



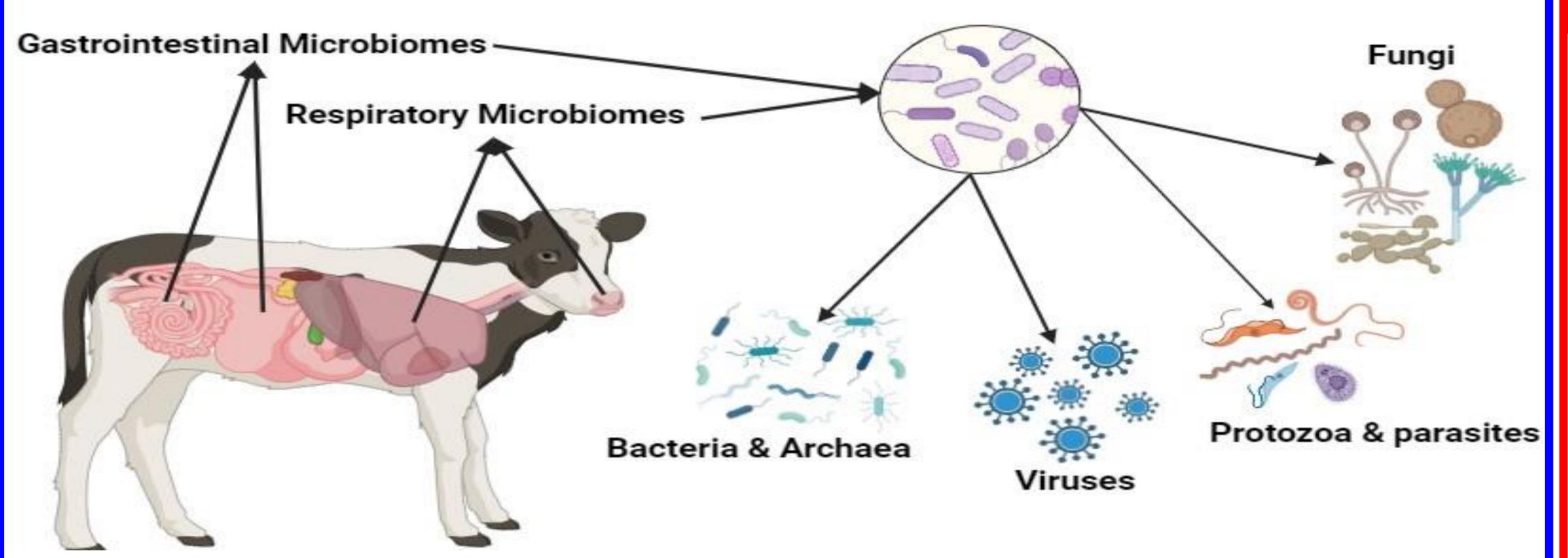
## Ruminant Horizon a project aims to determine how microbial populations, residing in the gut and respiratory tracts and other locations in cattle, affect performance, health, welfare & the environment

## What is a 'microbiome'

# A community of microorganisms in a particular environment i.e. colon or lungs

# **Microbiomes important to calf health**

**Healthy Microbiome** Microbes live in balance with each other & the host



# **Calf Health and the Microbiome**

Europe funded research

## Factors affecting the microbiome



Exposure to pathogens



Transport

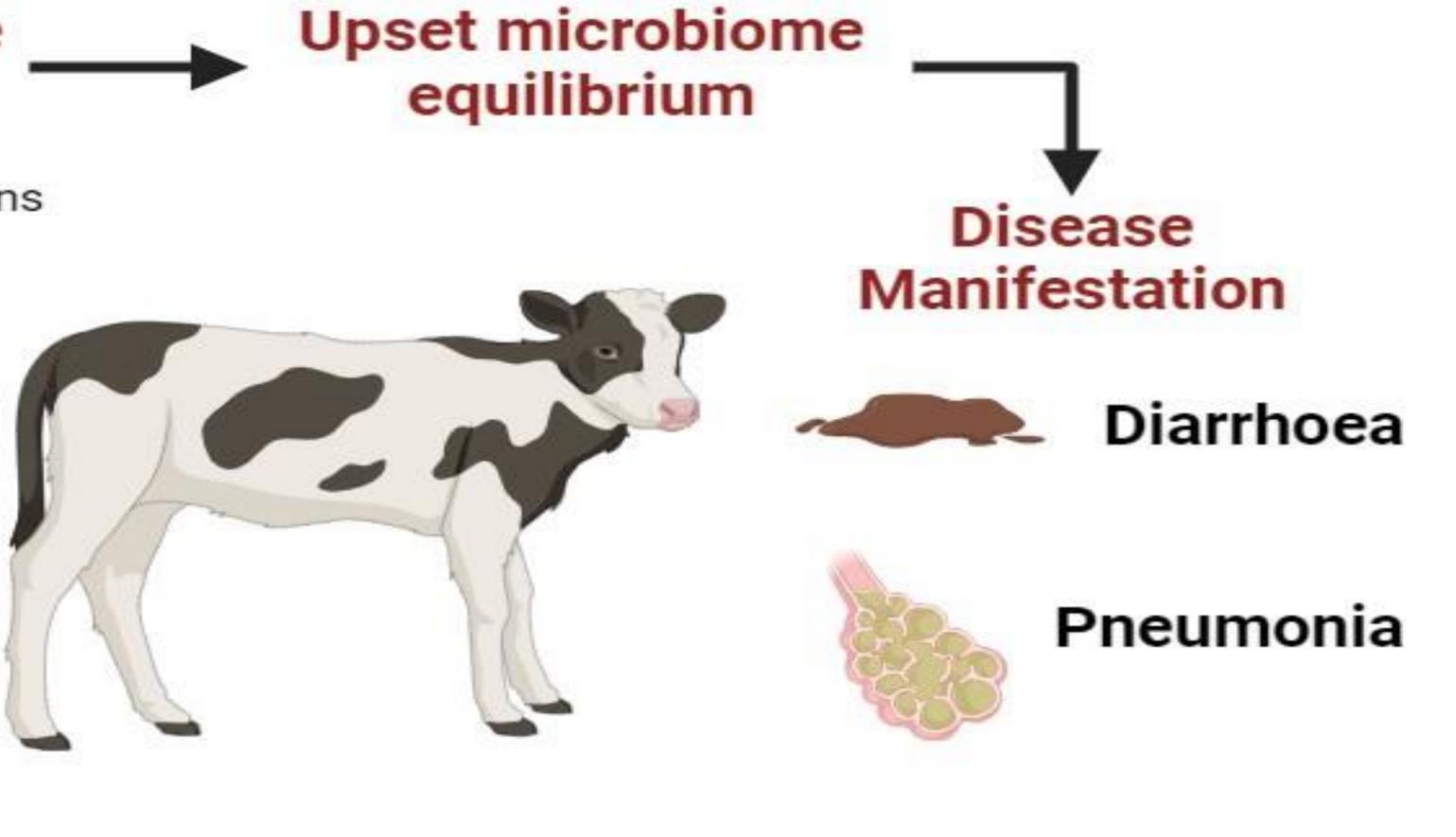


Calf handling & management



Diet & nutrition





# Take home messages

Microbiomes, established in the first weeks of life, are influenced by both genetics and environment

- Diverse and stable microbiomes are essential for long-term animal health and well-being
- Microbiomes play a significant role in both respiratory and diarrhoeal disease



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