

Editorial news and events

Conference Report*

The 53rd Annual Meeting of the Society of Nutrition Physiology of Germany was held at Goettingen, Germany, from March 2nd to 4th, 1999. (Editor: J.Pallauf, DLG Verlag, Frankfurt am Main, Vol. 8, 1999). The Proceedings of the Meeting contain 2 review papers, 115 abstracts and 1 communication from the Board for Nutrient Requirements (Ausschuss für Bedarfsnormen) of the Society of Nutrition Physiology. The abstracts were attributed to the following topics:

1. Nitrogen metabolism (18 papers)
2. Feed evaluation and analytical procedures (18 papers)
3. Digestion and metabolism (35 papers)
4. Macro and trace elements (7 papers)
5. Feed additives including NSP-degrading enzymes, antibiotics, micro-organisms and other substances (15 papers)
6. Vitamins (7 papers)
7. Fat metabolism (10 papers)
8. Undesirable feed ingredients (5 papers).

Papers were from German institutes of animal sciences mainly, and from other countries, i.e. Australia, Austria, Bolivia, Canada, Ethiopia, Hungary, Netherlands, PR China, Poland, Switzerland, Thailand, Turkey and United Kingdom.

In the invited paper "Nutrient flow across the liver in dairy cows" the author underlined the well known fact that significant metabolic conversions take place in the splanchnic tissues, especially in the liver. It can be calculated that a cow yielding 50 kg milk per day must synthesise 3.5- 4 kg glucose per day in the liver. Existing data on nutrient flow rates across the liver are sufficient to give an impression of the magnitude of the major nutrient exchanges, but not sufficient to construct a complete nutrient balance sheet for the liver in dairy cows. There is a lack of quantitative information about the hepatic exchanges of proteins, peptides, purins, pyrimidines, lipids, cholesterol, glycerol, pyruvate, acetoacetate and further

* The Proceedings of the 53rd Meeting of the Society of Nutrition Physiology (Vol. 8, 1999, 172 pp.) are available from the DLG-Verlag, Eschborner Landstrabe 122, D 60489 Frankfurt am Main, Germany. ISBN 3-7690-4091-0. Price 46.00 DM plus postage.

substances. It was concluded that more research in this area is needed to construct a reliable submodel of metabolism.

The second invited paper on "Calcium metabolism in ruminants – Physiological aspects and effects of anion rich diets" dealt with absorptive sites along the gastrointestinal tract, the transepithelial Ca transport in ruminants and the dietary cation-anion balance (DCAB) concept and prevention of milk fever were presented. The database to calculate the flow of Ca along the gastrointestinal tract of non lactating and lactating cow is very small. In *in vitro* experiments using Ussing chambers it has been demonstrated that Ca is actively absorbed across the rumen wall of sheep and goats. The Ca net flux rates depend on the presence of short chain fatty acids in the mucosal buffer solution, the active Ca transport could be increased in response to the addition of calcitriol to the serosal solutions. The post parturient hypocalcaemia in dairy cows is one of the most relevant diseases in early lactation. Its incidence may significantly be reduced by the adaptation to high anion diets in late pregnancy. More research is necessary to explain the physiological mechanisms which are involved.

The Proceedings close with a communication from the Board of Nutrient Requirements edited by M. Kirchgessner with the following title "Recommendations for protein requirements of calves". Based on the maintenance and the protein gain of growing calves protein requirements are calculated depending on body weight (50-150 kg) and daily weight gain (400-1.200 g per day) of calves.

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The next Meeting of the Society of Nutrition Physiology of Germany (the 54th one) will be held in Goettingen in March 6-8, 2000.