ARCHIVES OF ANIMAL NUTRITION

Volume 65 Number 5 October 2011



CONTENTS

Articles	
Effect of maternally supplied n-3 and n-6 oils on the fatty acid composition and mononuclear immune cell distribution of lymphatic tissue from the gastrointestinal	
tract of suckling piglets	
Claudia Binter, Annabella Khol-Parisini, Wilhelm Gerner, Klaus Schäfer,	
Howard W. Hulan, Armin Saalmüller and Jürgen Zentek	341
Effects of dietary conjugated linoleic acids on lipid metabolism and antioxidant	
capacity in laying hens Xiaolong Qi, Shugeng Wu, Haijun Zhang, Hongyuan Yue, Shaohui Xu, Feng Ji	
and Guanghai Qi	354
Effect of copper on antioxidant ability and nutrient metabolism in broiler chickens	
stimulated by lipopolysaccharides	
Zhigang Song, Tong Zhao, Lei Liu, Hongchao Jiao and Hai Lin	366
Effects of maternal folic acid supplementation on morphology and	
apoptosis-related gene expression in jejunum of newborn intrauterine growth	
retarded piglets	376
Jingbo Liu, Daiwen Chen, Xiangbing Mao and Bing Yu	370
Influence of various amounts of fumaric acid on performance and parameters	
of the acid-base balance of growing bulls fed with grass or maize silage	
Nicole Remling, Sabrina Hachenberg, Ulrich Meyer, Martin Höltershinken,	207
Gerhard Flachowsky and Sven Dänicke	386
Investigations on the effect of forage source, grinding, and urea supplementation	٠
on ruminal fermentation and microbial protein flow in a semi-continuous rumen	
simulation system	400
Bastian Hildebrand, Jeannette Boguhn and Markus Rodehutscord	402