

# MEAT QUALITY EVALUATION AT THREE SLAUGHTER WEIGHTS OF STEERS FROM THE HOLSTEIN-FRIESIAN BREED AND ITS CROSSES WITH MAINE-ANJOU, LIMOUSIN, CHIANINA and BLONDE D'AQUITAINE.

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LALANDE, G., LARMOND, E. AND FAHMY, M. H. 1982. Meat quality evaluation at three slaughter weights of steers from the Holstein-Friesian breed and its crosses with Maine-Anjou, Limousin, Chianina and Blonde d'Aquitaine. *Can. J. Anim. Sci.* **62**: 363-369.

Cooking and eating quality of steers slaughtered at 454, 544 or 635 kg liveweight were studied in two experiments carried out over 2 yr. In the first year, Maine-Anjou × Holstein (MH), Limousin × Holstein (LH) and pure Holstein (H1) were involved, in the second year, the genetic groups were Chianina × Holstein (KH), Blonde d'Aquitaine × Holstein (BH) and pure Holstein (H2). Within each slaughter weight, there were no differences among the genetic groups with respect to cooking rates or weight loss during cooking in either year. H1 steers had the best flavor at 635 kg and H2 at 454 kg. In both years, Holstein steers attained their best tenderness at 635 kg. No difference in juiciness at the different weights was observed in either year for Holsteins. LH steers were significantly more tender and juicy at 635 kg than at 454 kg whereas BH were more tender and juicy at 544 than at 635 kg. The KH steers attained their best tenderness and juiciness at 454 kg. MH steers had similar scores for flavor, tenderness and juiciness at the three slaughter weights. At 454 kg Holstein steers were significantly superior to MH and LH steers in flavor, to MH steers in tenderness and to LH, BH and KH steers in juiciness. At 544 kg the only significant difference between Holstein and crossbred steers was that with BH in juiciness. At 635 kg the Holstein steers were significantly superior to BH steers in juiciness but inferior in tenderness. All the differences among the crosses were nonsignificant except at 544 kg in which KH had more flavor than BH steers.

En deux expériences qui ont duré plus de 2 ans, nous avons étudié la qualité de cuisson et de gustation de la viande de bouvillons abattus à 454, 544 et 635 kg de poids vif. La première année, le travail a porté sur les croisements Maine-Anjou × Holstein (MH), Limousin × Holstein (LH) et la race Holstein pure (H1); tandis que la deuxième année, les groupes génétiques étaient le Chianina × Holstein (KH), le Blond d'Aquitaine × Holstein (BH) et le Holstein pur (H2). En aucune année, pour chaque poids d'abattage, il y a eu de la différence entre les groupes génétiques dans le taux de cuisson ou de la perte pendant la cuisson. Par contre, c'est au poids de 635 kg que les bouvillons H1 ont produit la viande la plus savoureuse, alors que les H2 l'ont produite à 454 kg. Les deux années, les bouvillons Holstein ont obtenu la viande la plus tendre au poids de 635 kg.

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0008-3984/82/6202-0363 \$2.00

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