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Posters

Effect of (1→3),(1→6)-β-D-Glucan from *Saccharomyces cerevisiae* on Acute Phase Proteins in the Lactating Sow.

Lutz-Günther Fleischer, Gerhard Gerber, Heinz-Detlef Gremmels, Eberhard Lippert, Günter Westphal, Faculty of Processing Sciences and Center of Biotechnology, TU Berlin; Fibona Health Products GmbH Wiesbaden; Germany

- Aim:** - Study of the dynamics of acute phase proteins and other blood constituents in dependence on gestation number and litter size
- Study of relationships between these biological variables of sow and growth rate of piglets under the influence of (1→3),(1→6)-β-D-glucan

Methods: C-reactive protein and immunoglobulins in serum were determined by turbidimetry; haptoglobin by nephelometry; neopterin by a ELISA technique. Serum proteins were electrophoretically separated on cellulose-acetate-layer and analyzed by photometry.

Results: The number of gestations per sow correlates positively with total protein in blood serum, γ-globulin, Immunoglobulin A, neopterin and piglet growth rate, and negatively with C-reactive protein and haptoglobin. C-reactive protein and haptoglobin show a negative correlation with the daily growth rate of piglets; IgA, γ-globulin and neopterin correlate positively with piglets growth rate. Feeding of sows with Glucaferm® - (1→3),(1→6)-β-D-glucan prepared from cell walls of yeast - activates the immune defence especially of young sows. This was revealed by quenching the relationships between gestation number, acute phase proteins and other blood variables.

Conclusion: Significant relationships were found between acute phase proteins and components of the immune defence during lactation of sows and growth performance of piglets. These relations are modified by (1→3),(1→6)-β-D-glucan prepared from cell walls of yeast, especially in young sows.