



DAFTAR PUSTAKA

- Adeola, O., E.A. Darko, P. He and L.G. Young. 1990. Manipulation of porcine carcass composition by ractopamine. *J. Anim. Sci.* 68:3633-3641.
- Atkins, K.D., and Thompson, J.M. 1979. Carcass characteristics of heavy weight crossbred lambs. 1. Growth and carcass measurements. *Aust. J. Agric. Res.* 30:1197.
- Baker, P. K., R. H. Dalrymple, D. L. Ingle and C. A. Ricks. 1984. Use of β -adrenergic agonist to alter muscle and fat deposition in lambs. *J. Anim. Sci.* 59:1256-1261.
- Beermann, D.H., D.E. Hogue, V.K. Fishell, R.H. Dalrymple and C.A. Ricks. 1986. Effects of cimaterol and fishmeal on performance, carcass characteristics and skeletal muscle growth in lambs. *J. Anim. Sci.* 62:370.
- Beermann, D.H., W.R. Butler, D.E. Hogue, V.K. Fishell, R.H. Dalrymple, C.A. Ricks and C.G. Scanes. 1987. Cimaterol-induced muscle hypertrophy and altered endocrine status in lambs. *J. Anim. Sci.* 65:1514-1524.
- Berg, R.T. and R.M. Butterfield. 1976. *New Concepts of Cattle Growth*. Sydney University Press, Sydney, Australia.
- Bergen, W.G., S.E. Johnson, D.M. Skjaerlund, A.S. Babiker, N.K. Ames, R.A. Merkel and D.B. Anderson. 1989. Muscle protein metabolism in finishing pigs fed ractopamine. *J. Anim. Sci.* 67:225-2262.
- Blaxter, K.L. 1962. *The Energy Metabolism of Ruminants*. Hutchinson, Scientific and Technical, London.
- Blumer, T.N. 1963. Relationship of marbling to the palatability of beef. *J. Anim. Sci.* 22:771-777.
- Bodwell, C.E., A.M. Pearson, and M.E. Spooner. 1965. *Postmortem changes in muscle*. I. Chemical changes in beef. *J. Fd. Sci.* 30:766-772.
- Boggs, D. L. and R. A. Merkel. 1979. *Live Animal Carcass Evaluation and Selection Manual*. Kendall/Hunt Publishing Co. Dubuque, Iowa, USA.
- Bondi, A.A. and David Drori. 1987. *Animal Nutrition*. John Wiley & Sons Ltd. Chichester, Grt. Brit.
- Bouton, P.E., A. Howard, R.A. Lawrie. 1957. *Studies on beef quality*. VI. Effect on weight losses and eating quality of further pre-slaughter treatments. CSIRO Australia. Div. Food Pres. and Transport. Tech. Pap. No. 6:5-23.
- Bouton, P.E., P.V. Harris and W.R. Shorthose. 1971. Effect of ultimate pH upon the water-holding capacity and tenderness of mutton. *J. Food Sci.* 36:435-439.
- Bowling, R.A. G.C. Smith, Z.L. Carpenter, T.R. Dutson and W.M. Oliver. 1977. Comparison of forage-finished and grain-finished beef carcasses. *J. Anim. Sci.* 25:377-380.
- Breidenstein, B.B., C.C. Cooper, R.G. Cassen, G. Evans and R.W. Bray. 1968. Influence of marbling and maturity on the palatability of beef muscle. I. Chemical and organoleptic considerations. *J. Anim. Sci.* 27:1532-1541.

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- Brockway, J. C. MacRae, and P.E.V. Williams. 1987. Side effects of clenbuterol as repartitioning agent. *The Vet. Record.* pp. 381-383.
- Bull, Sleeter. 1916. *The Principles of Feeding Farm Animals.* The McMillan Co., New York, U.S.A.
- Buttery, P. 1985. Exogenous applied growth promotents for use in ruminants-present and future applications. In : R.A. Leng, J.S.F. Barker, D.B. Adams and K.J. Hutchinson (editors). *Biotechnology and Recombinant DNA Technology in the Animal Production Industries. Proceedings of a symposium held at the University of New England, Armidale, New South Wales, Australia, 27 November 1984.* *Reviews in Rural Science* 6.
- Buyse, J., E. Decuypere, G.Huyghebaert, and M. Herremans. 1991. The effect of clenbuterol supplementation on growth on growth performance on plasma hormone and metabolite levels of broilers. *Poultry Science.* 70:993-1002.
- Campion, D.R., G.J. Hausman and R.J. Martin. 1989. *Animal Growth Regulation.* Plenum Press, New York, U.S.A.
- Carpenter, Z.L., R.G. KauffmanBray, R.W. Bray, E.J. Briskey, and K.G. Weckel. 1963a. Factor influencing quality in pork. A : Histological observations. *J. Fd. Sci.* 28:467-471.
- Carpenter, Z.L., R.G. KauffmanBray, R.W. Bray, E.J. Briskey, and K.G. Weckel. 1963b. Factor influencing quality in pork. B : Commercially cured bacon. *J. Fd. Sci.* 28:578-583.
- Chang, Lu-Chih. 1972. *The concept of statistics in connection with experimentation.* Food & Fertilizer Technology Center. Taipei City, Taiwan, Republic of China. *Ext. Bull. No.13.* pp. 1-132.
- Chikhou, F.H., A.P. Moloney, P. Allen, J.F. Quirke, F.H. Austin, and J.F. Roche. 1993. Long term effects of cimaterol in Friesian steers: I. Growth, feed efficiency, and selected carcass traits. *J. Anim. Sci.* 71:906-913.
- Chikhou, F.H., A.P. Moloney, P. Allen, R.L. Joseph, P.V. Tarrant, J.F. Quirke, F.H. Austin, and J.F. Roche. 1993. Long term effects of cimaterol in Friesian steers : II. Carcass composition and meat quality. *J. Anim. Sci.* 71:914-922.
- Church, D.C. and W.G. Pond. 1978. *Basic Animal Nutrition and Feeding.* O & B Books Inc., Corvallis, Oregon 97330, U.S.A.
- Church, D.C. 1979. Lipid utilization and requirements. In: D.C. Church (ed.). *Digestive Physiology and Nutrition of Ruminants.* O & B Books Inc., Corvallis Oregon 97330 U.S.A.
- Church, D.C. and J.P. Fontenot. 1979. Nitrogen metabolism and requirements. In : D.C. Church (ed.). *Digestive Physiology and Nutrition of Ruminants.* O & B Books, Inc. Corvallis Oregon 97330 U.S.A.
- Chwalibog, A., K. Jensen and G. Thorbek. Energetics of growth in bulls treated with β -adrenergic agonist. 1994. *Energy metabolism of farm animals.* J.F. Aguilera (compiler). *Proc. 13th Symposium, Mojacar, Spain.* 18 - 24 September 1994. EAAP Publication No. 76. CSIC (213-216).

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- Cleys, M.C., D.R. Mulvaney, F.D. McCarthy, M.T. Gore, D.N. Marple and J.L. Sartin. 1989. Skeletal muscle protein synthesis and growth hormone secretion in young lambs treated with clenbuterol. *J. Anim. Sci.* 67:2245-2254.
- Coleman, M.E., P.A. Ekeren and S.B. Smith. 1988. Lipid synthesis and adipocyte growth in adipose tissue from sheep chronically fed a beta-adrenergic agent. *J. Anim. Sci.* 66:372-378.
- Constantoura, Paul. 1985/1986. Reducing the fat on fat lambs. *Rural Research. CSIRO Australia*, No. 129 pp. 11-13.
- Crampton, E. W. and L. E. Harris. 1969. *Applied Animal Nutrition*. W.H. Freeman and Co. San Francisco U.S.A.
- Crouse, J.D. G.M. Smith and R.W. Mandigo. 1978. Relationship of selected beef carcass traits with meat palatability. *J. Food. Sci.* 43:152-157.
- Covey, C.L. and K.V. Gilbert 1967. Structural changes in meat during ageing. *J. Fd. Technol.* 2:57-59.
- Covey, C. L. and K .V. Gilbert. 1976. Effect of ageing and cooking on the tenderness of beef muscle. *J. Sci. Fd. Agric.* 27 : 251-256.
- De Fremery, D. and M.F. Pool. 1963. The influence of postmortem glycolysis on poultry tenderness. *J. Food Sci.* 28:173-178.
- Direktur Jenderal Peternakan. 1991. *Buku Statistik Peternakan (Statistical Book on Livestock)*. Direktur Bina Program, Direktorat Jenderal Peternakan, Jakarta.
- Direktur Jenderal Peternakan. 1994. *Buku Statistik Peternakan (Statistical Book on Livestock)*. Direktur Bina Program, Direktorat Jenderal Peternakan, Jakarta.
- Doty, D.M. and J.C. Pierce. 1961. Beef muscle characteristics as related to carcass grade, carcass weight, and degree of ageing. *U.S.D.A Technical Bull.* 1231:1-45.
- Edey, T.N. 1983. Growth : Principles and patterns. In : T.N. Edey (ed.). *Tropical Sheep and Goat Production*. AUIDP Canberra, Australia, (89-104).
- Eisemann, J. H., G. B. Huntington and C. L. Ferrell. 1988. Effects of dietary clenbuterol on metabolism of the hindquarters in steers. *J. Anim. Sci.* 66:342-353.
- Eisen, E.J., W.J. Croom, Jr. and S.W. Helton. 1988. Differential responses to the β -adrenergic agonist cimaterol in mice selected for rapid gain and unselected controls. *J. Anim. Sci.* 66:361-371.
- Forskin, N. A. M., H. M Henderson and R.J. Townsend. 1971. *Biochemistry of Foods*. Academic Press, New York, USA.
- Ferrell, C.L. 1988. Energy metabolism. In : D.C. Church (Editor). *The Ruminant Animal Digestive Physiology and Nutrition*. Prentice Hall, Englewood Cliffs, New Jersey 07632, USA.
- Ghiem, L.O., E. Decuypere and CH.V. Boucque. 1989. A note on the effect of feeding cimaterol on some endocrinological parameters and growth in different types of finishing beef bulls.



- Forrest, J. C., E. D. Aberle, H. B. Hedrick and R. A. Merkel. 1976. Principles of Meat Science. W.H. Freeman and Co., San Francisco, U.S.A.
- Forsberg, N. E., M. A. Llian, A. Ali-Bar, P. R. Cheeke and N.B. Wehr. 1989. Effects of cimaterol on rabbit growth and myofibrillar protein degradation and on calcium-dependent proteinase and calpain activities in skeletal muscle. *J. Anim. Sci.* 3313-3321.
- Fortin, A., J.D. Wood and O.P. Whelehan. 1987. Breed and sex effects on development, distribution of muscle, fat and bone, and the partition of fat in pigs. *J. agric. Sci. Camb.* 108:141-153.
- Gann, G. L. and R. A. Merkel. 1978. Ultrastructural changes in bovine longissimus muscle during postmortem ageing. *Meat Sci.* 2:129-144.
- Gaspeersz, V. 1991. Teknik Analisis dalam Penelitian Percobaan. Jilid 1. Penerbit Tarsito, Bandung.
- Gaspeersz, V. 1991. Teknik Analisis dalam Penelitian Percobaan. Jilid 2. Penerbit Tarsito, Bandung.
- Geesink, G.H., F.J.M. Smulders, H.L.J.M. van Laack, J.H. van der Kolk, Th. Wensing, and H. J. Breukink. 1993. Effects on meat quality of the use of clenbuterol in veal calves. *J. Anim. Sci.* 71:1161-1170.
- Goll, D. E., W. G. Hoekstra and R. W. Bray. 1964a. Age associated changes in bovine muscle connective tissue. II. Exposure to increasing temperature. *J. Fd. Sci.* 29:615-621.
- Goll, D.E., W.G. Hoekstra, and R.W. Bray. 1964b. Age associated changes in bovine muscle connective tissue. III. Rate of solubilization at 100° C. *J. Fd. Sci.* 29:622-628.
- Grodsky, G.M. 1983. Sifat umum hormon. Biokimia. Terjemahan ke dalam Bahasa Indonesia dari "Review of Physiological Chemistry" In : H.A. Harper, V.W. Rodwell and P.A. Mayes (Ed.), Lange Medical Publication, Los Altos, California 94022, U.S.A. oleh M. Muliawan. Fakultas Kedokteran Universitas Indonesia.
- Gwartney, B.L., C.R. Calkins and S.J. Jones. 1991. The effect of cimaterol and its withdrawal on carcass composition and meat tenderness of broiler chickens. *J. Anim. Sci.* 69:1551-1558.
- Gwartney, B.L., S.J. Jones, and C.R. Calkins. 1992. Response time of broiler chickens to cimaterol : meat, tenderness muscle composition, fibre size, and carcass characteristics. *J. Anim. Sci.* 1992. 70:2144-2150.
- Hamby, P. L., J.R. Stouffer and S.B. Smith. 1986. Muscle metabolism and real-time ultrasound measurement of muscle and subcutaneous adipose tissue growth in lambs fed diets containing a beta-agonist. *J. Anim. Sci.* 63:1410.
- Hamm, R. 1975. Water holding capacity of meat. Butterworths, London, Grt. Brit.
- Hamm, R. 1981. Post-mortem changes in muscle affecting the quality of comminuted meat products. In : R.A. Lawrie (Ed.). Development in Meat Science-2. Applied Science Publishers Ltd. Rapple Rd., Barking, Essex, England.

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- Hartadi, Hari, S. Reksohadiprodjo dan A.D. Tillman. 1990. *Tabel Komposisi Pakan Untuk Indonesia*. Gajah Mada University Press. P.O. Box 14, Bulaksumur, Yogyakarta.
- Hedrick, H. B. 1958. Etiology and possible preventive measures in the dark cutter syndrome. *Vet. Med.* 53:466-472.
- Hermann, U., W. Jentsch, M. Beyer, Gertrud Michelchen and L. Hoffman. 1991. Influence of growth promoters (recombinant somatotropin and clenbuterol) on energy and protein metabolism in growing pigs. In: C. Wenk and M. Boesinger (Ed.). *Energy Metabolism of Farm Animals: Proc. the 12th Symposium Kartause Ittingen, Switzerland, 1-7 September 1991*. EAAP Publication No. 58, 1991 (158-159).
- Herman, R. 1993. Perbandingan pertumbuhan, komposisi tubuh dan karkas antara domba Priangan dan Ekor Gemuk. Disertasi Program Pascasarjana, I.P.B., Bogor.
- Herman, R. 1989. Kualitas karkas domba lokal hasil peng gemukan. In: A. Djajane-gara, M. Rangkuti, S.B. Siregar, Suhardono dan W.K. Sejati. *Proceedings Pertemuan Ilmiah Ruminansia di Cisarua, Bogor 8-10 Nopember 1988*. Jilid 2 : Ruminansia Kecil. Pusat Penelitian dan Pengembangan Peternakan.
- Herring, H.K., R.G. Cassen, and E.J. Briskey. 1965a Further studies on bovine muscle tenderness as influenced by position sarcomere length and fibre diameter. *J.Fd.Sci.* 30:1049-1054.
- Herring, H.K., R.G. Cassen and E.J. Briskey. 1965b. Sarcomere length of free and restrained bovine muscle at low temperature as related to tenderness. *J.Sci.Fd.Agric.* 16:378-384.
- Hoey, A.J., M.M. Reich, G. Davis, R. Shorthose, and M.N. Sillence. 1995. β_2 -adrenoceptor densities do not correlate with growth, carcass quality, or meat quality in cattle. *J. Anim. Sci.* 73:3281-3286
- Hu, C.Y., A. Suryawan, N.E. Forsberg, R.H. Dalrymple and C.A. Rick. 1987. Effect of cimaterol on sheep adipose lipogenesis. *Fed Proc.* 46:1177.
- Humason, G. L. 1967. *Animal Tissue Technique*. 2nd Edition. W.H. Freeman & Co., San Fransisco.
- Huxley, Sir Julian. 1972. *Problems of Relative Growth*. 2nd edition. Dover Publications, Inc., 180 Varick St., New York, N.Y.10014, U.S.A.
- Jones, R. W., R. A. Easter, F. K. McKeith, R. H. Dalrymple, H. M. Maddock and P.J. Bechtel. 1985. Effect of β -adrenergic agonist cimaterol (CL 263,780) on the growth and cracass characteristics of finishing swine. *J. Anim. Sci.* 61:905-912.
- Kempster, A.J. 1980-81. Fat partition and distribution in the carcasses of cattle, sheep and pigs : a review. *Meat Science* 5:83-98.
- Kempster, T. A., A. Cuthbertson, and G. Harrington. 1982. *Carcass Evaluation in Livestock Breeding, Production and Marketing*. 1st Publication. Granada Publishing Ltd. Grt. Brit.
- Khan, A.W. and C.P. Lentz. 1973. Influence of antemortem glycolysis and de-phosphorylation of high energy phosphates on beef aging and tenderness. *J. Food Sci.* 38:56-58.

- Kim, Y.S., Y.B. Lee, W.N. Garrett and R.H. Dalrymple. 1989. Effects of cimaterol on nitrogen retention and energy utilization in lambs. *J. Anim. Sci.* 67:674- 681.
- Kim, Y.S., R.D. Sainz, R.J. Summers, and P. Molenaar. 1992. Cimaterol reduces β -adrenergic receptor density in rat skeletal muscles. *J. Anim. Sci.* 70:115-122.
- Koohmaraie, M., S.D. Shackelford, N.E. Muggli-Cockett and R.T. Stone. 1991. Effect of the β -adrenergic agonist L644,969 on muscle growth, endogenous proteinase activities, and postmortem proteolysis in wether lambs. *J. Anim. Sci.* 69:4823-4835.
- Koohmaraie, M. and S.D. Shackelford. 1991. Effect of calcium chloride infusion on the tenderness of lambs fed a β -adrenergic agonist. *J. Anim. Sci.* 69:2463-2471.
- Kretchmar, D.H., M.R. Hathaway, R.J. Epley and W.R. Day ton. 1990. Alteration in postmortem degradation of myofibrillar proteins in muscle of lambs fed a β -adrenergic agonist. *J. Anim. Sci.* 68:1760-1772.
- Lang, R. and D. Robinson. 1986. *Biochemistry and Cell Biology. Signals and Receptors.* 5325 Book 6. The Open University. Walton Hall, Milton Keynes, MK7 6AA.
- Lawrie, R. A. 1958. Physiological stress in relation to dark-cutting beef. *J. Sci. Fd. Agric.* 9:721-727.
- Lawrie, R.A. 1979. *Meat Science.* 3rd edition. Pergamon Press Ltd., Headington Hill Hall, Oxford OX3 OBW, England, Grt. Brit.
- Lawrie, R.A. 1980. *Development in Meat Science-1.* Applied Science Publishers Ltd. London.
- Lawrie, R.A. 1981. *Development in Meat Science-2.* Applied Science Publishers Ltd. London.
- Lee and Kim. 1993. Muscle characteristics and meat tenderness of cimaterol-fed lambs. *J. Food Sci.* 59:33-37.
- Lehninger, A.L. 1975. *Biochemistry.* 2nd edition. Worth Publishers, Inc. New York, N.Y.10016. U.S.A.
- Levie, A. 1963. *The Meat Handbook.* The Avi Publishing Co., Inc., Westport, Connecticut, U.S.A.
- Locker, R.H. 1960. Degree of muscular contraction as a factor in tenderness of beef. *Food Res.* 25:304-307.
- Locker, R.H. and C.J. Hagyard. 1963. A cold shortening effect in beef muscles. *J. Sci. Fd. Agric.* 14:787-792.
- Lowe, R., T. Buckley and A. Day. 1989. I.P.B./ Australia advanced technical training course. Instrumentation and analytical chemistry. B.P.T. Laboratories, Ciawi-Bogor.
- Maloney, A.P., P. Allen, D.B. Ross, G. Olson and E.M. Convey. 1990. Growth, feed efficiency and carcass composition of finishing Frisian steers fed β -adrenergic agonist L644,969. *J. Anim. Sci.* 68:1269-1277.

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- Marsh, B.B. 1954. *Rigor mortis* in beef. *J. Sci. Fd. Agric.* 5:70-75.
- Marsh, B.B. and N.G. Leet. 1966. Studies in meat tenderness. III. The effect of cold shortening on tenderness. *J. Fd. Sci.* 31:450-496.
- Marsh, B.B. 1975. Tenderness. In: D.J.A. Cole & R.A. Lawrie (ed.). *Proc. 21st Easter School Agric. Sci. Univ. Nottingham, 1974.* Butterworth, (339-357).
- Marsh, B. B. 1977. The basis of tenderness in muscle foods. In : *Symposium, the basis of quality in muscle foods.* *J. Fd. Sci.* 42:295-297.
- Martin, A.H. and H.T. Fredeen. 1974. Postmortem pH change as related to tenderness and water-holding capacity of muscle from steer, bull and heifer carcasses. *Can. J. Anim. Sci.* 54:127-135.
- Martin, A.H., L.E. Jeremiah, H.T. Fredeen and P.J. L'Hirondile. 1977. Influence of pre- and post-rigor muscle changes on intrinsic toughness of beef muscle. *Can. J. Anim. Sci.* 57:705-712.
- May, N.D.S. 1970. *Anatomy of the Sheep.* University of Queensland Press, Brisbane, Australia.
- Maynard, L.A., J.K. Loosli, H.F. Huttz. 1979. *The Animal Body and Its Food.* Tata McGraw Hill Publishing Co. Ltd., New Delhi, India.
- McDonald, P., R. A. Edwards and J.F.D. Greenhalgh. 1981. *Animal Nutrition.* 3rd edition. Longman Inc., New York, U.S.A..
- McRae, J.C., G.E. Loblely and P.A. Skene. 1986. The effects of the β -adrenergic agonist clenbuterol on the energy expenditure and protein turnover of wether lambs. *J. Anim. Sci.* 63 (Suppl. 1):453 (Abstr.).
- Merkens, J. dan Soemirat. 1926. *Sumbangan Pengetahuan Tentang Peternakan Domba di Indonesia (Bijdrage Tot De Kennis Van de Schapenfokkerij in Nederlandsch Indie.* dalam *Ned. Ind. Bladen v. Diergeneesk.* 38:395-416). In : S. Adisoemarto (Koordinator). *Domba dan Kambing di Indonesia.* Terjemahan ke dalam Bahasa Indonesia oleh R.P. Utojo. Lembaga Ilmu Pengetahuan Indonesia. 1979.
- Mersmann, H.J. and C.Y. Hu. 1987. Factors affecting measurements of glucose metabolism and lipolytic rates in porcine adipose tissue slices *in vitro.* *J. Anim. Sci.* 64:148.
- Mersmann, H.J., C.Y. Hu, W.G. Pond, D. C. Rule, J.E. Novakofski and S.B. Smith. 1989. Growth and adipose tissue metabolism in young pigs fed cimaterol with adequate or low dietary protein. *J. Anim. Sci.* 64:1384-1394.
- Mersmann, H.J. 1989. Potential mechanisms for repartitioning of growth by β -adrenergic agonists. In : G.R. Champion, G.J. Hausman and R.J. Martin (ed.). *Animal Growth Regulation.* Plenum Press, New York, U.S.A.
- Meyer, H.H.D. and L.M. Rinke. 1991. The pharmacokinetics and residues of clenbuterol in veal calves. *J. Anim. Sci.* 69:4538-4544.
- Miller, M.F., D.K. Garcia, M.E. Coleman, P.A. Ekeren, D.K. Lunt, K.A. Wagner, M. Procknor, T.H. Welsh, Jr. and S.B. Smith. 1988. Adipose tissue, longissimus muscle and anterior pituitary growth and function in clenbuterol-fed heifers. *J. Anim. Sci.* 1988. 66:12-20.

- Miller, M.F., H.R. Cross, J.J. Wilson and S.B. Smith. 1989. Acute and long term lipogenic response to insuline and clenbuterol in bovine intramuscular and subcutaneous adipose tissue. *J. Anim. Sci.* 67:928.
- Minitab Statistical Software. 1988. Reference Manual release 6.1. Minitab Inc. 3081 Enterprise Drive State College, PA 16801, USA.
- Mitchell, A.D., M.B. Solomon and N.C. Steele. 1990. Response of low and high protein select lines of pigs to the feeding of the beta-adrenergic agonist racto pamine (phenethanolamine). *J. Anim. Sci.* 68:326-3232.
- Morgan, J. B., S. J. Jones and C. R. Calkins. 1989. Muscle protein turnover and tenderness in broiler cheickens fed ciamterol. *J. Anim. Sci.* 67 : 2646-2654.
- Muir, L.A. 1988. Effects of beta-adrenergic agonists on growth and carcass characteristics of animals. In: Committee on Technological Options to Improve the Nutritional Attributes of Animal Products, Board on Agric. NRC (ed.). *Designing Foods*. National Academy Press, Washington , D.C., U.S.A.
- Munro, H. N. and J. C. Allison. 1964. *Mammalian Protein Metabolism*. Vol. I. Academic Press, London.
- Natasasmita, A., I W. Mathius, I. Inounu, I K. Saka, J. A. Prawoto dan B. Brahmantiyo. 1992. Laporan praktik lapangan di proyek-proyek peternakan domba di Trijaya (Kuningan), Margawati (Garut) dan peternakan rakyat Rancabango (Garut). Program Pascasarjana. IPB, Bogor.
- National Research Council. 1985. *Nutrient Requirements of sheep*. 6th revised edition. National Academy Press. Washington D.C. 20418, U.S.A.
- Newbold, R.P. and P.V. Harris. 1972. The effect of pre- rigor changes on meat tenderness. A. review. *J. Fd. Sci.* 37:337-340.
- Newton, K.G. and C.O. Gill. 1981. The microbiology of DFD fresh meat : A review. *Meat Sci.* (ed. R.A. Lawrie). 5:223-232.
- Nickerson, J.T. and A.J. Sinkey. 1972. *Microbiology of foods and Food Processing*. American Elsevier Publishing Co., New York, U.S.A.
- O'Halloran, W.J., J.M. Thompson, D.McNeill, T.J. May and N.J.Jackson-Hope. 1986. The effect of pre-slaughter fasting on liveweight, carcase weight and fat loss in prime lambs. *Wool Technology and Sheep Breeding*. The University of New South Wales. Dept. Wool Sci., Australia. vol. XXXIV, No.1 pp.12-17.
- Parrish, Jr., F.C., D.G. Olson, B.E. Miner, R.G. Young and R.L. Snell. 1973. Relationship of tenderness measurements made by the armour tenderometer to certain objective, subjective and organoleptic properties of bovine muscle. *J. Food Sci.* 38:1214-1218.
- Pearson, A. M. and R. B. Young. 1979. *Muscle and Meat Biochemistry*. Academic Press, Inc. San Diego, California 92101, U.S.A.
- Penny, I. F. 1980. The enzymology of conditioning. In: R.A. Lawrie (Ed.). *Deveopment in Meat Science-1*. J. Applied Sci. Publishers Ltd. London



(115-143).

- Phillis, J.W. 1976. The endocrine glands. In : J.W. Phillis (ed.). Veterinary Physiology. Wright-Scientechnica, Bristol, Grt. Brit.
- Power, S.K. and Howley, E.T.. 1990. Exercise Physiology. Wm. C. Brown Publishers, U.S.A.
- Preston, T.R. and M.B. Willis. 1970. Intensive Beef Production. 2nd edition. Pergamon Press Ltd., Headington Hill Hall, Oxford Oxford OX3 OBW, England, Grt. Brit.
- Pringle, T.D., S.M. Lonergan, C.R. Calkins, S.J. Jones, P.S. Miller, and M. Koohmaraie. 1994. Temporal response of rabbits to β -adrenergic agonist feeding: Tissue weight, calpain and calpastatin activities, and nucleic acid and protein concentrations. J. Anim. Sci. 72:68-74.
- Ramsbotom, J. M. and E. J. Strandine. 1949. Changes in beef as related to tenderness. J. Anim. Sci. 8:398-410.
- Reeds, P.J. and H.J. Mersmann. 1991. Protein and energy requirements of animals treated with β -adrenergic agonists: A discussion. J. Anim. Sci. 69:1532-1550.
- Ricks, C.A., R.H. Dalrymple, P.K. Baker and D.L. Ingle. 1984. Use of β -agonist to alter fat and muscle deposition in steers. J. Anim. Sci. 59:1247-1255.
- Shackelford, S.D., J.W. Edwards, E.K. Smarr, and J.W. Saveil. 1992. Retail cut yields of Rambouillet wether lambs fed the β -adrenergic agonist L644,969. J. Anim. Sci. 70:161-168.
- Shackelford, S.D., T.L. Wheeler, and M. Koohmaraie. 1995. The effects of *in utero* exposure of lambs to a β -adrenergic agonist on prenatal and postnatal muscle growth, carcass cutability, and meat tenderness. J. Anim. Sci. 73:2986-2993.
- Schiavetta, A.M., M.F. Miller, D.K. Lunt, S.K. Davis and S.B. Smith. 1990. Adipose tissue cellularity and muscle growth in young steers fed the β -adrenergic agonist clenbuterol for 50 days and after 78 days of withdrawal. J. Anim. Sci. 68:3614-3623.
- Shorthose. 1980. Factors affecting the incidence of dark-cutting meat. III. Simposio Nacional de Ciencia y Tecnologia de Carnes. Buenos Aires, 1980. CSIRO Division of Food Research, Meat Research Laboratory, Queensland, 4170, Australia.
- Sisson, S. and J.D. Grossman. 1960. The Anatomy of the Domestic Animals. 4th edition. W.B. Saunders Co. Philadelphia, U.S.A.
- Smith, G.C., T.C. Arango, Z.L. Carpenter. 1971. Effect of physical and mechanical treatments on the tenderness of the beef longissimus. J. Food. Sci. 36:445-449.
- Smith, G.C., T.R. Dutson, R.L. Hostetler and Z.L. Carpenter. 1976. Fatness, rate of chilling and tenderness of lamb. J. Food Sci. 41:748-756.
- Soehadji. 1993. Penelitian unggul di bidang peternakan yang mendukung kebijaksanaan pengembangan peternakan di Indonesia. Paper disampaikan pada



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- Spurlock, M. E., J. C. Cusumano, and S.E. Mills. 1993. (—)-[³H]-Dihydroalprenolol binding to β -adrenergic receptors in porcine adipose tissue and skeletal muscle membrane preparations. *J. Anim. Sci.* 71:1778-1785.
- Stoffel, B and H.H.D. Meyer. 1993. Effects of β -adrenergic agonist clenbuterol in cows: Lipid metabolism, milk production, pharmacokinetics, and residues. *J. Anim. Sci.* 71:1875-1881.
- Swatland, H. J. 1982. *Structure and Development of Meat Animals*. Prentice-Hall, Inc, Inglewood Cliffs, New Jersey 07632, U.S.A.
- Tangendjaja, B., E. Wina dan IGM Budiarsana. 1994. Ransum penggemukan domba dengan bahan lokal. In : B. Bakrie, B. Haryanto, E. Wina, I P. Kompiang dan K. Diwyanto (Penyunting). *Prosiding Seminar Nasional dan Teknologi Peternakan di Ciawi, Bogor 25-26 Januari 1994*. BPT Bogor.
- Tjay, Tan Hoan dan Tjoa Hian Rie. 1964. *Obat2 Penting, Chasiat dan Penggunaannya*. Cetakan ke-tiga.
- Thompson, J.M., K.D. Atkins and A.R. Gilmour. 1979. Carcass characteristics of heavyweight crossbred lambs. III. Distribution of subcutaneous fat, intermuscular fat, muscle and bone in the carcass. *Aust. J. Agric. Res.* 30:1215-1221.
- Tulloch, N.M. 1978. Growth, development, body composition, breeding and management. In : W.A.T. Bowker, R.G. Dumsday, J.F. Frisch, R.A. Swan and N.M. Tulloch (Ed.). *A.A.U.C.S., Australian Vice-Chancellors' Committee*. Academy Press Pty Ltd, Brisbane, Australia.
- Uttaro, B.E., R.O. Ball, P. Dick, W. Rae, G.Vessie, and L. E. Jeremiah. 1993. Effect of ractopamine and sex on growth, carcass characteristics, processing yield, and meat quality characteristics of crossbred swine. *J. Anim. Sci.* 71:2439-2449.
- Vernon, R.G. 1992. Control of lipogenesis and lypolysis. In : *Proc. Nutr. Soc.* 51:397-408.
- Walker, D. J. 1976. Meat quality-the impact of research. In : *Proc. Aust. Soc. Anim. Prod.* 11:73-80.
- Wang, Hsi, E. Rasch, V. Bates, F. J. Beard, J. C. Pierce, and O. G. Hankins. 1954. Histological observations on fat loci and distribution in cooked beef. *Food Research.* 19:314-322.
- Wang, S.Y. and D.H. Beermann. 1988. Reduced calcium-dependent proteinase activity in cimaterol-induced muscle hypertrophy in lambs. *J. Anim. Sci.* 66:2545-2550.
- Warriss, P.D., S.C. Kestin, and S.N. Brown. 1989. The effect of β -adrenergic agonists on carcass and meat quality in sheep. *Anim. Prod.* 48:385.
- Watkins, L.E., D.J. Jones, D.H. Mowrey, D.B. Anderson and E.L. Veenhuizen. 1990. The effect of various levels of ractopamine hydrochloride on the performance and carcass characteristics of finishing swine. *J. Anim. Sci.* 68:3588-3595.



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- Weidemann, J.F. G. Kaess and L.D. Carruthers. 1967. The histology of pre-rigor and post-rigor ox muscle before and after cooking and its relation to tenderness. *J. Fd. Sci.* 32:7-13.
- Whipple and Koochmaraie. 1991. Effects of lamb age, muscle type, and 24-hour activity of endogenous proteinases on postmortem proteolysis. *J. Anim. Sci.* 70:798-804.
- Williams, P.E.V. 1987. The Use of β -agonists as a means of altering body composition in livestock species. *Nutr. Abstr.Rev. (Series B)* 57:453.
- Wilson, N.R.P., E.J. Dyett, R.B. Hughes and C.R.V. Jones (ed.). 1981. *Meat and Meat Products*. Applied Science Publishers Ltd. Ripple Rd., Barking Essex, England, Grt. Brit.
- Yeates, N.T.M., T.N. Edey, and M.K. Hill. 1975. *Animal Science*. Pergamon Press (Australia) Pty. Ltd. P.O. Box 544, Potts Point, N.S.W. 2011.
- Yulastini, D., M. Rangkuti, A. Wilson dan Muryanto. 1989. Pengaruh pemberian biji kapas pada ransum rumput gajah untuk domba yang sedang tumbuh. In : A. Djajanegara, M. Rangkuti, S.B. Siregar, Suhardono dan W.K. Sejati (Penyunting). *Proc. Pertemuan Ilmiah Ruminansia di Cisarua, Bogor 8-10 Nopember 1988. Jilid 2 : Ruminansia Kecil*. Pusat Penelitian dan Pengembangan Peternakan, Bogor.



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