

8 LITERATURVERZEICHNIS

- ABE, M., TAKASE, O., SHIBUI, H., IRIKI, T. (1981)
Neonatal diarrhoea in calves given milk-substitutes differing in fat source and fed by different procedures.
Br J Nutr **46**(3): 543-548
- ADAMS, L. G., POLZIN, D. J. (1989)
Mixed acid-base disorders.
Vet Clin North Am Small Anim Pract **19**(2): 307-326
- AHMED, A. F., CONSTABLE, P. D., MCCALLISTER, M. M., MISK, N. A. (2005)
Abomasal cannulation in the milk-fed calf using a 7 mm polyurethane tube.
J Vet Med A Physiol Pathol Clin Med **52**(1): 39-42
- AHMED, A. F., CONSTABLE, P. D., MISK, N. A. (2001)
Effect of orally administered cimetidine and ranitidine on abomasal luminal pH in clinically normal milk-fed calves.
Am J Vet Res **62**(10): 1531-1538
- AHMED, A. F., CONSTABLE, P. D., MISK, N. A. (2002)
Effect of feeding frequency and route of administration on abomasal luminal pH in dairy calves fed milk replacer.
J Dairy Sci **85**(6): 1502-1508
- ALONSO, F. R., DONAWICK, W. J., HAMMEL, E. P. (1973)
Cannulation of bovine abomasum: a surgical technique.
Am J Vet Res **34**(3): 447-448
- ANDREN, A., BJORCK, L. (1986)
Milk-feeding maintains the prochymosin production in cells of bovine abomasal mucosa.
Acta Physiol Scand **126**(3): 419-427
- ANDREN, A., BJORCK, L., CLAESSION, O. (1982)
Immunohistochemical studies on the development of prochymosin- and pepsinogen-containing cells in bovine abomasal mucosa.
J Physiol **327**: 247-254
- ANSTEY, C. M. (2005)
Comparison of three strong ion models used for quantifying the acid-base status of human plasma with special emphasis on the plasma weak acids.
J Appl Physiol **98**(6): 2119-2125
- BAILEY, J. E., PABLO, L. S. (1998)
Practical approach to acid-base disorders.
Vet Clin North Am Small Anim Pract **28**(3): 645-662
- BALASUBRAMANYAN, N., HAVENS, P. L., HOFFMAN, G. M. (1999)
Unmeasured anions identified by the Fencl-Stewart method predict mortality better than base excess, anion gap, and lactate in patients in the pediatric intensive care unit.
Crit Care Med **27**(8): 1577-1581

- BAUMANN, R. (2003)
Wasser-, Elektrolyt- und Säure-Basen-Haushalt.
In: R. F. Schmidt und Unsicker, K. (Hrsg.): Lehrbuch Vorklinik.
Köln: Deutscher Ärzte-Verlag. S.498-502
- BELL, F. R., MOSTAGHNI, K. (1975)
Duodenal control of gastric emptying in the milk-fed calf.
J Physiol **245**(2): 387-407
- BELL, F. R., RAZIG, S. A. (1973)
The effect of some molecules and ions on gastric function in the milk-fed calf.
J Physiol **228**(2): 513-526
- BELL, F. R., RAZIG, S. A. (1973a)
Gastric emptying and secretion in the milk-fed calf.
J Physiol **228**(2): 499-512
- BERCHTOLD, J. (1998)
Untersuchungen zur Diagnose und Behandlung systemischer Azidosen bei Kälbern.
Berlin: Freie Univ., Fachbereich Veterinärmedizin, Diss.
- BERCHTOLD, J., PRECHTL, J. (2002)
Orale und parenterale Flüssigkeitstherapie.
Nutztierpraxis Aktuell **Ausgabe 2**
- BERCHTOLD, M., RUSCH, P., BURKHARDT, H. (1982)
Azidose: Ein Hauptproblem bei kranken Kälbern.
Tierärztl. Umschau **37**(7): 490-492
- BERGHEN, P., DORNY, P., VERCRUYSSSE, J. (1987)
Evaluation of a simplified blood pepsinogen assay.
Am J Vet Res **48**(4): 664-669
- BINDER, H. J. (2003)
Intestinal Fluid and Electrolyte Movement.
In: W. F. Boron and E. L. Boulpaep (Hrsg.): Medical Physiology.
Philadelphia: Saunders Company. S. 932-937, 951-953
- BINDER, H. J., REUBEN, A. (2003a)
Nutrient Digestion and Absorption.
In: W. F. Boron and E. L. Boulpaep (Hrsg.): Medical Physiology.
Philadelphia: Saunders Company. S. 955
- BOHNHOFF, M., MILLER, C. P., MARTIN, W. R. (1964)
Resistance of the Mouse's Intestinal Tract to Experimental Salmonella Infection. I.
Factors Which Interfere with the Initiation of Infection by Oral Inoculation.
J Exp Med **120**: 805-816
- BOOTH, A. J., NAYLOR, J. M. (1987)
Correction of metabolic acidosis in diarrheal calves by oral administration of
electrolyte solutions with or without bicarbonate.
J Am Vet Med Assoc **191**(1): 62-68
- BOVEE, K. C. (1969)
Urine osmolarity as a definitive indicator of renal concentrating capacity.
J Am Vet Med Assoc **155**(1): 30-35

- BRAUN, R. K. (1975)
Peroral use of a special dietary food as a source of electrolytes in diarrheic calves.
Vet Med Small Anim Clin **70**(5): 601-606
- BREUKINK, H. J., WENSING, T., VAN WEEREN-KEVERLING BUISMAN, A.,
VAN BRUINESSEN-KAPSENBERG, E. G., DE VISSER, N. A. (1988)
Consequences of failure of the reticular groove reflex in veal calves fed milk replacer.
Vet Q **10**(2): 126-135
- BROBST, D. (1983)
Pathophysiologic and adaptive changes in acid-base disorders.
J Am Vet Med Assoc **183**(7): 773-780
- BROOKS, H. W., WHITE, D. G., WAGSTAFF, A. J., MICHELL, A. R. (1996)
Evaluation of a nutritive oral rehydration solution for the treatment of calf diarrhoea.
Br Vet J **152**(6): 699-708
- BROOKS, H. W., WHITE, D. G., WAGSTAFF, A. J., MICHELL, A. R. (1997)
Evaluation of a glutamine-containing oral rehydration solution for the treatment of calf diarrhoea using an *Escherichia coli* model.
Vet J **153**(2): 163-169
- BÜHL, A., ZÖFEL, P. (2005)
Statistische Grundbegriffe. SPSS 12
Einführung in die moderne Datenanalyse unter Windows.
München: Pearson Studium. **9. Auflage**: S. 113
- BURNETT, R. W., COVINGTON, A. K., FOGH-ANDERSEN, N., KULPMANN, W. R., MAAS,
A. H., MULLER-PLATHE, O., SIGGAARD-ANDERSEN, O., VAN KESSEL, A. L.,
WIMBERLEY, P. D., ZIJLSTRA, W. G. (1995)
International Federation of Clinical Chemistry (IFCC). Scientific Division. Committee
on pH, Blood Gases and Electrolytes. Approved IFCC recommendations on whole
blood sampling, transport and storage for simultaneous determination of pH, blood
gases and electrolytes.
Eur J Clin Chem Clin Biochem **33**(4): 247-253
- BUTLER, D. G., WILLOUGHBY, R. A., MCSHERRY, B. J. (1971)
Studies on diarrhea in neonatal calves. 3. Acid-base and serum electrolyte values in
normal calves from birth to ten days of age.
Can J Comp Med **35**(1): 36-39
- BYWATER, R. J. (1980)
Comparison between milk deprivation and oral rehydration with a glucose-glycine-
electrolyte formulation in diarrhoeic and transported calves.
Vet Rec **107**(24): 549-551
- BYWATER, R. J., PENHALE, W. J. (1969)
Depressed lactase activity in the intestinal mucous membrane of calves after
neonatal diarrhoea.
Res Vet Sci **10**(6): 591-593
- CHAPMAN, H. W., BUTLER, D. G., NEWELL, M. (1986)
The route of liquids administered to calves by esophageal feeder.
Can J Vet Res **50**(1): 84-87

- CHERRINGTON, C. A., HINTON, M., PEARSON, G. R., CHOPRA, I. (1991)
Short-chain organic acids at pH 5.0 kill *Escherichia coli* and *Salmonella* spp. without causing membrane perturbation.
J Appl Bacteriol **70**(2): 161-165
- CHUNG, A. W. (1948)
The effect of oral feeding at different levels on the absorption of foodstuffs in infantile diarrhea.
J Pediatr **33**: 1-13
- COMLINE, R. S., TITCHEN, D. A. (1951)
Reflex contraction of the oesophageal groove in young ruminants.
J Physiol **115**(2): 210-226
- CONSTABLE, P. D. (1997)
A simplified strong ion model for acid-base equilibria: application to horse plasma.
J Appl Physiol **83**(1): 297-311
- CONSTABLE, P. D. (1999a)
Clinical assessment of acid-base status. Strong ion difference theory.
Vet Clin North Am Food Anim Pract **15**(3): 447-471
- CONSTABLE, P. D. (1999b)
The physicochemical approach for evaluating acid-base balance in exercising horses.
Equine Vet J Suppl **30**: 636-638
- CONSTABLE, P. D. (2000)
Clinical assessment of acid-base status: comparison of the Henderson-Hasselbalch and strong ion approaches.
Vet Clin Pathol **29**(4): 115-128
- CONSTABLE, P. D. (2002)
Calculation of variables describing plasma nonvolatile weak acids for use in the strong ion approach to acid-base balance in cattle.
Am J Vet Res **63**(4): 482-490
- CONSTABLE, P. D. (2002a)
The treatment of the diarrheic calf: an update.
22. World Buiatrics Congress, Hannover
- CONSTABLE, P. D., AHMED, A. F., MISK, N. A. (2005)
Effect of suckling cow's milk or milk replacer on abomasal luminal pH in dairy calves.
J Vet Intern Med **19**(1): 97-102
- CONSTABLE, P. D., GOHAR, H. M., MORIN, D. E., THURMON, J. C. (1996)
Use of hypertonic saline-dextran solution to resuscitate hypovolemic calves with diarrhea.
Am J Vet Res **57**(1): 97-104
- CONSTABLE, P. D., STAEMPFLI, H. R. (2005b)
Experimental determination of net protein charge and A(tot) and K(a) of nonvolatile buffers in canine plasma.
J Vet Intern Med **19**(4): 507-514

- CONSTABLE, P. D., STAEMPFLI, H. R., NAVETAT, H., BERCHTOLD, J., SCHELCHER, F. (2005a)
Use of a quantitative strong ion approach to determine the mechanism for acid-base abnormalities in sick calves with or without diarrhea.
J Vet Intern Med **19**(4): 581-589
- CONSTABLE, P. D., STREETER, R. N., KOENIG, G. J., PERKINS, N. R., GOHAR, H. M., MORIN, D. E. (1997)
Determinants and utility of the anion gap in predicting hyperlactatemia in cattle.
J Vet Intern Med **11**(2): 71-79
- CONSTABLE, P. D., THOMAS, E. BOISRAME, B. (2001)
Comparison of two oral electrolyte solutions for the treatment of dehydrated calves with experimentally-induced diarrhoea.
Vet J **162**(2): 129-141
- CONSTABLE, P. D., WALKER, P. G., MORIN, D. E., FOREMAN, J. H. (1998a)
Clinical and laboratory assessment of hydration status of neonatal calves with diarrhea.
J Am Vet Med Assoc **212**(7): 991-996
- COREY, H. E. (2003)
Stewart and beyond: new models of acid-base balance.
Kidney Int **64**(3): 777-787
- CROWE, D. T. J. (1986)
Enteral nutrition for critically ill or injured patients – part I.
Comp Cont Ed Pract Vet **8**(9): 603-609
- CUSACK, R. J., RHODES, A., LOCHHEAD, P., JORDAN, B., PERRY, S., BALL, J. A., GROUNDS, R. M., BENNETT, E. D. (2002)
The strong ion gap does not have prognostic value in critically ill patients in a mixed medical/surgical adult ICU.
Intensive Care Med **28**(7): 864-869
- DE BARROS FILHO, I. (2002)
Perioperative Veränderungen im Säure-Basen und Elektrolythaushalt von abomasopexierten und omentopexierten Kühen mit linksseitiger Labmagenverlagerung.
Hannover: Tierärztliche Hochschule; Diss.
- DE MORAIS, H. S. A. (1992)
A non traditional approach to acid-base disorders.
In: S. P. Dibartola (Hrsg.): Fluid Therapy in Small Animal Practice.
Philadelphia: W. B. Saunders Company: S. 297-320
- DE MORAIS, H. S. A. (2000)
Mixed Acid Base Disorders.
In: S. P. Dibartola (Hrsg.): Fluid Therapy in Small Animal Practice.
Philadelphia: W. B. Saunders Company: S. 251-264
- DE MORAIS, H. S. A., DIBARTOLA, S. P. (1993)
Mixed Acid-Base-Disorders .Part.1. Clinical Approach.
Comp Cont Educ Pract **15**(12): 1619-1626

- DE MORAIS, H. S. A., DIBARTOLA, S. P. (1994)
Mixed Acid-Base-Disorders .Part.2. Clinical Disturbances.
Comp Cont Educ Pract **16**(4): 477-488
- DEETJEN, P. (1999)
Säure-Basen-Haushalt.
In: P. Deetjen and E. J. Speckmann (Hrsg.): Physiologie.
Urban & Schwarzenberg. S. 409-414
- DEMIGNE, C., REMESY, C., CHARTIER, F., KALIGIS, D. (1983)
Utilization of volatile fatty acids and improvement of fluid therapy for treatment of
dehydration in diarrheic calves.
Ann Rech Vet **14**(4): 541-547
- DERKSEN, R., SCHEFFER, G. J., VAN DER HOEVEN, J. G. (2006)
Quantitative acid-base physiology using the Stewart model. Does it improve our
understanding of what is really wrong?
Eur J Intern Med **17**(5): 330-333
- DIBARTOLA, S. P. (2000)
Fluid Therapy in Small Animal Practice.
Philadelphia: W.B. Saunders Company
- DIRR, L., DIRKSEN, G. (1989)
Dysfunktion der Schlundrinne ("Pansentrinken") als Komplikation der Neugeborenen-
diarrhoe beim Kalb.
Tierärztl Prax **17**(4): 353-358
- DOLL, K. (1992)
Untersuchungen über die Bedeutung unspezifischer Faktoren in der Pathogenese der
Diarrhoe beim Kalb.
München: Tierärztliche Fakultät, Habil.-Schr.
- DOLL, K., BREITNER, W. (1990)
Die Harnkonzentration als Parameter zur Beurteilung des Exsikkosegrades bei
Kälbern mit Neugeborenenendiarrhoe
Tierärztl Umschau **45**(10): 722-727
- DOLL, K., RIEPL, H., DIRKSEN, G. (2004)
Pathophysiologische Bedeutung von Steatorrhoe sowie von Hydroxystearinsäuren im
Kot von Durchfallkälbern.
Dtsch Tierärztl Wochenschr **111**(1): 22-28
- DOLL, K., WEIRATHER, P., KÜCHLE, H. M. (1995)
Kälberdurchfall als Bestandsproblem: Betriebsinterne Faktoren und häufige
Behandlungsfehler.
Prakt. Tierarzt **76**(11): 995-1004
- DOUGHERTY, R. W. (1955)
Permanent stomach and intestinal fistulas in ruminants: some modifications and
simplifications.
Cornell Vet **45**(3): 331-357
- DRIEDGER, A., CONDON, R. J., NIMRICK, K. O., HATFIELD, E. E. (1970)
A modified technique for abomasal and rumen cannulation.
J Anim Sci **31**(4): 772-775

- DUPE, R. J., GODDARD, M. E., BYWATER, R. J. (1989)
A comparison of two oral rehydration solutions in experimental models of dehydration and diarrhoea in calves.
Vet Rec **125**(25): 620-624
- DYCE, K. M., SACK, W. O. WENSING, C. J. G. (1991)
Anatomie der Haustiere.
Stuttgart: Ferdinand Enke Verlag
- EICKER, S. W. (1990)
An introduction to strong ion difference.
Vet Clin North Am Food Anim Pract **6**(1): 45-49
- EL-MOUGI, M., EL-AKKAD, N., HENDAWI, A., HASSAN, M., AMER, A., FONTAINE, O., PIERCE, N. F. (1994)
Is a low-osmolarity ORS solution more efficacious than standard WHO ORS solution?
J Pediatr Gastroenterol Nutr **19**(1): 83-86
- ESPINASSE, J., NAVETAT, H., CONTREPOIS, M., BAROUX, D., SCHELCHER, F. (1991)
A new diarrhoeic syndrome with ataxia in young Charolais calves: clinical and microbiological studies.
Vet Rec **128**(18): 422-425
- EWASCHUK, J. B., NAYLOR, J. M., CHIRINO-TREJO, M., ZELLO, G. A. (2004)
Lactobacillus rhamnosus strain GG is a potential probiotic for calves.
Can J Vet Res **68**(4): 249-253
- FELDMAN, M., SONI, N., DICKSON, B. (2005)
Influence of hypoalbuminemia or hyperalbuminemia on the serum anion gap.
J Lab Clin Med **146**(6): 317-320
- FENCL, V., JABOR, A., KAZDA, A., FIGGE, J. (2000)
Diagnosis of metabolic acid-base disturbances in critically ill patients.
Am J Respir Crit Care Med **162**(6): 2246-2251
- FENCL, V., LEITH, D. E. (1993)
Stewart's quantitative acid-base chemistry: applications in biology and medicine.
Respir Physiol **91**(1): 1-16
- FETTMAN, M. J., BROOKS, P. A., BURROWS, K. P., PHILLIPS, R. W. (1986)
Evaluation of commercial oral replacement formulas in healthy neonatal calves.
J Am Vet Med Assoc **188**(4): 397-401
- FIGGE, J., JABOR, A., KAZDA, A., FENCL, V. (1998)
Anion gap and hypoalbuminemia.
Crit Care Med **26**(11): 1807-1810
- FIGGE, J., MYDOSCH, T., FENCL, V. (1992)
Serum proteins and acid-base equilibria: a follow-up.
J Lab Clin Med **120**(5): 713-719
- FIGGE, J., ROSSING, T. H., FENCL, V. (1991)
The role of serum proteins in acid-base equilibria.
J Lab Clin Med **117**(6): 453-467

- FISHER, E. W. (1965)
Death in Neonatal Calf Diarrhoea.
Br Vet J **121**: 132-138
- FLYNN, W. J., JR., GOSCHE, J. R., GARRISON, R. N. (1992)
Intestinal blood flow is restored with glutamine or glucose suffusion after hemorrhage.
J Surg Res **52**(5): 499-504
- FOLTMANN, B. (1969)
Prochymosin and chymosin (prorennin and rennin).
Biochem J **115**(3): 3P-4P
- FRANCIS, D. H., REMMERS, G. A., DEZEEUW, P. S. (1982)
Production of K88, K99, and 987P antigens by Escherichia coli cultured on synthetic and complex media.
J Clin Microbiol **15**(1): 181-183
- FRÖHNER, A., REITER, K. (2005)
Ursachen von Kälberverlusten bei Milchvieh und Möglichkeiten zur Reduzierung.
Bayerische Landesanstalt für Landwirtschaft.
Freising-Weihenstephan: S. 10-12
- GÄBEL, G. (2005)
Säure-Basen-Haushalt.
In: W. v. Engelhardt and G. Breves: Physiologie der Haustiere.
Stuttgart: Enke Verlag: S. 268-276
- GARCIA, J. P. (1999)
A practitioner's views on fluid therapy in calves.
Vet Clin of North Am Food Anim Pract **15**(3): 533-543
- GARRY, F. B., HULL, B. L., RINGS, D. M., KERSTING, K., HOFFSIS, G. F. (1988)
Prognostic value of anion gap calculation in cattle with abomasal volvulus: 58 cases (1980-1985).
J Am Vet Med Assoc **192**(8): 1107-1112
- GARTHWAITE, B. D., DRACKLEY, J. K., MCCOY, G. C., JASTER, E. H. (1994)
Whole milk and oral rehydration solution for calves with diarrhea of spontaneous origin.
J Dairy Sci **77**(3): 835-843
- GEISHAUSER, T. (1992)
Intravenöse Dauertropfinfusion zur Durchfallbehandlung beim Kalb.
Prakt. Tierarzt **73**: S. 35-40
- GEISHAUSER, T., THUNKER, B. (1997)
Metabolische Azidose bei neugeborenen Kälbern mit Durchfall- Abschätzung an Saugreflex oder Stehvermögen.
Prakt. Tierarzt **78**(7): S. 600-605
- GROUTIDES, C., MICHELL, A. R. (1990)
Evaluation of acid-base disturbances in calf diarrhoea.
Vet Rec **126**(2): 29-31

- GROVE-WHITE, D. H. (1998)
Monitoring and management of acidosis in calf diarrhoea.
J R Soc Med **91**(4): 195-198
- GROVE-WHITE, D. H., WHITE, D. G. (1993)
Diagnosis and treatment of metabolic acidosis in calves: a field study.
Vet Rec **133**(20): 499-501
- GRÜNDER, H.-D. (1990)
Harnapparat.
In: G. Rosenberger (Hrsg.): Die klinische Untersuchung des Rindes.
Berlin, Hamburg: Verlag Paul Parey: S. 402-404
- GÜRTLER, H. (1989)
Die Physiologie der Verdauung und Resorption.
In: E. Kolb: Lehrbuch der Physiologie der Haustiere.
Jena: VEB Gustav Fischer Verlag: S. 221-232
- GUTZWILLER, A., BLUM, J. W. (1996)
Effects of oral lactose and xylose loads on blood glucose, galactose, xylose, and insulin values in healthy calves and calves with diarrhea.
Am J Vet Res **57**(4): 560-563
- HAMM, D., HICKS, W. J. (1975)
A new oral electrolyte in calf scours therapy.
Vet Med Small Anim Clin **70**(3): 279-282
- HAND, M. S., HUNT, E., PHILLIPS, R. W. (1985)
Milk replacers for the neonatal calf.
Vet Clin North Am Food Anim Pract **1**(3): 589-608
- HARBOE, M., ANDERSEN, P. M., FOLTMANN, B., KAY, J., KASSELL, B. (1974)
The activation of bovine pepsinogen. Sequence of the peptides released, identification of a pepsin inhibitor.
J Biol Chem **249**(14): 4487-4494
- HARRIS, D. C. (Hrsg.) (2002)
Säure-Base-Titrationen.
In: Lehrbuch der quantitativen Analyse.
Berlin, Heidelberg, New York: Springer-Verlag: S. 359-364
- HARTMANN, H. (1994)
Störungen im Säure-Basen-Haushalt.
In: H. Hartmann and H. Meyer: Klinische Pathologie der Haustiere.
Jena, Stuttgart: Gustav Fischer Verlag: S. 176-194
- HARTMANN, H. (1994a)
Funktionsstörungen des Magen-Darm-Kanals.
In: H. Hartmann and H. Meyer: Klinische Pathologie der Haustiere.
Jena, Stuttgart: Gustav Fischer Verlag: S. 324-329
- HARTMANN, H. (2002)
Gastrointestinale Funktionen beim durchfallkranken Kalb und wirksamer Einsatz von Diättränken.
Tierärztl. Praxis: Grosstiere **30**(6): S. 83-84

- HARTMANN, H. (2005)
Säuren-Basen-Haushalt.
In: W. H. Hofmann: Rinderkrankheiten.
Stuttgart: Eugen Ulmer KG: S. 90-95
- HARTMANN, H., HAGELSCHUER, I., MEYER, H., RUDOLPH, C., LESCHE, R.,
FODISCH, G. (1989)
Zur Wirkung einer unterschiedlichen Konzentration sowie einer veränderten
Dispersion des Nahrungsfettes auf die Funktion des Magen-Darm-Kanals von
Kälbern.
Mh. Vet.- Med. **44**(2): 46-49
- HARTMANN, H., JOEL, B., LAUE, R., WEINER, R., DANOWSKI, H. (1985)
Die funktionelle Erfassung der Absorptionsfähigkeit des Dünndarms von
durchfallkranken Kälbern mit Schlussfolgerungen für die Zweckmäßigkeit der oralen
Behandlung.
Arch Exp Veterinärmed **39**(4): 573-584
- HARTMANN, H., MEYER, H., STEINBACH, G., SCHWEINITZ, P., LUSTERMANN, S. (1984)
Zum Säuren-Basen-Haushalt durchfallkranker Kälber.
Mh. Vet.-Med. **39**(21): 738-742
- HARTMANN, H., STAUFENBIEL, R. (Hrsg.) (1995)
Flüssigkeitstherapie bei Tieren.
Jena: Gustav Fischer Verlag
- HASSELBALCH, K. A. (1916)
Die Berechnung der Wasserstoffzahl des Blutes auf der freien und gebundenen
Kohlensäure desselben, und die Sauerstoffbindung des Blutes als Funktion der
Wasserstoffzahl.
Biochem. Ztg. **78**: 112-144
- HEATH, S. E., NAYLOR, J. M., GUEDO, B. L., PETRIE, L., ROUSSEAU, C. G.,
RADOSTITS, O. M. (1989)
The effects of feeding milk to diarrheic calves supplemented with oral electrolytes.
Can J Vet Res **53**(4): 477-485
- HENDERSON, L. J. (1908)
Concerning the relationship between the strength of acids and their capacity to
preserve neutrality.
Am J Physiol **21**: 173-179
- HENSCHEL, M. J. (1973)
Comparison of the development of proteolytic activity in the abomasum of the
preruminant calf with that in the stomach of the young rabbit and guinea-pig.
Br J Nutr **30**(2): 285-296
- HINDERER, A., SEEMANN, G., KLEE, W. (1999)
Untersuchungen zur Auswirkung von Ad-libitum- und rationierter Milchtränkung auf
Krankheitsverlauf und Körpermasseentwicklung bei jungen Kälbern mit Durchfall.
Dtsch Tierärztl Wochenschr **106**(1): 14-17
- HUBER, E. G. SCHEIBL, F. (1961)
Die Fettresorption bei verschiedenen Säuglingsnahrungen.
Monatsschr Kinderheilkd **109**: 216-217

- INOUE, Y., GRANT, J. P., SNYDER, P. J. (1993)
Effect of glutamine-supplemented total parenteral nutrition on recovery of the small intestine after starvation atrophy.
JPEN J Parenter Enteral Nutr **17**(2): 165-170
- JASTER, E. H., MCCOY, G. C., TOMKINS, T., DAVIS, C. L. (1990)
Feeding acidified or sweet milk replacer to dairy calves.
J Dairy Sci **73**(12): 3563-3566
- JONES, R. D., MIZINGA, K. M., THOMPSON, F. N., STUEDEMANN, J. A., BOWEN, J. M. (1994)
Bioavailability and pharmacokinetics of metoclopramide in cattle.
J Vet Pharmacol Ther **17**(2): 141-147
- KASARI, T. R. (1990)
Metabolic-Acidosis in Diarrheic Calves - the Importance of Alkalinizing Agents in Therapy.
Vet. Clin. North Am. Food Anim. Pract. **6**(1): 29-43
- KASARI, T. R., NAYLOR, J. M. (1984)
Metabolic-Acidosis without Clinical Signs of Dehydration in Young Calves.
Can Vet J **25**(10): 394-399
- KASARI, T. R., NAYLOR, J. M. (1985)
Clinical evaluation of sodium bicarbonate, sodium L-lactate, and sodium acetate for the treatment of acidosis in diarrheic calves.
J Am Vet Med Assoc **187**(4): 392-397
- KASARI, T. R., NAYLOR, J. M. (1986)
Further studies on the clinical features and clinicopathological findings of a syndrome of metabolic acidosis with minimal dehydration in neonatal calves.
Can J Vet Res **50**(4): 502-508
- KASKE, M. (1994)
Pathophysiologische Aspekte der neonatalen Kälberdiarrhoe.
Tierärztl Umschau **49**(6): 336-348
- KASKE, M. (2002)
Pathophysiologie der neonatalen Kälberdiarrhoe und Konsequenzen für die Therapie.
Nutztierpraxis Aktuell **Ausgabe 2**
- KASKE, M., KUNZ, H. J. (2003)
Handbuch Durchfallerkrankungen der Kälber.
Osnabrück: Kamlage Verlag GmbH & Co
- KEHOE, S. I., HEINRICHS, A. J. (2004)
Gastrointestinale Entwicklungen bei Milchkälbern.
Grosstierpraxis **5**(12): 33-36
- KELLUM, J. A. (2003)
Closing the gap on unmeasured anions.
Crit Care **7**(3): 219-220
- KELLUM, J. A., KRAMER, D. J., PINSKY, M. R. (1995)
Strong ion gap: a methodology for exploring unexplained anions.
J Crit Care **10**(2): 51-55

- KIERMEIER, F. LECHNER, E. (1973)
Milch und Milcherzeugnisse.
Hamburg: Verlag Paul Parey
- KLEE, W. (1989)
Aspekte der Behandlung neugeborener Kälber mit akutem Durchfall.
VET **5**: 6-17
- KLEIN, S. (1990)
Glutamine: an essential nonessential amino acid for the gut.
Gastroenterology **99**(1): 279-281
- KOMAREK, R. J. (1981)
Rumen and abomasal cannulation of sheep with specially designed cannulas and a cannula insertion instrument.
J Anim Sci **53**(3): 790-795
- KONDOS, A. C. (1967)
A new method for cannulation of the abomasum in sheep.
Aust Vet J **43**(4): 149-151
- KRAFT, W. (2005)
Säure-Basen-Haushalt.
In: W. Kraft and U. M. Dürr: Klinische Labordiagnostik in der Tiermedizin.
Stuttgart, New York: Schattauer GmbH: S. 280-283
- KRAFT, W., DÜRR, U. M., FÜLL, M., BOSTEDT, H., HEINRITZI, K. (2005a)
Skelettmuskulatur, Knochen, Kalzium-, Phosphor- Magnesiumstoffwechsel.
In: W. Kraft and U. M. Dürr: Klinische Labordiagnostik in der Tiermedizin.
Stuttgart, New York: Schattauer GmbH: S. 263-271
- KRAFT, W., DÜRR, U. M., FÜLL, M., BOSTEDT, H., HEINRITZI, K. (2005c)
Serum-Protein.
In: W. Kraft and U. M. Dürr: Klinische Labordiagnostik in der Tiermedizin.
Stuttgart, New York: Schattauer GmbH: S. 284-292
- KRAFT, W., DÜRR, U. M., FÜLL, M., BOSTEDT, H., HEINRITZI, K. (2005d)
Harnapparat.
In: W. Kraft and U. M. Dürr: Klinische Labordiagnostik in der Tiermedizin.
Stuttgart, New York: Schattauer GmbH: S. 186-219
- KRAUTZIG, I. (1986)
Pathophysiologische Aspekte der Fettverdauung beim jungen Kalb.
Mh Vet.-med **41**(20): 714-714
- KREHBIEL, C. R., FERRELL, C. L. (1999)
Effects of increasing ruminally degraded nitrogen and abomasal casein infusion on net portal flux of nutrients in yearling heifers consuming a high-grain diet.
J Anim Sci **77**(5): 1295-1305
- KUIPER, R., BREUKINK, H. J. (1986)
Secondary indigestion as a cause of functional pyloric stenosis in the cow.
Vet Rec **119**(16): 404-406

- KUTAS, F. (1965)
Determination of Net Acid-Base Excretion in the Urine of Cattle. A Method for the Estimation of Acid-Base Equilibrium.
Acta Vet Acad Sci Hung **15**: 147-153
- LANG, F. (2005)
Säure-Basen-Haushalt.
In: R. F. Schmidt, F. Lang and G. Thews: *Physiologie des Menschen*.
Heidelberg: Springer Medizin Verlag: S. 794-805
- LANGHANS, W., DELPRETE, E. SCHARRER, E. (1991)
Mechanisms of vasopressin's anorectic effect.
Physiol Behav **49**(1): 169-176
- LAST, W. (2005)
Rehydratationstränken für Kälber.
Veterinär-Spiegel: 1-5
- LATEUR-ROWET, H. J., BREUKINK, H. J. (1983)
The failure of the oesophageal groove reflex, when fluids are given with an oesophageal feeder to newborn and young calves.
Vet Q **5**(2): 68-74
- LATTMANN, J. (1984)
Untersuchungen des Elektrolytgehaltes von Speichel, Serum and Pansensaft gesunder sowie an labmagenverlagerungsbedingter Störung der Ingestapassage leidender Rinder.
Dtsch Tierärztl Wochenschr **91**(4): 146-149
- LE HUEROU-LURON, I., GUILLOTEAU, P., WICKER-PLANQUART, C., CHAYVIALLE, J. A., BURTON, J., MOUATS, A., TOULLEC, R., PUIGSERVER, A. (1992)
Gastric and Pancreatic-Enzyme Activities and Their Relationship with Some Gut Regulatory Peptides During Postnatal-Development and Weaning in Calves.
J Nutr **122**(7): 1434-1445
- LEVINE, G. M., DEREN, J. J., STEIGER, E., ZINNO, R. (1974)
Role of oral intake in maintenance of gut mass and disaccharide activity.
Gastroenterology **67**(5): 975-982
- LEWIS, L. D., PHILLIPS, R. W. (1979)
Treatment of the calf with diarrhea.
Vet Clin North Am Large Anim Pract **1**(2): 395-409
- LORENZ, I. (2004a)
Investigations on the influence of serum D-lactate levels on clinical signs in calves with metabolic acidosis.
Vet J **168**(3): 323-327
- LORENZ, I. (2004b)
Influence of D-lactate on metabolic acidosis and on prognosis in neonatal calves with diarrhoea.
J Vet Med A Physiol Pathol Clin Med **51**(9-10): 425-428
- MCAULIFFE, J. J., LIND, L. J., LEITH, D. E., FENCL, V. (1986)
Hypoproteinemic alkalosis.
Am J Med **81**(1): 86-90

- MCCARTHY, D. O., KLUGER, M. J., VANDER, A. J. (1984)
The role of fever in appetite suppression after endotoxin administration.
Am J Clin Nutr **40**(2): 310-316
- MCCULLOUGH, S. M., CONSTABLE, P. D. (2003)
Calculation of the total plasma concentration of nonvolatile weak acids and the effective dissociation constant of nonvolatile buffers in plasma for use in the strong ion approach to acid-base balance in cats.
Am J Vet Res **64**(8): 1047-1051
- MELOUN, B., MORAVEK, L., KOSTKA, V. (1975)
Complete Amino-Acid Sequence of Human-Serum Albumin.
Febs Letters **58**(1): 134-137
- MICHELL, A. R. (2005)
Why has oral rehydration for calves and children diverged: direct vs. indirect criteria of efficacy.
Res Vet Sci **79**(3): 177-181
- MICHELL, A. R., BROOKS, H. W., WHITE, D. G., WAGSTAFF, A. J. (1992)
The comparative effectiveness of three commercial oral solutions in correcting fluid, electrolyte and acid-base disturbances caused by calf diarrhoea.
Br Vet J **148**(6): 507-522
- MITCHELL IDE, G., TAME, M. J., KENWORTHY, R. (1974)
Conditions for the production of Escherichia coli enterotoxin in a defined medium.
J Med Microbiol **7**(3): 395-400
- MORGAN, T. J. (2004)
What exactly is the strong ion gap, and does anybody care?
Crit Care Resusc **6**(3): 155-159
- MORNET, P. ESPINASSE, J. (Hrsg.) (1990)
In: *Das Kalb: Anatomie, Physiologie, Aufzucht, Ernährung, Produktion, Pathologie.*
Hengersberg: Schober Verlags-GmbH
- MOVIAT, M., VAN HAREN, F., VAN DER HOEVEN, H. (2003)
Conventional or physicochemical approach in intensive care unit patients with metabolic acidosis.
Crit Care **7**(3): R41-45
- MURPHY, G., ANDRESEN, U. (2000)
Neuere Aspekte zur Beurteilung der Eignung antidiarrhoischer Diätetika für das Kalb.
Prakt Tierarzt **81**(3): 246-257
- NAGY, O., KOVAC, G., SEIDEL, H., WEISSOVA, T. (2001)
The effect of arterial blood sampling sites on blood gases and acid-base balance parameters in calves.
Acta Vet Hung **49**(3): 331-340
- NAGY, O., SEDOVIC, M., SLANINA, L. (1994)
Acid-base profile evaluation in central and peripheral arterial and venous blood in cattle.
Vet Med (Praha) **39**(1): 1-9

- NAPPERT, G. (2003)
Praktische Aspekte bei der oralen Rehydratationstherapie durchfallkranker Kälber.
Nutztierpraxis Aktuell **Ausgabe 7**
- NAPPERT, G., LATTIMER, J. C. (2001)
Comparison of abomasal emptying in neonatal calves with a nuclear scintigraphic procedure.
Can J Vet Res **65**(1): 50-54
- NAPPERT, G., SPENNICK, H. (2003a)
Effects of neonatal calf oral rehydration therapy solutions on milk clotting time.
Cattle Practice **11**: 285-288
- NAPPERT, G., ZELLO, G. A. NAYLOR, J. M. (1997)
Oral rehydration therapy for diarrheic calves.
Comp Cont Educ Pract **19**(8): 181-189
- NAVETAT, H. (1987)
Das Labmagengeschwür beim Kalb.
Dtsch Tierärztl Wochenschr **94**(5): 282-284
- NAYLOR, J. M. (1986)
Alkalinizing abilities of calf oral electrolyte solutions.
Dublin: 14th World Congress on Diseases of Cattle: S. 362
- NAYLOR, J. M. (1989)
A Retrospective Study of the Relationship between Clinical Signs and Severity of Acidosis in Diarrheic Calves.
Can Vet J **30**(7): 577-580
- NAYLOR, J. M. (1990)
Oral fluid therapy in neonatal ruminants and swine.
Vet Clin North Am Food Anim Pract **6**(1): 51-67
- NAYLOR, J. M. (1992)
Effects of electrolyte solutions for oral administration on clotting of milk.
J Am Vet Med Assoc **201**(7): 1026-1029
- NAYLOR, J. M. (1999)
Oral electrolyte therapy.
Vet Clin North Am Food Anim Pract **15**(3): 487-504
- NAYLOR, J. M., FORSYTH, G. W. (1986)
The alkalinizing effects of metabolizable bases in the healthy calf.
Can J Vet Res **50**(4): 509-516
- NAYLOR, J. M., LEIBEL, T., MIDDLETON, D. M. (1997)
Effect of glutamine or glycine containing oral electrolyte solutions on mucosal morphology, clinical and biochemical findings, in calves with viral induced diarrhea.
Can J Vet Res **61**(1): 43-48
- NELSON, J. H., JENSEN, R. G., PITAS, R. E. (1977)
Pregastric esterase and other oral lipases--a review.
J Dairy Sci **60**(3): 327-362

NEWSWIRE (2002)

New York Presbyterian Hospital kündigt die Vergabe des ersten Pollin Prize in der pädiatrischen Forschung an und würdigt die Entwickler der revolutionären oralen Rehydratationstherapie.

London: PR Newswire Europe Ltd.:

[http:// www.prnewswire.co.uk/cgi/news/release?id=94060](http://www.prnewswire.co.uk/cgi/news/release?id=94060) (Stand: 20.03.2006)

NIEUWOUDT, C. D. (1999)

Oral electrolyte replacement solutions.

Vet Clin North Am Food Anim Pract **15**(3): 663-667

NOURI, M., CONSTABLE, P. D. (2006)

Comparison of two oral electrolyte solutions and route of administration on the abomasal emptying rate of Holstein-Friesian calves.

J Vet Intern Med **20**(3): 620-626

PALMER, J. E., WHITLOCK, R. H. (1983)

Bleeding abomasal ulcers in adult dairy cattle.

J Am Vet Med Assoc **183**(4): 448-451

PEDERSEN, V. B., CHRISTENSEN, K. A., FOLTMANN, B. (1979)

Investigations on the activation of bovine prochymosin.

Eur J Biochem **94**(2): 573-580

PETIT, H. V., IVAN, M., BRISSON, G. J. (1988)

Digestibility and blood parameters in the preruminant calf fed a clotting or a non-clotting milk replacer.

J Anim Sci **66**(4): 986-991

PHILLIPS, R. W. (1985)

Fluid therapy for diarrheic calves. What, how, and how much.

Vet Clin North Am Food Anim Pract **1**(3): 541-562

PITAS, R. E. JENSEN, R. G. (1970)

Action of pregastric esterase on synthetic triglycerides containing butyric acid.

J Dairy Sci **53**(8): 1083-1085

RADEMACHER, G. (Hrsg.) (2003)

Kälberkrankheiten.

Stuttgart: Eugen Ulmer

RADEMACHER, G., LORENZ, I., KLEE, W. (2002)

Tränkung und Behandlung von Kälbern mit Neugeborenenenddurchfall.

Tierärztl. Umschau **57**: 177-189

RADOSTITS, O. M. (1975)

Treatment and control of neonatal diarrhea in calves.

J Dairy Sci **58**(3): 464-470

REHM, M., CONZEN, P. F., PETER, K., FINSTERER, U. (2004)

Das Stewart-Modell. "Moderner" Ansatz zur Interpretation des Saure-Basen-Haushalts.

Anaesthesist **53**(4): 347-357

- REINHOLD, P., FODISCH, G. (1993)
Lung-Function Diagnostics in Clinically Intact and Pneumonia-Affected Calves.
Monatsh Vet.-med **48**(3): 113-117
- REINHOLD, S., HERTSCH, B. W., HÖPPNER, S., HEUWIESER, W., HARTMANN, H. (2006)
Wirkung von Milch und Diättränken mit und ohne Bikarbonat-Ionen auf den intraluminalen pH-Wert im Labmagen und den systemischen Säuren-Basen-Status beim Kalb.
Tierärztl Prax **34 (G)**: 368-376
- RHOADS, J. M., ARGENZIO, R. A., CHEN, W., RIPPE, R. A., WESTWICK, J. K., COX, A. D., BERSCHNEIDER, H. M., BRENNER, D. A. (1997)
L-glutamine stimulates intestinal cell proliferation and activates mitogen-activated protein kinases.
Am J Physiol **272**(5 Pt 1): G943-953
- ROHDE, J. E., CASH, R. A. (1973)
Transport of glucose and amino acids in human jejunum during Asiatic cholera.
J Infect Dis **127**(2): 190-192
- ROSS, J. G., PURCELL, D. A., TODD, J. R. (1969)
Experimental infections of calves with *Trichostrongylus axei* investigations using abomasal cannulae.
Res Vet Sci **10**(1): 46-56
- ROUSSEL, A. J., JR., BRUMBAUGH, G. W. (1991)
Treatment of diarrhea of neonatal calves.
Vet Clin North Am Food Anim Pract **7**(3): 713-728
- ROY, J. H. B. (1984)
Dietary sensitivities in the calf.
London: 2nd G Durrant Memorial Symp
- RUPP, G. P., KREIKEMEIER, K. K., PERINO, L. J., ROSS, G. S. (1994)
Measurement of volatile fatty acid disappearance and fluid flux across the abomasum of cattle, using an improved omasal cannulation technique.
Am J Vet Res **55**(4): 522-529
- RUSSELL, K. E., HANSEN, B. D., STEVENS, J. B. (1996)
Strong ion difference approach to acid-base imbalances with clinical applications to dogs and cats.
Vet Clin North Am Small Anim Pract **26**(5): 1185-1201
- SACHS, L., HEDDERICH, J. (Hrsg.) (2003)
Angewandte Statistik. Anwendung statistischer Methoden.
Berlin: Springer-Verlag
- SADIEK, A. SCHLERKA, G. (1996)
Untersuchungen über die Rehydratation bei an Durchfall erkrankten Milchkälbern.
Tierärztl Umschau **51**(9): 544-552
- SCHARRER, E., WOLFFRAM, S. (2005)
Funktionen des einhöhligen Magens.
In: W. v. Engelhardt and G. Breves (Hrsg.): Physiologie der Haustiere.
Stuttgart: Enke Verlag. **2 Auflage**: S. 374-380

- SCHARRER, E., WOLFFRAM, S. (2005a)
Funktionen des Dünndarmes und seiner Anhangsdrüsen.
In: W. v. Engelhardt and G. Breves (Hrsg.): Physiologie der Haustiere.
Stuttgart: Enke Verlag. **2 Auflage:** S. 380-405
- SCHEID, P. (2001)
Säure-Basen-Gleichgewicht.
In: R. Klinke and S. Silbernagl (Hrsg.): Lehrbuch der Physiologie.
Stuttgart, New York: Georg Thieme Verlag. **3. Auflage:** S. 273-285
- SCHLERKA, G., BAUMGARTNER, W., WEHRLE, A. (1996)
Über die Aussagekraft des Harn-pH-Wertes für die Beurteilung einer Blutazidose
beim durchfallkranken Milchkalb.
Tierärztl Umschau **51**(2): 96-99
- SCHUBERT, M. L. (2003)
Gastric secretion.
Curr Opin Gastroenterol **19**(6): 519-525
- SCHULTE-MÄRTER, F. (2000)
Kälberkrankheiten im Verlauf von 16 Jahren (Erhebungen an einer Hochschulklinik
von 1980-1995).
Hannover: Tierärztliche Hochschule, Diss.
- SEN, I., CONSTABLE, P. D., MARSHALL, T. S. (2006)
Effect of suckling isotonic or hypertonic solutions of sodium bicarbonate or glucose on
abomasal emptying rate in calves.
Am J Vet Res **67**(8): 1377-1384
- SIEWERT, K. L., OTTERBY, D. E. (1970)
Effects of in vivo and in vitro acid environments on activity of pregastric esterase.
J Dairy Sci **53**(5): 571-574
- SIGGAARD-ANDERSEN, O. (1966)
Titratable acid or base of body fluids.
Ann N Y Acad Sci **133**(1): 41-58
- SIGGAARD-ANDERSEN, O., FOGH-ANDERSEN, N. (1995)
Base excess or buffer base (strong ion difference) as measure of a non-respiratory
acid-base disturbance.
Acta Anaesthesiol Scand Suppl **107**: 123-128
- SILBERNAGL, S. (2001)
Maßeinheiten, Kurven und ein wenig Mathematik.
In: R. Klinke and S. Silbernagl (Hrsg.): Lehrbuch der Physiologie.
Stuttgart, New York: Georg Thieme Verlag: S. 772
- SINGER, R., HASTINGS, A. (1948)
An improved clinical method for the estimation of disturbances of the acid-base
balance of human blood.
Medicine (Baltimore) **27**: 223-242
- SISSONS, J. W., SMITH, R. H. (1982)
Effect of duodenal cannulation on abomasal emptying and secretion in the
preruminant calf.
J Physiol **322**: 409-417

- SLANINA, L., NAGY, O., SEDOVIC, M., STRUHARIKOVA, J. (1992)
[Dynamics of the acid-base balance of venous and arterial blood in clinically healthy calves].
Dtsch Tierärztl Wochenschr **99**(5): 182-186
- SMITH, R. H. (1964)
Passage of Digesta through the Calf Abomasum and Small Intestine.
J Physiol **172**: 305-320
- STAEMPFLI, H., TAYLOR, M., MCNICOLL, C., GANCZ, A. Y., CONSTABLE, P. D. (2006)
Experimental determination of net protein charge, $[A]_{tot}$, and K_a of nonvolatile buffers in bird plasma.
J Appl Physiol **100**(6): 1831-1836
- STAEMPFLI, H. R., CONSTABLE, P. D. (2003)
Experimental determination of net protein charge and A_{tot} and $K(a)$ of nonvolatile buffers in human plasma.
J Appl Physiol **95**(2): 620-630
- STEWART, P. A. (1978)
Independent and dependent variables of acid-base control.
Respir Physiol **33**(1): 9-26
- STEWART, P. A. (Hrsg.) (1981)
How to understand acid-base: a quantitative acid-base primer for biology and medicine.
New York: Elsevier
- STEWART, P. A. (1983)
Modern quantitative acid-base chemistry.
Can J Physiol Pharmacol **61**(12): 1444-1461
- STEWART, W. E., NICOLAI, J. H. (1964)
Abomasal Fistula Technique for Calves.
J Dairy Sci **47**(6): 654
- STORY, D. A., TOSOLINI, A., BELLOMO, R., LEBLANC, M., BRAGANTINI, L., RONCO, C. (2005)
Plasma acid-base changes in chronic renal failure: a Stewart analysis.
Int J Artif Organs **28**(10): 961-965
- STRYER, L. H. (Hrsg.) (1988)
Die Kontrolle der enzymatischen Aktivität.
In: Biochemie.
Heidelberg: Spektrum der Wissenschaft Verlagsgesellschaft mbH: S. 245-259
- TAKAHASHI, N., TAKAHASHI, Y., BLUMBERG, B. S., PUTNAM, F. W. (1987)
Amino-Acid Substitutions in Genetic-Variants of Human-Serum Albumin and in Sequences Inferred from Molecular-Cloning.
Proc Nat Acad Sci USA **84**(13): 4413-4417
- TANFORD, C., SWANSON, S. A., SHORE, W. S. (1955)
Hydrogen Ion Equilibria of Bovine Serum Albumin.
J Am Chem Soc **77**(24): 6414-6421

- THEWS, G. (1997)
Atemgastransport und Säure-Basen-Status des Blutes.
In: R. F. Schmidt (Hrsg.): Physiologie des Menschen.
Berlin, Heidelberg, New York: Springer-Verlag. **27.Auflage**: S. 604-622
- UNICEF (1999)
Der Kampf gegen die Kindersterblichkeit.
http://www.unicef.de/fileadmin/mediathek/download/i_0065_kindersterblichkeit.pdf
(Stand:20.03.2006)
- VAN HOOYDONK, A. C. M., BOERRIGTER, I.J.; HAGEDOORN, H. G. (1986)
pH-induced physico-chemical changes of casein micelles in milk and their effect on renneting. 2. Effect of pH on renneting of milk.
Neth Milk Dairy J **40**: 297-313
- WALKER, P. G., CONSTABLE, P. D., MORIN, D. E., FOREMAN, J. H., DRACKLEY, J. K., THURMON, J. C. (1998)
Comparison of hypertonic saline-dextran solution and lactated Ringer's solution for resuscitating severely dehydrated calves with diarrhea.
J Am Vet Med Assoc **213**(1): 113-121
- WATSON, P. D. (1999)
Modeling the effects of proteins on pH in plasma.
J Appl Physiol **86**(4): 1421-1427
- WENDEL, H., SOBOTKA, R., RADEMACHER, G. (2001)
Untersuchungen zur klinischen Abschätzung des Azidosegrades bei Kälbern mit Neugeborenenendurchfall.
Tierärztl Umschau **56**(7): 351-356
- WILLIAMS, V. J., ROY, J. H., GILLIES, C. M. (1976)
Milk-substitute diet composition and abomasal secretion in the calf.
Br J Nutr **36**(3): 317-335
- WINDMUELLER, H. G., SPAETH, A. E. (1974)
Uptake and metabolism of plasma glutamine by the small intestine.
J Biol Chem **249**(16): 5070-5079
- WITTEK, T., CONSTABLE, P. D., MARSHALL, T. S., CROCHIK, S. S. (2005)
Ultrasonographic measurement of abomasal volume, location, and emptying rate in calves.
Am J Vet Res **66**(3): 537-544
- WITTENBERGER, W. (Hrsg.) (1995)
Rechnen in der Chemie.
Wien: Springer-Verlag: S. 124-128
- WOODFORD, S. T., WHETSTONE, H. D., MURPHY, M. R., DAVIS, C. L. (1987)
Abomasal pH, nutrient digestibility, and growth of Holstein bull calves fed acidified milk replacer.
J Dairy Sci **70**(4): 888-891
- WOOTEN, E. W. (2004)
Science review: quantitative acid-base physiology using the Stewart model.
Crit Care **8**(6): 448-452

YOUANES, Y. D., HERDT, T. H. (1987)

Changes in small intestinal morphology and flora associated with decreased energy digestibility in calves with naturally occurring diarrhea.
Am J Vet Res **48**(4): 719-725

YOUNG, J. A., COOK, D. I., LINGARD, J. M., VAN LENNEP, E. W., WEGMAN, E. A. (2001)

Funktion des Magen-Darm-Trakts.
In: R. Klinke and S. Silbernagl (Hrsg.): Lehrbuch der Physiologie.
Stuttgart: Georg Thieme Verlag. **2.Auflage**: S. 404

ZHU, H., HART, C. A., SALES, D., ROBERTS, N. B. (2006)

Bacterial killing in gastric juice-effect of pH and pepsin on Escherichia coli and Helicobacter pylori.
J Med Microbiol **55**(Pt 9): 1265-70