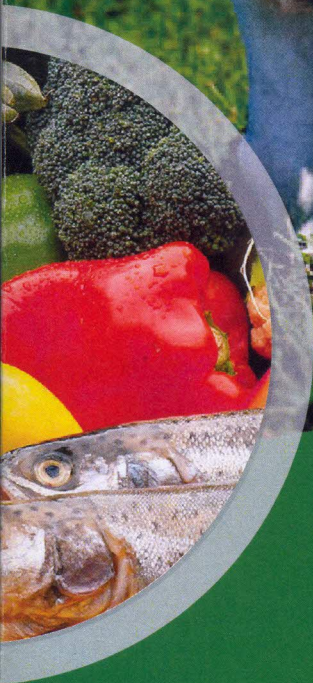
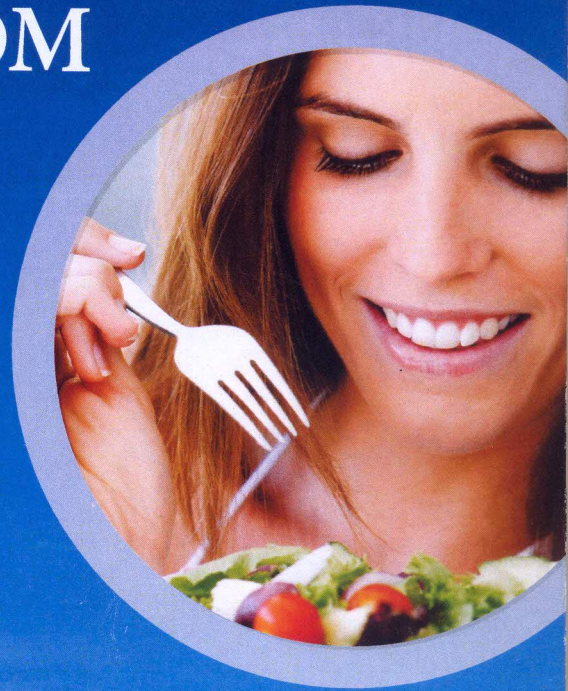


19TH-20TH FEBRUARY, MILAN, ITALY

HEALTHY FOOD FROM HEALTHY ANIMALS



FEED *for* HEALTH

FEED FOR HEALTH FINAL CONFERENCE, 2013

EUROPEAN
SCIENCE
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EUROPEAN COOPERATION
IN SCIENCE AND TECHNOLOGY



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

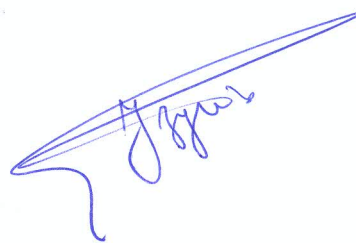


Book of Abstracts Final Feed for Health Conference, 19th-20th February, Milan, Italy

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. Miezeliene, 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

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

Faculty of Veterinary Medicine, Skopje, Macedonia

Introduction. This study analyzes the influence of feed, milk and air quality on the welfare of dairy cattle and their impact on the scoring system defined in the Assessment protocol for dairy cattle from the Welfare Quality® Project. Specifically, the connection between these three factors and the scores of the welfare principles, such as: quality of feed and Good Feeding; milk quality and Good Housing and Good Health principles; and microbiological profile of the air and the Good Housing score.

Materials and methods. This study involves 2 dairy cattle farms (Farm A and Farm B, 10 and 36 dairy cows) with tie stall system. The samples from hay, silage and concentrate feed were microbiologically and quality analyzed. The indoor air Total Viable Count (TVC) was calculated and the present bacteria and fungi were identified. Milk samples from 26 and 6 cows for SCC and CFU/ml were assessed for presence of clinical and subclinical mastitis.

Results. Both farms have "Acceptable" level of Animal Welfare with the following scores: Farm A - 25; 19; 40 and 38; Farm B - 29; 11; 51 and 30 for the Good Feeding; Good Housing; Good Health and Appropriate Behaviour principles. The feed parameters are within the approved range for feed safety and quality regulations, except the presence of 10 CFU/g sulphide-reductive clostridia in concentrate feed from Farm B. Microbiological air analysis found 15.6×10^3 and 43×10^3 CFU/m³ bacteria, and 1.2×10^3 and 13.5×10^3 CFU/m³ fungi, for Farm A and B. Milk analysis demonstrated 100% presence of subclinical mastitis in Farm A, while in Farm B 54% were cows with clinical and subclinical mastitis.

Discussion. The differences in the feed quality and safety among the farms had no influence on the Good Feeding score. However, poor quality and small amount of feed contributed for low scores of both farms for this principle. Comparison of the Good Housing scores and CFU/m³ in the stall air presented differences. Both farms have very low Good Housing scores, determined as "not classified", thus the high number of TVC is an indicator for poor hygiene conditions and housing. The farms have high percentage of mastitis, but since other health conditions are also influencing the Good Health score, there isn't significant decrease (second level, out of four). The milk quality and udder condition have high influence on the Good Housing score as a result of low scores for cleanliness which is a potential hazard for mastitis occurrence.

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