

THE INFLUENCE OF MUSCLE FIBRE AREA ON PORK QUALITY

Gintė Bulotienė, Vigilijus Jukna

Laboratory of Meat Characteristics and Quality Assessment, Lithuanian Veterinary Academy, Tilžės st. 18, LT-4718 Kaunas, Lithuania; Phone: +370 37 36 34 14; e-mail: ginte@lva.lt

Abstract. Meat quality is one of the important factors in pork production. A better control of meat quality is of major importance for producers and retailers in order to satisfy the consumer's requirement for a consistently good product. Muscle fiber characteristics are thought to be important factors influencing meat quality however, identifying a strong correlation between fiber types and meat quality remains to be established. The objective of the study was to demonstrate the influence of pork *m. longissimus dorsi fibre* area on meat quality indexes and to establish correlations. It was determined that Large White pigs had the biggest fibre area - 2281 μm^2 and Landrace pigs had the smallest fibre area - 1871 μm^2 ($p < 0.05$). The correlation between fibre area and drip loss was statistically significant ($p < 0.05$). Pork with the biggest fibre area had the highest shear force, drip loss and cooking loss. The results showed that pig *m. longissimus dorsi fibre* area has the influence on meat quality, especially on meat drip loss, shear force and cooking loss.

Key words: muscle fibre, muscle fibre area, meat quality, pork.