

References

Basarab, J.A. 1991. Economic impact of calving season pattern. 1991. Proc. Intl. Beef Sym. Great Falls, MO pp. 143-154. Basarab, J.A., L.M. Rutter and P.A. Day 1993. The efficacy of predicting dystocia in yearling beef heifers: I. Using ratios of pelvic area to birth weight or pelvic area to heifer weight. *J. Anim. Sci.* 71: 1359-1371. Beef Herd Management Reference Binder and Home Study Guide. 1996. 4th edition, J.A. Basarab editor, Alberta Agriculture, Food and Rural Development, 7000 - 113 street, Edmonton, Alberta T6H 5T6. Butson, S., R.T. Berg and R.T. Hardin. 1980. Factors influencing weaning weights of range beef and dairy-beef calves. *Can. J. Anim. Sci.* 60: 727-742. Cundiff, L.V., R.M. Koch and K.E. Gregory. 1984. Characterization of biological types of cattle (Cycle III). IV. Postweaning growth and feed efficiency. *J. Anim. Sci.* 58: 312. Doornbos, D.E., K.M. Havstad, E. Fredrickson, M. Wagner and D.D. Kress. 1987. Estimating efficiency of different biological types of beef cattle. *Proceedings, Western Section, Amer. Soc. Anim. Sci.* 38:75-78. Fredeen, H.T., G.M. Weiss, G.W. Rahnefeld, J.E. Lawson and J.A. Newman. 1981. Growth patterns of first-cross cows under two environments. *Can. J. Anim. Sci.* 61: 243-259. Fredeen, H.T., G.M. Weiss, G.W. Rahnefeld, J.E. Lawson and J.A. Newman. 1982. Environmental and genetic effects on preweaning performance of calves from first-cross cows. II. Growth traits. *Can. J. Anim. Sci.* 62: 51-67. Jenkins, T.G. and C.L. Ferrell. 1992. Lactation characteristics of nine breeds of cattle fed various quantities of dietary energy. *J. Anim. Sci.* 70: 1652-1660. Jenkins, T.G. and C.L. Ferrell. 1994. Productivity through

weaning of nine breeds of cattle under varying feed availabilities: I. Initial evaluation. *J. Anim. Sci.* 72: 2787-2797. Kattnig, R.M., J.A. Winder, J.D. Wallace and C.C. Bailey. 1993. Evaluation of biological efficiency of free-grazing beef cows under semidesert conditions. *J. Anim. Sci.* 71: 2601-2607. Mathison, G.W. 1993. The beef industry. In: "Animal Production in Canada", edited by J. Martin, R.J. Hudson, B.A. Young. pp. 35-74. Melton, B.E. and W.A. Colette. 1993. Potential shortcomings of output:input ratios as indicators of economic efficiency in commercial beef breed evaluations. *J. Anim. Sci.* 71:579-586. Montano-Bermudez, M. And M.K. Nielsen. 1990. Biological efficiency to weaning and to slaughter of crossbred beef cattle with different genetic potential for milk. *J. Anim. Sci.* 68:2297-2309. National Standards Document: Beef Genetic Improvement Program. 1993. Agriculture and Agri-Food Canada, 930 Carling Ave., Ottawa, ON. K1A 0C5. NRC. 1984. Nutrient requirements of beef cattle. Sixth revised edition. National Academy Press, 2101 Constitution Avenue, NW, Washington, DC 20418. Ritchie, H.D. 1996. The optimum beef cow. Dept. Of Anim. Sci., Michigan State University, East Lansing, MI 48824. Smith, E.G., G.W. Rahnefeld, J.E. Lawson, and K.K. Klein. 1987a. Cow-calf production returns in the parkland region. Canada-Manitoba Economic Regional Development Agreement, Tech. Bulletin No. 12107.1. P.O. Box 3000 Main, Lethbridge, Alberta, T1J 4B1. Smith, E.G., G.W. Rahnefeld, J.E. Lawson, and K.K. Klein. 1987b. Cow-calf production returns in the short-grass prairie region. Canada-Manitoba Economic Regional Development Agreement, Tech. Bulletin No. 12107.1. P.O. Box 3000 Main, Lethbridge, Alberta, T1J 4B1.

Abstract

Assessment of two devices for measuring tympanic membrane temperature in swine, dairy cattle, and dairy calves

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We compared tympanic membrane temperature readings obtained by 2 commercially available devices with rectal temperature readings obtained with a standard mercury thermometer in dairy cattle, dairy calves, and swine. Tympanic membrane temperature readings from both devices were lower than those obtained using a rectal thermometer. Repeated

measurements of individual cattle resulted in consistent body temperature readings for both devices. Because all animals were visibly healthy, these results suggest that the tympanic membrane temperature readings obtained with either device may be an adequate assessment of health status.