

Editorial News and Events

Conference Report

The Proceedings of the 6th Symposium on „Vitamins and Additives in Nutrition of Man and Animal” held in Jena, Germany, 24 to 25 September 1997, organized by the Institute of Nutrition and Environment (Editors: R. Schubert, G. Flachowsky, R. Bitsch and G. Jahreis – Friedrich Schiller University¹) contains 87 papers, of which 13 are reviews or broader introductions into chosen subjects presented during the Symposium.

Most of the presented papers deal with various nutritional and physiological effects of vitamins, enzymes, probiotics and antimicrobial feed additives.

Several papers are on vitamins in the nutrition of man and animals. Methods of assessing the vitamin status of organisms are critically discussed in an introductory paper. The value of the static and functional methods, and differences in sensitivity and specificity of these tests are considered.

Several papers present the effects of antioxidative properties of vitamin E, C and carotene. Their influence on health and, in particular, their probable preventive effect on cardiovascular and neoplastic diseases is discussed. The favourable effect of vitamin E on meat quality of pigs and poultry is presented, as well as its significant role in animal reproduction. Transfer of vitamin E from feed to food of animal origin is also broadly studied. The other vitamins presented are riboflavin and biotin.

Methods of determining antioxidative activity are reviewed and an ELISA biotin assay is presented. The question of whether the various vitamin preparations found on the market are nutrients, food additives or medicaments is discussed.

Attention is also focused on L-carnitine, a vitamin-like substance. A comprehensive review paper presents the role of carnitine in metabolism and the effects of its inclusion into feeds for animals. Other papers present studies on the effect of feed supplementation with carnitine on protein synthesis in poultry and pigs, as well as the influence of this compound on the blood of milking cows.

The effects of enzymes hydrolyzing non-starch polysaccharides, and the effects of their inclusion in feeds for laying hens, broilers, turkeys and pigs are presented in several papers. In particular, the influence of these enzymes on viscosity of chyme is emphasized.

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The efficiency of phytase in animal nutrition is reviewed and its action in the digestive tract of poultry is studied.

Antimicrobial feed additives are reviewed in terms of their advantages, disadvantages, and possible future perspectives of their use as additives. The effects of supplementing feeds for pigs and broilers using some antibiotics are presented.

Effects of feed supplementation with such probiotics as live yeast preparations or commercial brand-name preparations on poultry and ruminants are also discussed. The main subject of study is the influence of live yeast on rumen fermentation.

Other topics, such as the effect of plant phenols on health, use of a gamma-aminobutyric acid derivative as a feed additive, influence of management and season on vitamins and fatty acids in cow's milk are also included.

The book contains many interesting results and information. Most of the papers are in German, although there are short summaries in English.