

# Reducing the need for antibiotics by means of animal nutrition

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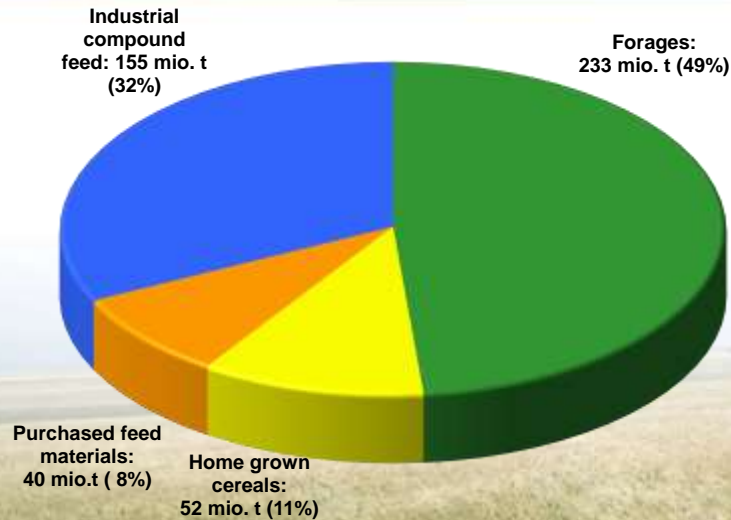
**10 November 2017**

## FEFAC in a nutshell

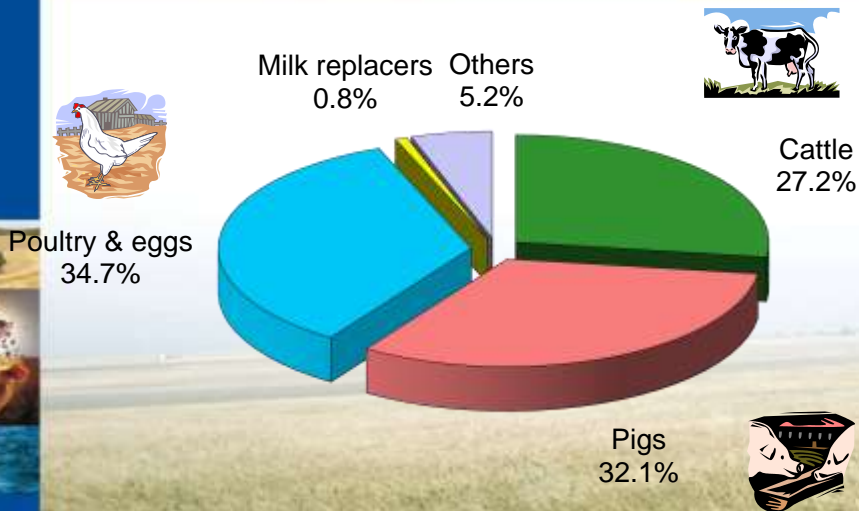
- Created in 1959
- Represents industrial compound feed and premixtures manufacturers
- 33 members
  - 24 Member Associations from 23 EU Member States
  - 2 Observer Members (Russia, Serbia)
  - 7 Associate Members (Turkey, Switzerland, Norway (3) EMFEMA, EFFPA)



## EU-28 Livestock sourcing in feedingstuffs – 480 mio. t in 2016



## Industrial compound feed production in the EU-28 in 2015 = 155 mio. t



## THE FEFAC 2030 Animal Feed Industry Vision

Feed Safety Management

Animal Nutrition

Sustainability

### FEED INDUSTRY ANIMAL FOOD CHAIN SOLUTIONS

**Feed safety management capacity building**

**Preservation of animal health to reduce need for antibiotics**

**Accommodate animal welfare concerns**

**Facilitate responsible sourcing**

**Increasing nutrient efficiency**

**Develop new resource efficiency indicators**

**Risk management optimisation along the feed chain**

**Co-operation between control authorities & industry operators**

**Improve the quality & nutritional value of food products**

**Measure the environmental performance of feed production**

28 September 2017

Feedadditives2017

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## FEFAC VISION ON ANIMAL NUTRITION

A multifunctional science, delivering solutions to a sustainable livestock<sup>1</sup> sector

Animal Nutrition is now much more than just increasing **animals' performance**; it is also how to keep them **healthy and feeling well** and how to minimise their **impact on the environment**. It is also how to make them deliver the animal products that consumers **want**. In short, a compound feed is much more than the sum of its ingredients. Investing in research on Animal Nutrition is essential to help EU livestock farmers preserving the sustainability and resilience of animal husbandry.

## EFSA-EMA opinion on AMR (January 2017)

- Animal nutrition is a key **prevention** tool of AMR
- Importance of nutritional balance and management of diet transitions (focus on piglets)
- Use of highly digestible protein sources, with proper balance in amino acids
- Feed additives such as organic acids or probiotics

## Maintaining animals healthy to reduce the **need** for medical treatment

### Farm Hygiene Management

Animal  
Nutrition

Veterinary

Genetics



# Only 37% of Europeans are aware of EU ban on Antibiotics as Growth Promoters

Source: Special Eurobarometer 445 – Report  
Antimicrobial Resistance, June 2016

## 01 January 1999

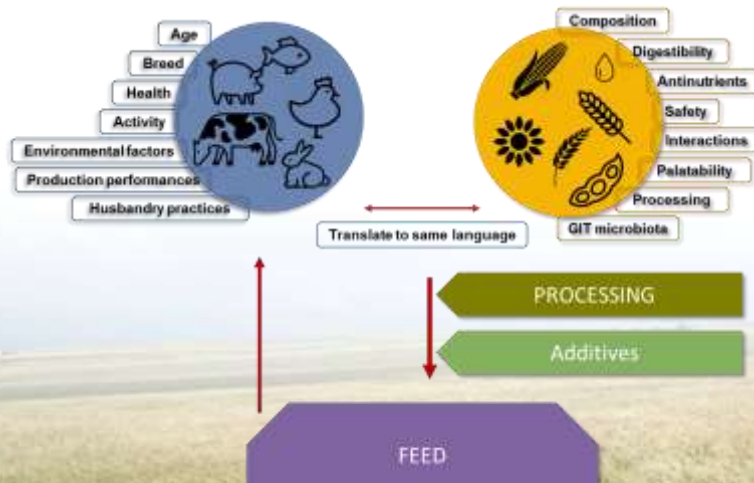
Tylosin, Spiramycin,  
Virginiamycin, Zinc-  
Bacitracin

## 01 January 2006

Avilamycin,  
Flavophospholipol,  
Salinomycin, Monensin



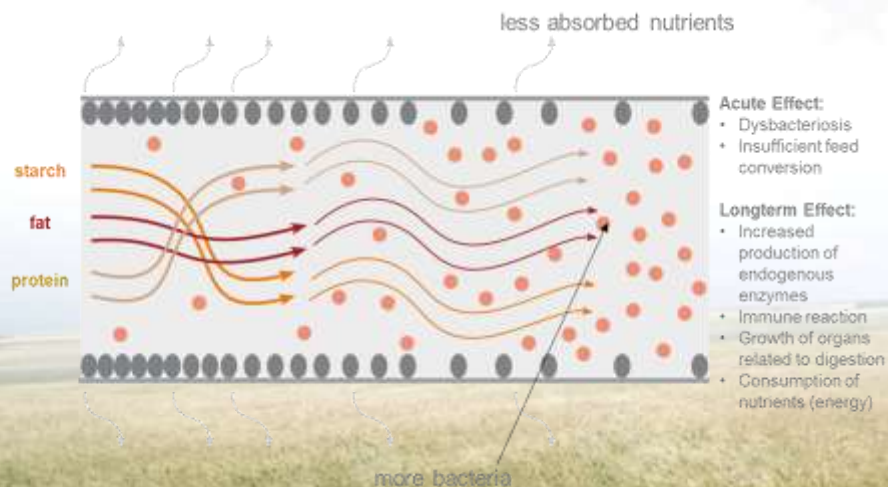
# Animal feed industry – the link between ingredients and nutrition



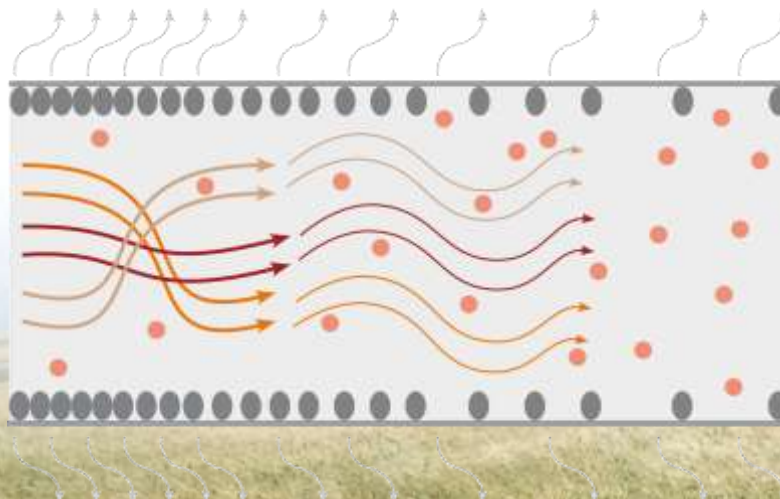
## The role of Animal nutrition & Feed Industry in animal health

- Feed industry is not the driver of using medications
- It is primarily about farmer's needs and vet's expertise
- We focus on prevention – keeping animals healthy
- It is a service for our customers to provide therapy via feed if needed
- However, we have the sound and safe way to deliver medications via feed under very strict control

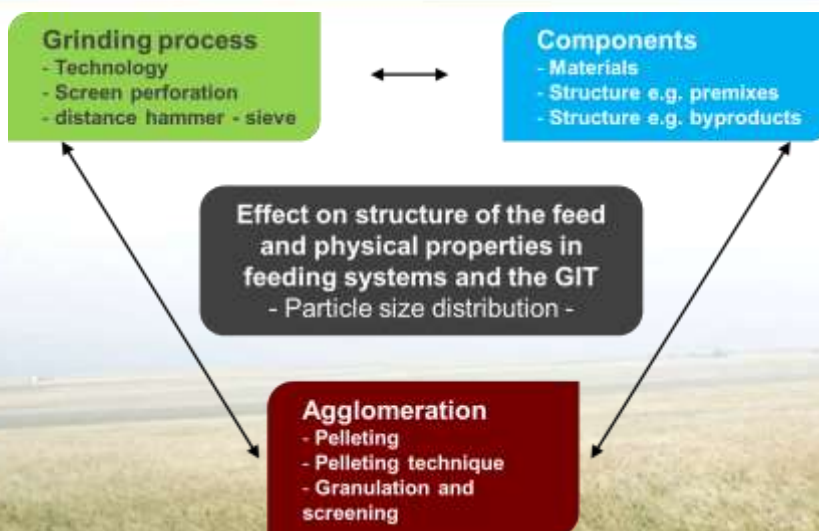
## Incomplete digestion >> higher amount of nutritive substances for bacteria in caecum / colon



## Optimal digestion rate >> leads reduced amount of nutritive substances for bacteria



## Feed processing technology

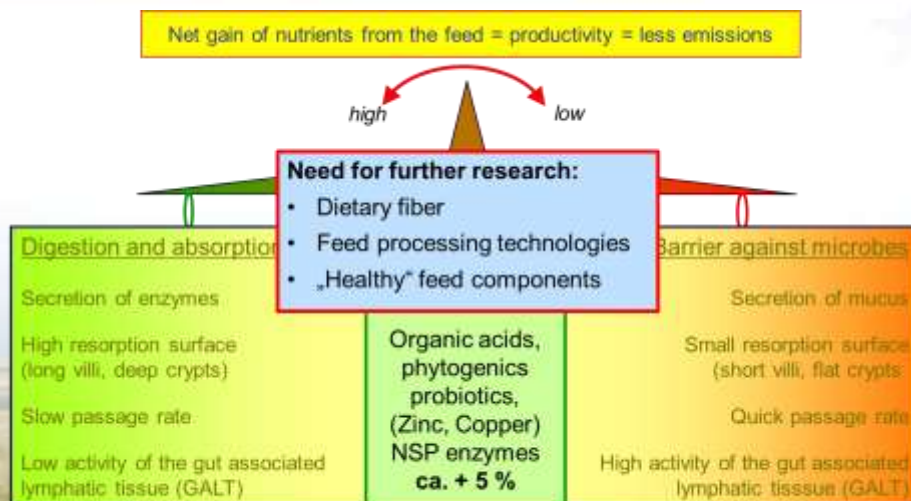


## Animal nutrition – additives / feed materials

Groups of additives / feed materials often used to **balance** microflora in order to have a positive influence on gut stability & intestinal health :

- Enzymes
- Trace-elements
- Probiotics
- Prebiotics
- Organic acids (and their salts)
- Essential oils
- Chelated microminerals
- Secondary plant compounds (standardized combination of extracts from e.g. essential oils and other plant parts)

## Feed additives stabilizing gut functionality & health





## Needs for further research

- Higher nutrient use efficiency – first monitoring then improving
- Focus on Amino Acid digestibility
- Best practice of buying/selling/providing nutrients instead of ingredients
- Models which will optimize use of nutrients in best possible way – balance between requirements and raw material content
- Shift from static toward dynamic nutritional models
- Understanding and quantifying interactions of various nutritional factors in the gut and measuring the impact on immunity and health.

## Capitalize on the animal nutrition contribution

- Feed manufacturers have a strategic position to share/disseminate best practices – suggest to be part of any national AMR action plan
- EU legal framework needs to encourage innovation

## Putting things into perspective

- Feed solutions are not alternatives to antibiotics – they are complementary health and welfare management tools
- Antibiotics remain vital for medical treatment of humans and animals – prohibiting access endangers health and welfare and can impact food safety and security
- Feed solutions contribute mainly on farms with good hygiene- and welfare-management

**Thank you for your attention**