

PROCEEDINGS

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**VITH CONGRESS OF THE
INTERNATIONAL SOCIETY FOR ANIMAL
CLINICAL BIOCHEMISTRY**

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**University of Guelph,
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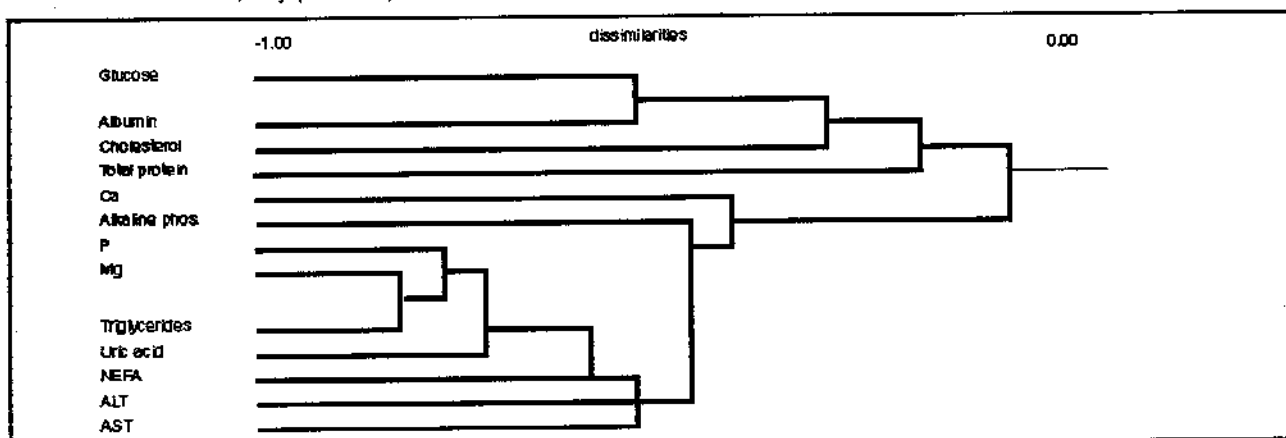
TOXICITY AND METABOLIC DISORDERS

5-1 Effect of Different Fibre Content of Diets on Metabolic Parameters of Growing Pheasants

M. Bagliacca, G. Paci, M. Marzoni, G. Biagi, G. Calzolari.
 Dept. Prod. Animali, Università di Pisa, Italy (Bagliacca, Paci, Marzoni), Ist. Clinica Medica Veterinaria, Univ. di Pisa, Italy (Biagi), Ministero. Risorse Agricole, Alimentari e Forestali uff. di Lucca, Italy (Calzolari).

Metabolites were monitored in 40 pheasants. Two diets, characterized by a different composition (M.E. 11.7 and 11.0 MJ/kg, crude fibre 6.2 and 12.2%) were fed to the birds during the growing-finisher period. A tree diagram based on Pearson correlation coeff. between parameters and a table (Av ± S.D.) showing the serum levels are reported.

Only the use of multivariate analysis allowed to differentiate diets while only glucose, albumin and P, singly analysed, significantly differed in relationship to diets. The use of multivariate models is consequently essential to perform metabolic profiles.



Hematic Parameters		Low Fibre Diet	High Fibre Diet	Males	Females	Age (b value)
Glucose	mmol/l	21.1 ± 2.85a	19.2 ± 3.81b	18.3 ± .77	19.2 ± 3.25**	+0.099**
Cholesterol	mmol/l	2.8 ± .41	2.6 ± .46	2.5 ± .50	2.6 ± .39	+0.008**
Triglycerides	mmol/l	.99 ± .43	.95 ± .49	1.1 ± .49	.96 ± .43	-0.015***
NEFA	µEq/l	374 ± 226	4445 ± 191	484 ± 231	445 ± 188	-5.17***
Uric acid	µmol/l	422 ± 265	498 ± 302	613 ± 303	498 ± 261	-7.48***
Total protein	g/l	38.1 ± 3.79	38.6 ± 5.24	38.4 ± 4.1	38.6 ± 5.10	+0.029ns
Albumin	µmol/l	195 ± 34a	181 ± 17b	178 ± 27	181 ± 26	+0.43**
ALT	mU/ml	147 ± 31	140 ± 35	142 ± 37	140 ± 30	-1.04***
AST	mU/ml	40 ± 14.1	43 ± 19.7	37 ± 15.0	43 ± 18.4	-0.36**
Alkaline Phosphatase	mmol/l	628 ± 148	668 ± 120	650 ± 154	668 ± 115	-2.87**
Ca	mmol/l	2.1 ± .20	2.0 ± .24	2.0 ± .20	2.0 ± .25	-0.004**
P	mmol/l	1.7 ± .68b	2.3 ± .83a	2.8 ± .73a	2.3 ± .83b	-0.020***
Mg	mEq/l	.75 ± .12	.71 ± .15	.75 ± .13	.71 ± .15	-0.004***

Means bearing different letters differ (p<.05); * indicate significant values