

Reducing antibiotic use in pigs – turning change into opportunity

Phileo Lesaffre Animal Care recently hosted a highly successful symposium dedicated to pigs and poultry in Rome, Italy. Nearly 300 participants from 45 countries attended the event, which focused on the central theme of reducing antibiotic use and embracing the opportunities presented by a global market that is evolving rapidly on this topical issue.

In the heart of Rome, the eternal city, the first afternoon's plenary session helped to set the scene on the world stage: "Our challenge is to produce more with less, and humans are at the heart of our concerns," clarified Frédérique Clusel, General Manager of Phileo Lesaffre Animal Care, opening the symposium.

A global concern

The Rome Symposium yielded the crucial observation that there is increasing global awareness of the importance of reducing antibiotic use, and the 20 or so international speakers who addressed the event over the two days demonstrated this clearly by their presentations on economic, technical and scientific topics.

On the economic front, the first afternoon's plenary session gave the floor to the Brazilian consultant Osler Desouzart, who emphasised the importance of Asia, and China in particular.

"Asia will account for more than half of the increase in global meat production expected by 2026, with China as the driving force," he said.

According to Desouzart, food animal production will face a global shortage of land and water in the future.

"Food safety is a growing concern for the Chinese authorities, who are currently introducing a system to monitor the use of antibiotics," reported Chinese consultant Dr Rongsheng Qiu in a later contribution.

According to Dr Qiu, the China Consumers Association has a strong voice in the scientific debate, and farming professionals are increasingly turning to alternatives to



Members of the Phileo Lesaffre Animal Care team at the Symposium in Rome, Italy.

antibiotics, especially enzymes, an expanding market in China.

This theme was continued later by American researcher Shawn Bearson, who described the efforts undertaken by the USDA since January 2017 to develop alternatives to antibiotics which promote animals' immune response and human health. She also stressed the importance of pro- and prebiotics.

A corporate reality

The Rome Symposium also gave a voice to several companies in the livestock industry and distribution sector for which reducing antibiotic use is an everyday reality.

"Italy is the third largest consumer of antibiotics for farm animals in Europe, and last May Coop Italia started selling its first products from farms wishing to reduce or even eliminate antibiotic use," commented Chiara Faenza, Sustainability and Innovation Manager at Coop Italia, a leading Italian distribution group representing nearly 19% of the supermarket and hypermarket sector.

"We have implemented a strategic action plan to manage gut health at weaning in piglets born to prolific sows," explained Carlo Lasagna of Italian agrifood group Martini, which operates in multiple sectors.

These comments were echoed in the swine session by Mathieu Gloaguen, who is responsible for the Cooperl experimental station.

"Training farmers and veterinarians, and the quest for alternative

solutions which strengthen animal immunity, are the drivers of a long-term strategy that should be supported by all players," clarified Gloaguen.

The Cooperl group currently produces 1.7 million swine without antibiotics and has been pursuing an antibiotic reduction strategy for the past two years.

The promise of science

Science was also at the heart of the Rome Symposium, both in the plenary sessions and in the sessions devoted to swine. The latter were simultaneously interpreted into six languages (English, Italian, Spanish, Mandarin, Russian and French).

"We are only just beginning to learn about the gut microbiota, which is deeply and permanently affected by the use of antibiotics," explained Professor Jan Suchodolski of the USA.

In a very clear and detailed contribution, Professor Elizabeth Santin of the Federal University of Paraná, Brazil, stressed the importance and difficulty of using earlier indicators of digestive health than macroscopic lesions to monitor digestive health in livestock on a scale suited to the field. This is crucial to better assess gut health in swine and develop a preventive approach, leading to reduced antibiotic use.

The importance of fibre and improving its digestibility was another strong theme of the swine session.

"Fibre improves gut health by pro-

ducing volatile fatty acids," explained Gilles Langeoire, a French consultant in swine nutrition. He added that "a better understanding of the chemical composition of fibre and its effect on the digestive process in the growing animal would allow the use of higher-fibre rations."

Probiotic yeasts can also improve gut health in swine by improving fibre digestion, as Tadele Kiros Gebreyohannes, Swine R&D Manager with Phileo Lesaffre Animal Care, Canada, explained.

"Daily supplementation of swine with the reference probiotic yeast Actisaf promotes fermentation in the large intestine, leading to an increase in the energy value of feed ingredients and improved animal performance," said Dr Kiros Gebreyohannes, who added that Actisaf therefore enables less expensive and less energy-dense ingredients to be used in swine diets.

This theme was continued by Dr Jimmie Corley, Swine and Poultry Manager for Phileo Lesaffre Animal Care, USA, who ended the swine session with a presentation on pro-, pre- and paraprobiotic solutions designed to safeguard gut health while improving animal performance.

These include the reference live yeast Actisaf which has several beneficial effects, such as promoting the development of favourable intestinal flora in the piglet, reducing coliform bacteria in the gut and improving the energy value of rations. ■