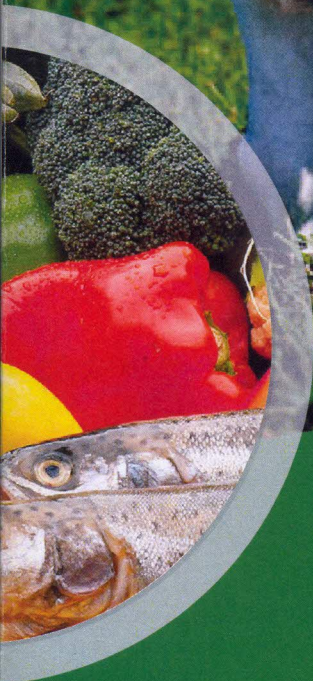
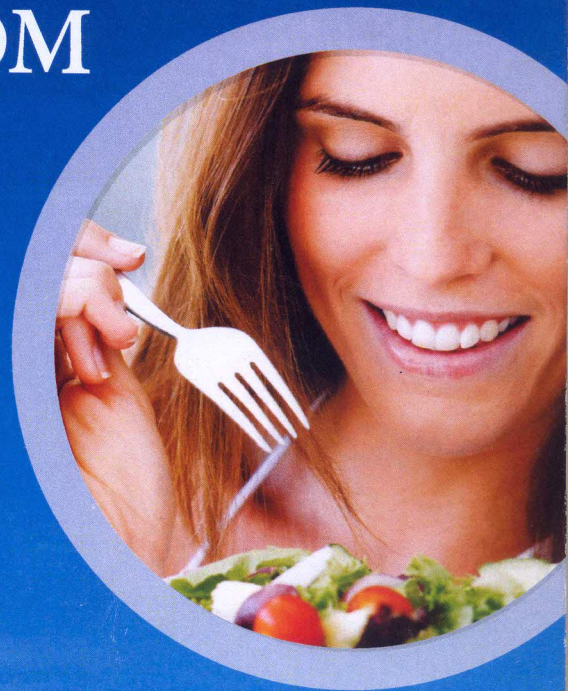


19TH-20TH FEBRUARY, MILAN, ITALY

HEALTHY FOOD FROM HEALTHY ANIMALS



FEED *for* HEALTH

FEED FOR HEALTH FINAL CONFERENCE, 2013

EUROPEAN
SCIENCE
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IN SCIENCE AND TECHNOLOGY



UNIVERSITÀ DEGLI STUDI DI MILANO
DIPARTIMENTO DI SCIENZE VETERINARIE
PER LA SALUTE, LA PRODUZIONE ANIMALE
E LA SICUREZZA ALIMENTARE

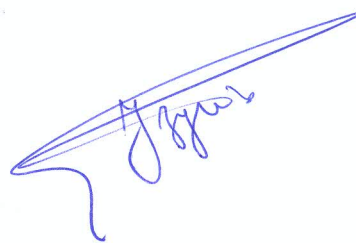


Book of Abstracts Final Feed for Health Conference, 19th-20th February, Milan, Italy

Edited by Claudia Paltanin, Matteo Ottoboni and Luciano Pinotti

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Organisational information

The FFH Final Conference 'Healthy Food from Healthy Animals' 2013 Scientific Committee

Luciano Pinotti

Department of Health, Animal Science and Food Safety, University of Milan, Italy, Coordinator Cost Action

Åshild Krogdahl

NVH, Norway

Ian Givens

Reading University, United Kingdom

Chris Knight

University of Copenhagen, Denmark

Joop Luten

Nofima, Norway

The FFH Final Conference 'Healthy Food from Healthy Animals' 2013 Organising University of Milan – Departement VESPA Committee

Luciano Pinotti, chair

Antonella Baldi

Vittorio Dell'Orto

Support The FFH Final Conference 'Healthy Food from Healthy Animals' 2013

Department of Health, Animal Science and Food Safety, University Milan, Italy

COST European Cooperation in Science and Technology, Belgium

University of Milan

Program of the Final Conference Feed For Health

19th February

08.30	Registration
09.00	Opening Conference L. Pinotti Welcome from Director V. Dell'Orto and Rector G. Vago
09.30	Introducing agenda L. Pinotti Premiere Video newsletter 20

Opening section- Future challenges - Chair: Prof. Å. Krogdahl

10.00 *Feed industry facing the challenge to ensure safe and healthy feed for food*
M. Eeckhout and A. Bouxin

10.30 *Potential of insects as food and feed in assuring food security*
A. van Huis

11.00 **Coffee break**

Session 1- Nutrition, health and welfare - Chair: Prof. C. Knight

11.30 1. *Management of physiological status for better immune function, health and performance of dairy cows.*
K.L. Ingvarstsen and K.M. Moyes

12.00 2. *Effects of feeding silage ensiled with magnesium chloride to dairy cows prior to calving*
C. Kronqvist, M. Jardstedt, R. Spörmndly and K. Holtenius

12.10 3. *The potential use of caprylic acid in broiler chickens: effect on counts of salmonellas in gastrointestinal contents of chickens experimentally infected with Salmonella Enteritidis*
E. Skřivanová, G. Dlouhá, M. Marounek, S. Prazáková

12.20 4. *Combined probiotic preparation improved performance parameters of piglets*
E. Delia, F. Shytaj

12.30 5. *Influence of dietary nucleotides in postweaning-challenged piglets on intestinal proinflammatory cytokines*
Caputo J. M., Ferroni M., Comi M., Agazzi A., Dell'Orto V., Bontempo V., Savoini G.

12.40 6. *The influence of feed, milk and indoor air quality on the welfare scoring of dairy cattle farm* – M. Radeski, A. Janevski, M. Ratkova, L. Angelovski, R.N. Chrcheva, R. Uzunov, L. Pendovski, V. Ilieski

13.00 **Lunch**

Session 2- Feed safety - Chair: Dr. L.W.D. van Raamsdonk

14.00 1. *Feed for health - a risk based approach Issues on feedsafety*
L.W.D. van Raamsdonk, L.A.P. Hoogenboom, S.M. van Ruth, P. Adamse, P. Bikker, H.J.P. Marvin, A.W. Jongbloed, E. Kok, R.G. Herbes, J. de Jong

14.15 2. *Mycotoxins a largely ignored global health disease*
I.P. Oswald



14.45	3. <i>Zearalenone effects on oxidative stress and inflammation in weanling piglets</i> D. Marin, G. Pistol, I. Neagoe and I.Taranu
14.55	4. <i>Image analysis for MBM characterization: preliminary results of comparison between bovine and poultry lacunae</i> Amato G., Marchis D., Brusa B., Pinotti L., Paltanin C., Ottoboni M., Abete M.C.
Session 3- Consumer perception of animal products - Chair: Dr. P. Honkanen and Prof. J. Luten	
15.10	1. <i>Market perspectives for ethical meat product differentiation</i> A. Krystallis
15.40	2. <i>Seafood products in Norway are 'packed' with information, but what do consumers use of it all?</i> T. Altintzoglou and B.H. Nøstvold
15.50	3. <i>On site quality control of pork meat by using a handheld NIRS</i> B. de la Roza-Delgado , A. Soldado , A.F. Oliveira , A. Martínez-Fernández and A. Argamenteoría
16.00	4. <i>Near Infrared Spectroscopy and IC technologies to increase consumer knowledge about livestock production systems: The free range Iberian pig system</i> A. Garrido, E. Zamora-Rojas, E. de Pedro, J.E. Guerrero and D.C. Pérez-Marín
16.10	5. <i>Consumer preference and sensory evaluation of two types of oysters.</i> J. van Houcke, T. Altintzoglou, M. Stieger and J. Luten
16.20	Coffee break
Session 4- COST at UNIMI - Chair: Prof. A. Baldi	
16.50	1. COST Tools Prof. Baldi
17.00	2. <i>FA1201: Epigenetics and periconception environment as an epigenomic lever for optimizing food production and health in livestock</i> T.A.L. Brevini and F. Gandolfi
17.10	3. <i>FA1002: Proteomics in Farm Animals" initiative</i> – F. Ceciliani, A.M. de Almeida, D. Eckersall
17.20	4. <i>FA0802: COST Action Feed for Health in figures</i> L. Pinotti
17.45	Networking Cocktail

20th February

Session 5- Dietary and optimisation - Chair Prof. L. Pinotti

- | | |
|-------|--|
| 9.00 | 1. <i>Plant feed ingredients in fish diets may compromise gut function and fish health</i>
Å. Krogdahl and A. M. Bakke |
| 9.30 | 2. <i>Inclusion of GM Maize into diet of animals – Pros and Cons</i>
Chrencová M., Chrastinová A., Laukovaá A., Poláčiková M., Formelová Z., Strompfová V., Ondruòka A., Rafay J., Plachá I., Szabóovár R., Pogány Simonová, M. |
| 9.40 | 3. <i>Choline in hay-based dairy cow diets: effects on milk production and metabolic health</i>
Pinotti L., Agazzi A., Ottoboni M., Baldi A., Dell'Orto V., Savoini G. |
| 9.50 | 4. <i>Influence of pelleting process on protein changes in diets based on corn and sunflower meal</i>
R. Čolović, A. Torbica, J. Tomić, D. Ivanov, Đ. Vukmirović, J. Lević, S. Sredanović |
| 10.00 | 5. <i>Lipid hydrolysis during processing and storage of commercial feed</i>
A. Tres, R. Codony, E. Vilarrasa, R. Buonfiglio, J. Zoldan, N. Magrinyà, R. Bou and F. Guardiola |
| 10.10 | 6. <i>Influence of addition of organic and inorganic selenium to porcine diet on quality attributes of raw and cooked pork</i>
A. Miezieliene, G. Alencikiene, R.Gruzauskas |

10.20 Coffee break

Session 6- Feed, food & health – Chair: Prof. I.D. Givens

- | | |
|-------|--|
| 10.50 | 1. <i>Food from plants versus food from animals: which is most sustainable? –</i>
N. Scollan |
| 11.20 | 2. <i>Does Dairy Food Intake Predict Arterial Stiffness and Blood Pressure in Men? Evidence from the Caerphilly Prospective Study</i>
K.M. Livingstone, J.A. Lovegrove, J.R. Cockcroft, P.C. Elwood, J.E. Pickering and D.I. Givens |
| 11.35 | 3. <i>Relationship between ruminant trans fatty acids intake levels and blood lipids in healthy subjects: results from a systematic review of randomized clinical trials</i>
C. Gayet-Boyer, F. Tenenhaus-Aziza, C. Prunet, C. Marmonier, C. Malpuech-Brugère, B. Lamarche and J.M. Chardigny |
| 11.45 | 4. <i>Dose-response efficacy and long-term stability of the hypocholesterolemic effect of amidated pectin in female rats</i>
M. Marounek, Z. Volek, D. Dušková, J. Tůma* and T.Taubner* |
| 11.55 | 5. <i>Milk fatty acids to diagnose rumen acidosis and liver ketosis in dairy cattle - current state of the art</i>
V. Fievez |



12.10 Closing conference LP

12.15 **Lunch**

13.15 MC-meeting

14.15 End MC Meeting

Validation of rapid ELISA method for determination of ractopamine in pig feed

R. Uzunov, Z. Hajrulai-Musliu, P. Sekulovski, V. Ilieski, L. Pendovski, L. Angelovski, M. Radeski and V. Stojkovski

Faculty of Veterinary Medicine, Lazar Pop-Trajkov 5/7, 1000 Skopje, R. Macedonia

Introduction. Ractopamine hydrochloride is a phenethanolamine member of the family of β -adrenergic agonists. The advantages of feeding animals with ractopamine have been reported to include the promotion of repartitioning of fat into muscles, improving feed efficiency, saving on feed, improve carcass composition, decreasing the number of days to market when higher doses are administered and gaining higher economic benefit to producers. The use of ractopamin in food producing animals is prohibited in most countries of the EU. For this reason in our study validation of rapid ELISA method for determination of ractopamine in pig feed is described. The validation process was carried out according to Commission Decision 2002/657/EC criteria.

Methods. In this study ELISA Ractopamine test kit (R-Biopharm AG, Darmstadt, Germany) was validated. For determination of limit of detection (LOD) we used 20 blank pig feed samples. The method recovery was determined at three levels by spiking on pig feed samples (2, 5 and 10 ng/ml). Detection capabilities ($CC\beta$) was evaluated by analyzing 20 spiked pig feed samples lover than MRPL level. For determination of repeatability, the same steps were repeated on two occasions in the same analytical conditions. Precision was expressed as the CV (Coefficient of variation) (%) of the calculated standards and sample concentrations.

Results. Detection limit for ractopamine was found to be 1.20 ng/ml. For the three target concentration the recovery in pig feed samples was 106.2%, 80.08% and 84.4% respectively. Repeatability was 94.6%, 83.04% and 86.01% respectively. The $CC\beta$ for ractopamine in pig feed was 8.40 ng/ml. The precision (CV%) in ractopamine standards ranged from 0.2% to 3.0%. The precision (CV %) in spiked pig feed ranged from 1.3% to 4.4%.

Conclusion. ELISA is simple, rapid and cost-effective method. Because of good recovery and precision, and satisfactory $CC\beta$, it is applicable in official control laboratories as a rapid screening method for determination of ractopamine in pig feed. But in the case when the target analyte is clearly identified above $CC\beta$ the sample is considered as non-compliant and we must confirm the results with GC/MS, LC/MS or another confirmatory method.

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