

# Introduction to the plenary session

## AVANT – ALTERNATIVES TO VETERINARY ANTIBIOTICS

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KØBENHAVNS UNIVERSITET



AVANT



The aim of the workshop organized by the EU Innovation Action [AVANT](#) is to facilitate dialogue and consensus on specific themes pertinent to the future of antibiotic-free pork production. The involvement of significant partners such as SEGES, COOPERL and FVE, alongside other relevant national and international stakeholders, will offer a **diverse array of perspectives** and expertise crucial for addressing the multifaceted challenges and opportunities of this type of production in the years to come. One significant outcome could be the development of a position paper encompassing the collective insights, agreements, and recommendations arising from the **discussions** held during the workshop.

### Tentative programme (in EEST, Greece Time)

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10:30-11:00	The farmer's perspective	Stine Mikkelsen Klintebygaard veterinary practice, DK*
11:00-11:30	Coffee break	
11:30-12:00	The veterinarian's perspective	Andreas Palzer Federation of Veterinarians of Europe, BE
12:00-12:30	COOPERL's antibiotic-free pork production	Arnaud Buchet COOPERL, FR*
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14:00-16:00	Plenary session	

\* Online talk

# "A provocative short talk..." or Reflective thoughts from a younger veterinarian's mind

Why Kasper Pedersen from Vrå in Denmark?

- Raised on a pig farm
- Educated pig farmer
- 5 years in SEGES under Charlotte Sonne Kristensen along with vet studies
- Veterinarian in HyoVet for 1,5 years
  - 1/5 of Danish sows
  - Focusing on **prevention**
- Now: Ph.D.-student in Virology

**puts the ass at slap height**



**Striking issue is the consumers short thinking when they are to buy products of animal origin**

WHY?

No consequences!

**Doesn't make the world a better place**

Requires long term thinking

# ELON MUSK

Long-term thinker!

... **GOAL definition**

- **99,9% happy pigs**
- **No suffering**
- **Sustainable protein**



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First principle thinking

- ... breaking the topic down to smallest bricks
- the issue is not **enteritis**

# Breaking down – 1 what do the pig industry strive for 2024



Providing protein and fat to consumers around the world!



Due to **free trade**, lowest cost will win.



Heads count more than quality.



Forces a cost of some suffering...



**(That is not aligned with our goal)**

# Breaking down - 2

## what is the reason for using antimicrobials 2024

Enteritis



**Welfare** (avoid pain,  
suffer etc.)

**Performance** (decrease  
mortality, secure growth)

Securing minimum welfare in a microbial-saturated environment?

or

Compensate for early weaning?

## Breaking down – 3

### Is it biologically realistic not to use antimicrobials?

#### **Raising numerous pigs together?**

- In a dirty environment
- At no place
- Under circumstances of crossfostering
- Early weaning
- Additional weaner mixing
- With a microbial susceptible host
- Prone to intestinal and especially respiratory infections

***We treat a disease condition that is caused by improper management of pigs***

## Breaking down – 4

### Let's change the management - comparison of two scenarios

#### Nowadays

$$365 / 118 + \mathbf{28} + 5 (=151) = 2,42$$

\*95% = 2,3 litters/year

**19** liveborn

14 goes to sow – 5 goes to crossfoster

Mortality at 14,3%

12 and 4,3 weaned/weaning

27,6 weaned/year + (11,5) 9,9 crossfostered

**37,5 weaned/year**

#### Future example

$$365 / 118 + \mathbf{70} + 5 (=193) = 1,89$$

\*95% = 1,8 litters/year

**12** liveborn

Keeps own pigs

Mortality at 1 pig = 8,3%

11 weaned/weaning

**19,8 weaned/year**



## BREAKING DOWN – 4 SUGGEST

$$(1 - (19,8/37,5)) * 100 =$$

**47% decreased pork consumption**

1. Increases the price on pork meat = lower demand

2. Eat less pork = Health, Climate, Welfare, Resistance

# WHY THIS NEVER WILL HAPPEN

**Free trade across different cultures**



# Breaking down – 5

The issue is low compliance towards quality food



\* Inflation Adjusted

\*\*Alcohol Spending was included in the category of Food Spending in 1941

Article & Source:

<https://howmuch.net/articles/american-spending-past-75-years>

<https://www.bls.gov/cex/>

# Breaking down – 5 the issue is low compliance towards quality food

Livestock Science 276 (2023) 105337

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**Livestock Science**

journal homepage: [www.elsevier.com/locate/livsci](http://www.elsevier.com/locate/livsci)

Willingness-to-pay for reduced carbon footprint and other sustainability concerns relating to pork production – A comparison of consumers in China, Denmark, Germany and the UK

Sigrid Denver<sup>a,\*</sup>, Tove Christensen<sup>a</sup>, Thomas Bøker Lund<sup>a</sup>, Jakob Vesterlund Olsen<sup>a</sup>, Peter Sandøe<sup>a,b</sup>

<sup>a</sup> Department of Food and Resource Economics, University of Copenhagen, Rolighedsvej 23, 1958 Frederiksberg C, Denmark  
<sup>b</sup> Department of Veterinary and Animal Sciences, University of Copenhagen, Grønnegårdsvej 8, 1870 Frederiksberg C, Denmark

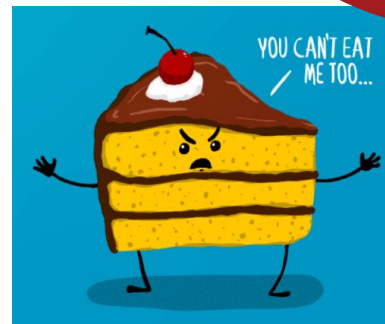
## 1,500 respondents of each country in a questionnaire about willingness to pay for sustainable pork

- Denmark, Germany, UK and China
- **1/10 will pay 20% more**
- No compliance towards climate impact for price premium
- Western: animal welfare
- China: food safety



# One cannot have one's cake and eat it too

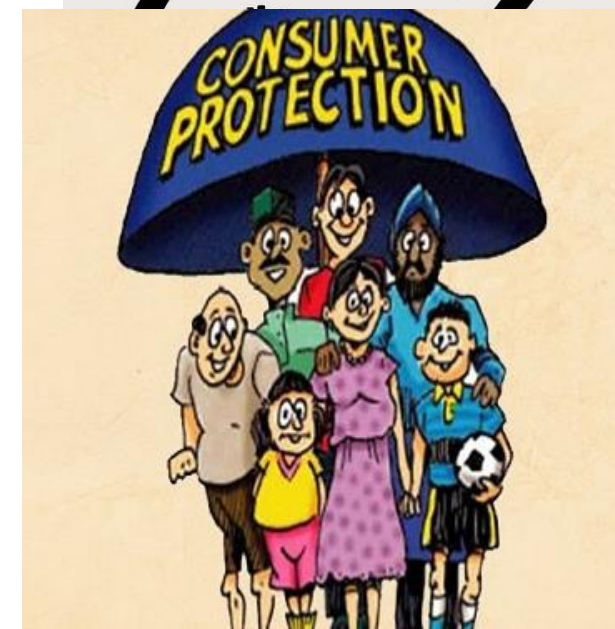
*It cannot be reached  
under current conditions*



Consumers will have  
cheap protein and fat  
- and lots of it.

Consumers will indeed not have  
the issue about resistant bacteria –  
and many other things

**But;** they are short term thinkers:  
they don't know, because they are  
not **aware** of the issue and  
consequences



# What is the issue really?

Short term thinkers:

*“AVANT aims at developing and testing the efficacy and sustainability of alternatives to antimicrobials for the management of pig enteritis...”*

**Long** term thinkers:

...

# Elaboration on the AVANT program – who thinks in long terms?



## WHO REPRESENTS THE GOAL or THE PIGS?



Consumers

Politicians

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# Stakeholders who talks for the pigs?

## Consumers

- Uninformed
- Economically dependent, and better like other expenses
- They have no relationship to animals in production. They want bacon!

## Politicians

- Should be informed
- Economically **“in”**dependent
- Can they change their mind?
- Unpopular legislations will lower their popularity - **VOTES**

## Farmer

- Produce what there is asked for
- Pen blind!
- Economically dependent and at any time driven to lower costs
- Price increase will not change this, and lower demand will take away the once of lowest productivity.

## Veterinarians

- Informed!
- Economically dependent
- Do they really have anything to say?





**THANKS FOR THE ATTENTION**

**WHICH WAY TO GO?**