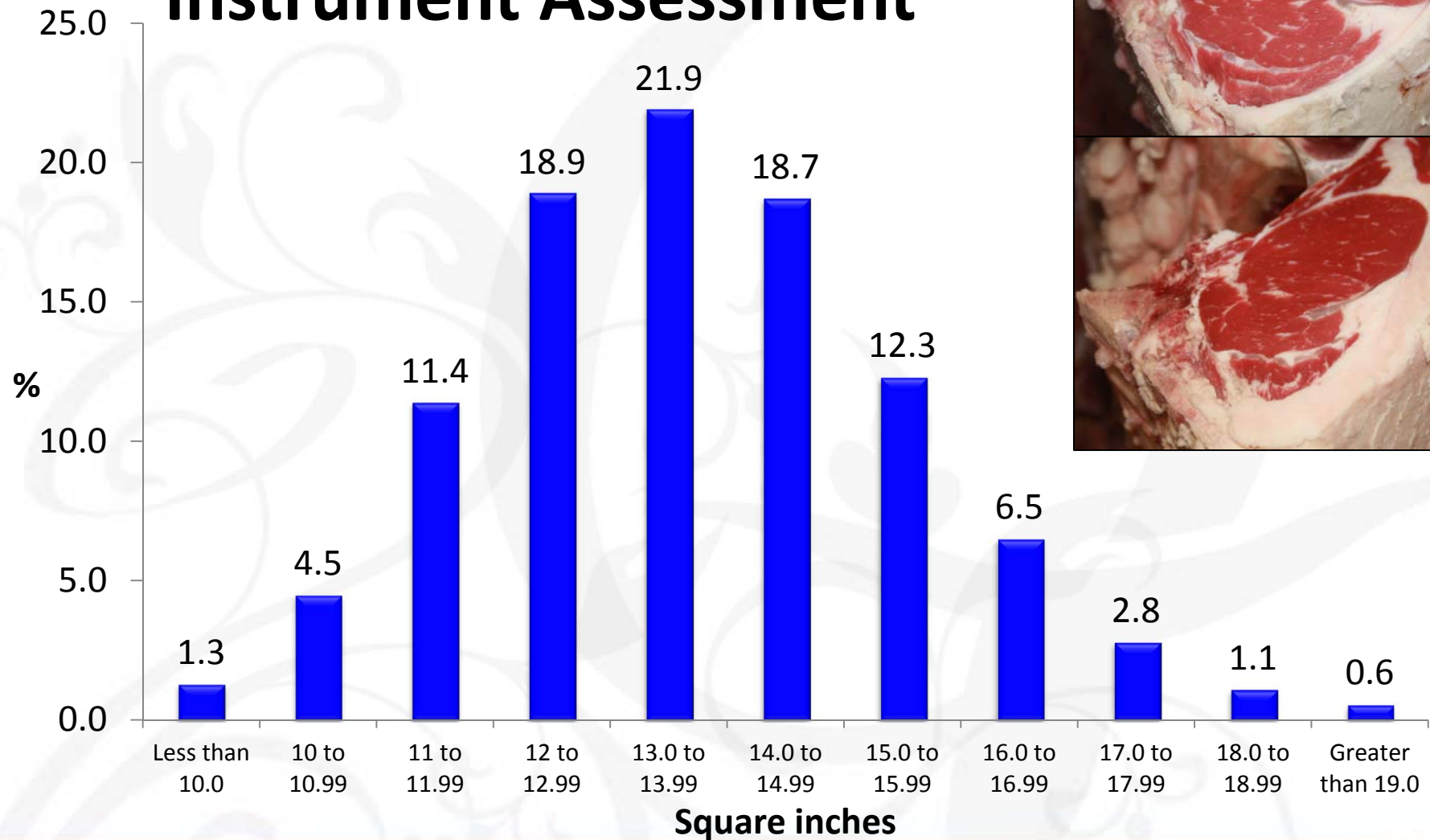
- $n = 2.4 \times 10^6$
- Data collected from November 2010 to November 2011 every other month for one week (about 20 days worth of data overall per month)
- Multiple plants ( $n = 17$ ) from multiple companies ( $n = 4$ )



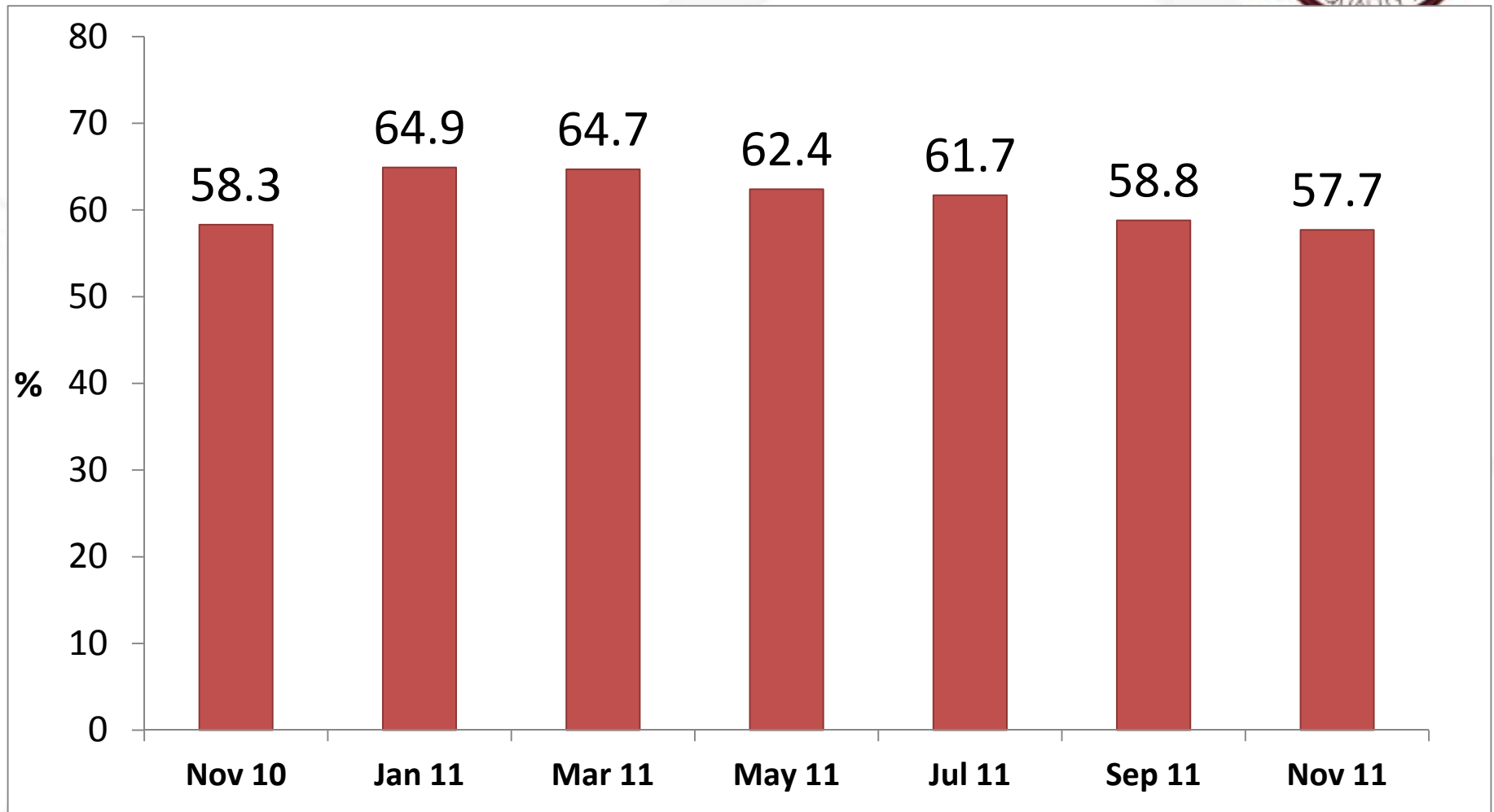
# Steer and Heifer Percentages by the Month: Instrument Assessment



# Ribeye Area Distribution: Instrument Assessment



# Carcasses Grading Choice by Month: Instrument Assessment





# Comparisons Between Cooler and Instrument Data



Trait	Cooler mean (n = 9,802)	Instrument mean (n = 2,427,074)
USDA yield grade	2.95	2.86
Adj. fat thickness, in.	0.51	0.47
Hot carcass weight, lbs	825	819
Ribeye area, in <sup>2</sup>	13.76	13.71
Marbling score	Small <sup>40</sup>	Small <sup>50</sup>