

Dr Vytenis Andriukaitis  
Member of the European Commission  
European Commission  
Rue le la Loi, 200  
1049 Brussels

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## **Role and contribution of Animal Nutrition to the fight against Antimicrobial Resistance**

Dear Commissioner,

FEFAC, representing the EU compound feed industry, would like herewith draw your attention to the importance of promoting safe, high quality and nutritionally optimised animal feed as a key area of attention in the development of the EU One-Health Action Plan to support Member States in the fight against Antimicrobial Resistance (AMR). For this reason, with further elaboration below, **FEFAC is firmly convinced that the animal feed sector must be represented in the “One-Health AMR network” that you announced today.**

Safe and nutritionally balanced feed is indeed not only a prerequisite to the health and wellbeing of animals, but also a means to further enhance the overall animal health status through specific feeding strategies, feed composition, feed formulations or feed processing. We are convinced that, for the three proposed pillars of the future One-Health Action Plan, action points related to animal nutrition are appropriate. This could take shape through a recommendation to Member States to include a feed chapter in their national action plans to reduce AMR, through public research programmes fostering innovative nutritional solutions and by the sharing of good animal feeding practices at global level.

We would like to herewith provide you with some elements of our vision and practical contribution to combat AMR, which could be reflected and further amplified through the One-Health Action Plan.

### **1. Promotion of nutritionally well-balanced feed as a prerequisite to maintain the health status of animals**

Nutrition, including drinking water, has an important impact on individual animal health and performance. The amount and quality of water and feed provided and, in particular, their nutritional balance and composition, should be adequate to meet the nutritional requirements corresponding to species, sex and physiological stage.

Deficiencies in certain nutrients can translate into pathologies and immune-deficiencies, potentially requiring treatment. On the other hand, excess of certain nutrients may also lead to pathologies when for example the body is not able to regulate through homeostasis the excessive presence of certain vitamins or trace-elements in the diets. In addition, ratios between certain nutrients (e.g. macro-minerals) also impact on the health status of animals.

The gap between deficiency and excess is sometimes very narrow and if nowadays, compound feed manufacturers are able to deliver nutritionally optimised feed at the right moment to the right animal, this is thanks to decades of research and innovation. **It is in our opinion of primary importance that farmers, whatever the production system they exercise (including organic farming), are encouraged to make use of such feed and can get expert advice on how to make best use of such solutions.**

Some examples of potential action points could be:

- To make sure that feeding strategies and animal nutrition are part of any advisory or training programme for livestock farmers developed by national authorities in collaboration with feed industry experts as part of their national action plans;
- To stimulate the development of incentive systems for livestock farmers to implement optimised feeding strategies that help to reduce the need for antibiotics;
- To evaluate the suitability of restrictions imposed on feed composition under certain marketing standards, such as organic farming, against the objective of reducing the need for antibiotics;
- To facilitate communication to farmers on the added value of certain feeding strategies or composition with regards to the health status of animals; this means among others more flexibility left to operators in feed claims.

## **2. Fostering research and innovation to enhance gut health and microbial diversity through specific strategies, formulations, ingredients and/or processes**

The interaction of feed with the gut microbiota is a key factor for animal health. Already today, a number of publications demonstrate that the composition, formulation and processing of the feed have an impact on the gut microbiota and therefore can enhance the ability of the animal to control pathogens in the gut:

- It has been shown that moderate amounts of fiber in poultry feed improves enzyme production and nutrient digestibility. These effects result in improved growth and animal health, while the potential benefits depend to a great extent on the physicochemical characteristics of the fibre source.
- Likewise, specific products like organic acids, probiotics, prebiotics and trace-elements like copper have been proved to exert a positive effect on the intestinal microflora and some of them have been granted a specific authorisation as feed additive for this very function.
- The feed processing, in particular the particle size, has an impact on gut microflora and the rough grinding of feed is known as a way to control the multiplication of Salmonella in the gut, via the competitive microbial exclusion mechanism.

All these elements must be integrated in any feeding strategy aiming at enhancing animal health & immunological status, especially for young animals (piglets, chicken). Nevertheless, a lot more research involving innovative techniques is still needed to better understand the mechanisms at stake and therefore the ability to optimise these interactions to enhance the immune system of animals and therefore their resistance to diseases requires further scientific investigations. **This must be encouraged via the EU Horizon 2020 programme<sup>1</sup> and national research programmes.**

It is also extremely important that the legislative framework supports the practical use of innovative nutritional approaches as alternatives to antibiotics. In this sense, we do welcome your initiative to include the revision of the feed additives legislation in the EU Commission REFIT programme and consider this as a key action item that the One-Health action plan should emphasise.

## **3. Disseminating EU expertise globally**

We strongly welcome the present global antibiotic awareness week, which marks an important step to foster further engagement from all stakeholders and authorities to take concrete action following the commitment of governments in different instances (UN, OIE, WHO, Codex Alimentarius) to address as a matter of priority the critical

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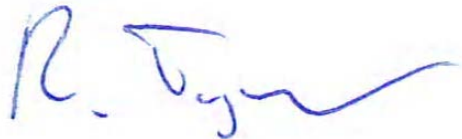
<sup>1</sup> See [Strategic Research and Innovation Agenda for feed for food producing animals](#) (EUFETEC) and [White paper on Research & innovation for a sustainable livestock sector in Europe](#) (Animal Task Force)

question of resistance to antibiotics. The EU feed industry, via its international federation IFIF, has been invited by FAO to provide its input in the CODEX Ad Hoc Intergovernmental Task Force on Antimicrobial Resistance (TFAMR). FEFAC believes that animal nutrition is also a key element to be integrated in the CODEX Code of practice to minimize and contain antimicrobial resistance.

We do believe that the EU Commission One-Health action plan provides a unique opportunity to remind both decision makers and chain partners of the importance of good animal feeding practices and of creating the adequate legal and economic framework to enable farmers to make use of the existing and future know-how in terms of animal nutrition. Further elements are available in our Vision 2030 available on our [website](#).

We trust that our contribution will receive a favourable echo and will be granted the level of emphasis in the upcoming EU Commission One-Health Action Plan that it deserves. We hope that, with your strong support, we will be able to further develop this in the framework of the One-Health AMR network.

Yours sincerely



Ruud Tijssens  
President

Cc: Mr Arūnas Ribokas (Member of Cabinet), Mr Xavier Prats-Monné (Director General - DG SANTE), Mr Ladislav Miko (Deputy Director General - DG SANTE), Mrs Sabine Jülicher (Director - DG SANTE), Mr Bernhard van Goethem (Director – DG SANTE), Mr John Bell (Director – DG Research), Mr Stefano Soro (Head of Unit – DG SANTE)