

MOTIVATING CHANGE: INCLUDE MOTIVATION AND BEHAVIOR CHANGE WHEN IMPROVING ANIMAL HEALTH

EXPLORING THE CORE PRINCIPLES OF HUMAN BEHAVIOR AND DECISION-MAKING IN THE CONTEXT OF ANIMAL HEALTH

Jolanda Jansen, PhD MSc.



JOLANDA JANSEN, PhD, MSc











Human skills in animal health

https://www.researchgate.net/profile/Jolanda_Jansen







IT'S ALL ABOUT OUR MINDSET







What do old folks do when it rains?

What do kids do when it rains?



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IT'S ALL ABOUT OUR MINDSET











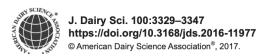
KEY POINTS

- What is the mindset regarding disease prevention?
- What do we currently do as policymakers/advisors?
- What could we learn from social psychology?
- How to apply that in our communication with farmers?





MUCH EVIDENCE ON 'HUMAN FACTOR'



Invited review: Determinants of farmers' adoption of management-based strategies for infectious disease prevention and control

Caroline Ritter,*1 Jolanda Jansen,† Steven Roche,‡ David F. Kelton,‡ Cindy L. Adams,§ Karin Orsel,* Ron J. Erskine,# Geart Benedictus, II Theo J. G. M. Lam, ¶ and Herman W. Barkema*

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Understanding farmers' and veterinarians' behavior in relation to antimicrobial use and resistance in dairy cattle: A systematic review

S. Farrell. © C. McKernan. © T. Benson. C. Elliott, and M. Dean*

Institute for Global Food Security, School of Biological Sciences, Queen's University Belfast, 19 Chlorine Gardens, Belfast BT9 5DL



Understanding Farmers' Behavior and Their Decision-Making Process in the Context of Cattle Diseases: A **Review of Theories and Approaches**

Marit M. Biesheuvel 1*, Inge M. G. A. Santman-Berends 2, Herman W. Barkema 1, Caroline Ritter3, John Berezowski4, Maria Guelbenzu5 and Jasmeet Kaler

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J. Dairy Sci. 102:3805-3824 https://doi.org/10.3168/jds.2018-15037

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Invited review: Examining farmers' personalities and attitudes as possible risk factors for dairy cattle health, welfare, productivity, and farm management: A systematic scoping review

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Factors influencing dairy farmers' antibiotic use: An application of the COM-B model

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Frontiers Frontiers in Veterinary Science

TYPE Systematic Review PUBLISHED 03 March 2025 DOI 10.3389/fvets.2025.1507704



OPEN ACCESS

Joel Fernando Soares Filipe. University of Milan, Italy

A scoping review of knowledge, attitudes, and practices in swine farm biosecurity in North America



WE ALL WANT HEALTHY ANIMALS







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WE ARE ALL HUMANS

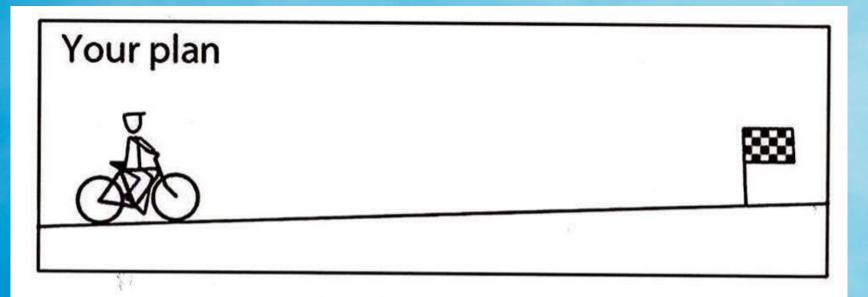
New years resolutions for 2020 about 2022 1. Lose Weight again 2. get fit next year 3. Give up attornal drink less
4. Stand up to boss
5. Be nicer to my wife 6. Sort out junk in abred

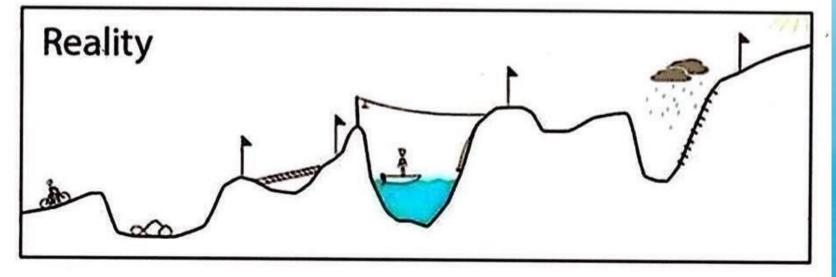




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CHANGE IS NOT EASY









WE ARE ALL HUMANS

Need

Need to be effective in dealing with environment

COMPETENC

AUTONOMY

Need to control the course of their liv

RELATEDNESS

Need to have close, affectionate relationships





"You confront me with my own mistakes all the time, it's never good, always needs improvement anyway"

WIPEIENC Need to be effective "I have to do it, I have no choice, you decide what I need to do."

NOWY Ac Need to control the course of their liv/

"It's not something to be proud of or show off, this could damage my relationship with others"

ZDNESS Need to have close,

"Didn't you know that bad milking hygiene and your drying off procedure is the reason for the high mastitis incidence? You should really do something about it, and teach your milkers the same."

WE ARE ALL HUMANS

COMPETENC

Need to be effective in dealing with environment

What do you know already?

AUTONOMY

Need to control the course of their liv

Would you like to know more about..?

etermination theory

RELATEDNESS

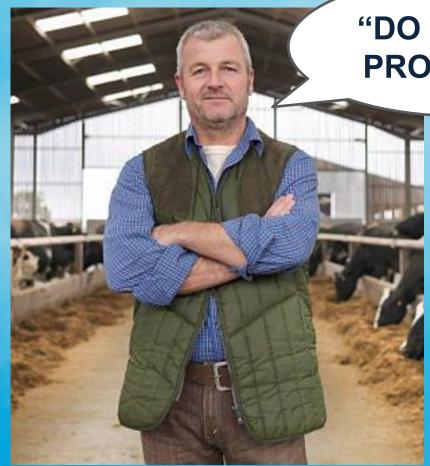
Need to have close, affectionate relationships

What would be suitable to you and your workers?



NEED MORE SCIENTIFIC EVIDENCE?











NEED MORE SCIENTIFIC EVIDENCE?







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FARMER = 'EMPTY VESSEL'?!

KNOWLEDGE



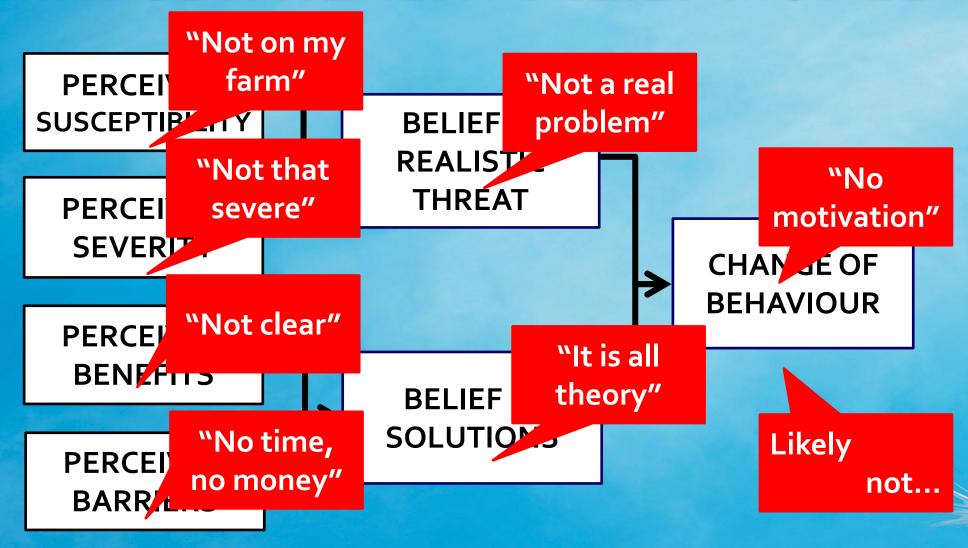


Our brains are not actually empty!



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MINDSET: HEALTH BELIEF MODEL





REGARDING DISEASE PREVENTION IN

- Does not happen to me
- Animals will always get ill
- Part of farm life

SUSCEPTIBILITY

JEVENT

- No real consequences of doing wrong
- What is welfare/pain?
- No benefits for doing good
- Does not make me 'look good' as farmer
- Investments in management (time/money)
- Risk for production loss
- Uncertain ROI
- Complex/ no perceived control
- Difficult diagnostics
- Various opinions of advisors
- No trust in government

LIVESTOCK

Will take the risk

You are an influencer!

CHANGE Bena Who cares, do only what I feel is necessary

Prevention is complex, cost time and money.
Old way is easy way.

REGARDING DISEASE PREVENTION IN

- Does not happen to me
- Animals will always get ill
- Part of farm life

SUSCEPTIBILITY

JEVENT

- No real consequences of doing wrong
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- Various opinions of advisors
- No trust in government

LIVESTOCK

"My vet does not talk about it"

Will take the risk

CHANGE Ben Who cares, do only what I feel is necessary

Prevention is complex, cost time and money.
Old way is easy way.

WHAT ABOUT EXTENDED AB USE?



J. Dairy Sci. 98:2369–2380 http://dx.doi.org/10.3168/jds.2014-8488 © American Dairy Science Association[®], 2015.

Social influences on the duration of antibiotic treatment of clinical mastitis in dairy cows

J. M. Swinkels,*¹ A. Hilkens,† V. Zoche-Golob,‡ V. Krömker,‡ M. Buddiger,* J. Jansen,§ and T. J. G. M. Lam# *GD Animal Health, 7400 AA Deventer, the Netherlands

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#Department of Farm Animal Health, Faculty of Veterinary Medicine, Utrecht University, 3584 CL Utrecht, the Netherlands



Swinkels et al, 2015

79% REPORTED ROUTINE EXTENDED TREATMENT

18% REPORTED OCCASIONAL EXTENDED TREATMENT





REASONS ARE NOT ECONOMIC:

- INSECURE ABOUT EFFECT TREATMENT
- CLINICAL CURE > BACTERIOLOGICAL CURE



CONSIDERED AS GOOD STOCKMANSHIP (LONGEVITY)

EXTENDED TREATMENT = 'THOROUGH' (30 OUT OF 38)



Swinkels et al, 2015

'BETTER SAFE THAN SORRY'

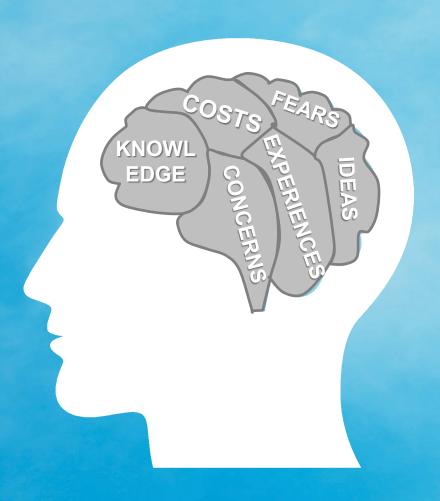
"You should treat it well and long. You should not stop the treatment to early. Some farmers will always treat mastitis only for three days. But then mastitis will return. Therefore, we concluded that you should extend the treatment"





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OUR CLIENT # 'EMPTY VESSEL'!





Our client's brain is full of information!



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OUR CLIENT # 'EMPTY VESSEL'!

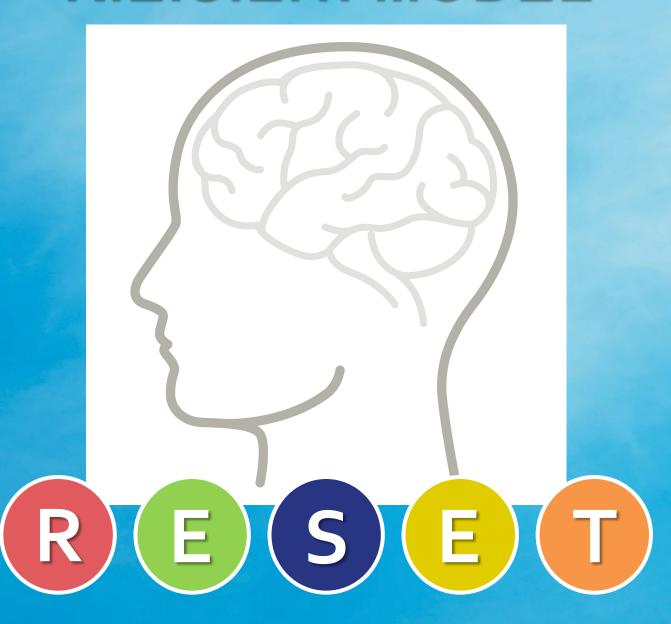




Our client's brain is full of information!



R.E.S.E.T. MODEL







R.E.S.E.T MODEL (HOW)

ULES & REGULATIONS DUCATION & INFORMATION OCIAL PRESSURE CONOMIC INCENTIVES







BE CREATIVE









R.E.S.E.T. THE MINDSET





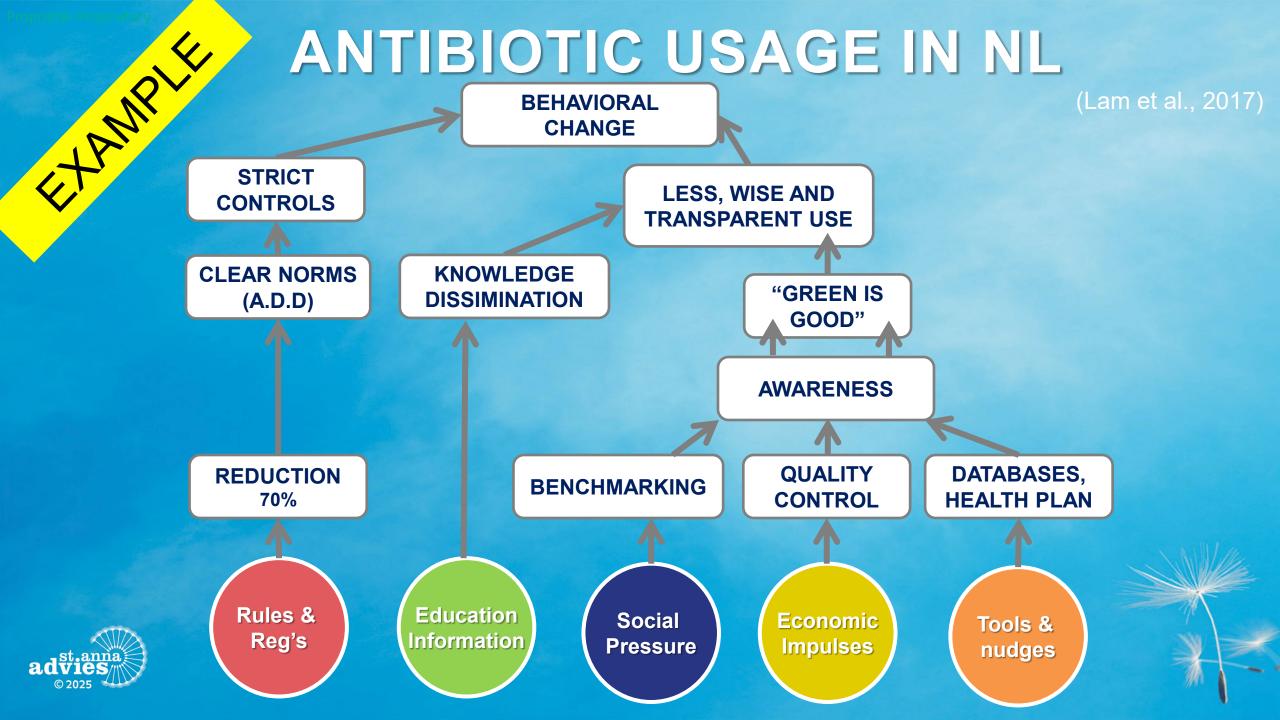






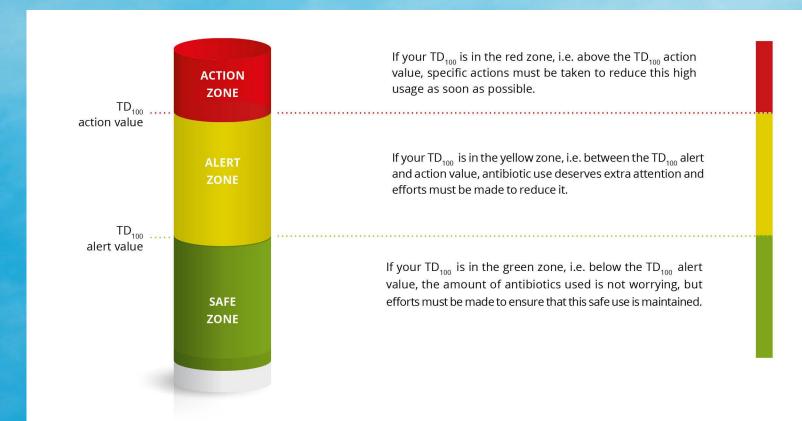






BENCHMARKS SET NORMS



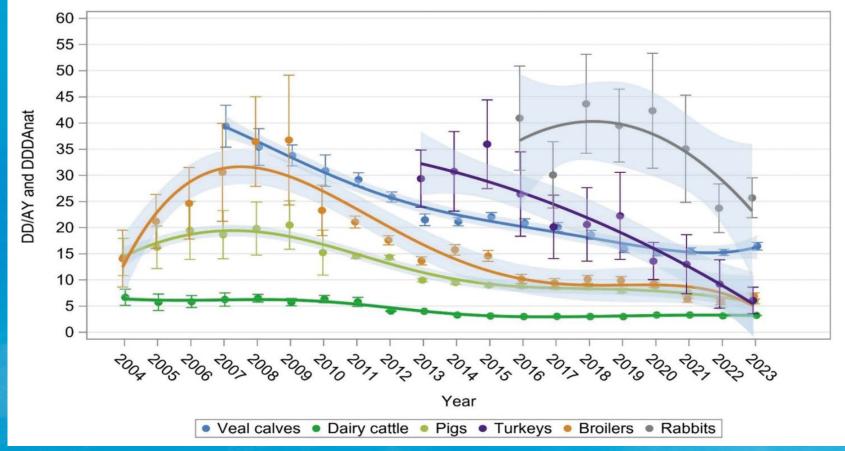


(https://www.amcra.be/en/analysis-of-antibiotic-use



ANTIBIOTIC USAGE IN NL

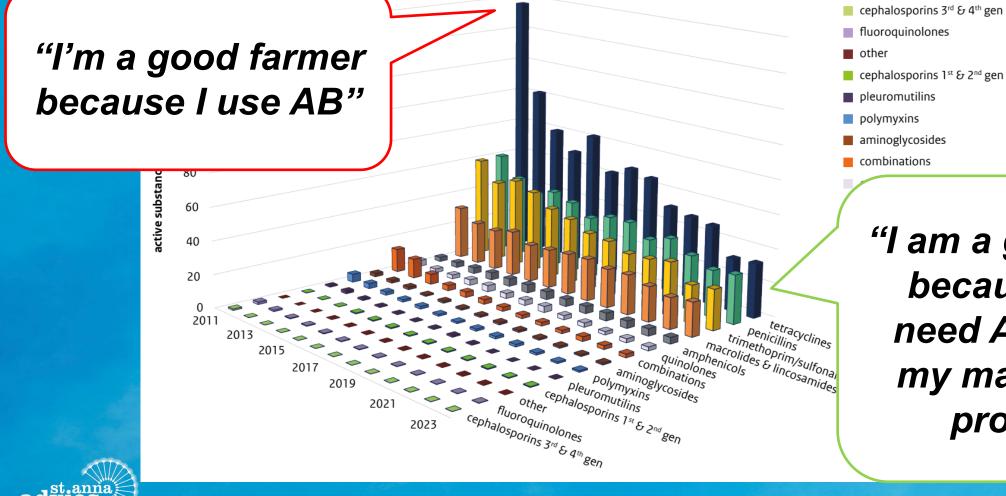
Figure 3 Number of animal-defined daily dosages per animal-year for rabbits (grey), turkeys (purple), veal calves (blue), broilers (orange), pigs (light green) and dairy cattle (dark green) farms as reported by LEI WUR-MARAN (years 2007-2010 as DD/AY) and by SDa (years 2011-2023 as DDDANAT) depicting point estimates (dots), 95% confidence limits (error bars), smoothed trend line (penalized spline) and 95% confidence limits for the spline (shaded area)





ANTIBIOTIC USAGE IN NL

Figure 2 Antimicrobial Veterinary Medicinal Product sales by antibiotic class from 2011-2023 in kg (thousands); antibiotic class "other" comprises bacitracin, fusidic acid and nitro-imidazole's



"I am a good farmer because I don't need AB to mask my management problems"

R.E.S.E.T MODEL FOR PERSONALITIES



'INFO-SEEKERS'

S 'STATUS-SEEKERS'

'PRICE-SEEKERS'

'CONVENIENCE-SEEKERS'





COMMUNICATE WITH R.E.S.E.T.

IMPROVE ANIMAL HEALTH: CONVINCE FARM MANAGER



"What are current and future rules/regs.? What risk are you willing to take?"



"What do you know already? What can you do?



"Why is it important to you? What is good farming practice?" "What is the risk for you, your workers and family?"



"What do you think this disease costs? What do you think we can gain by prevention?" What if you do not change?"



"How can we make things easier for you?" "What could help on your farm?"



PEOPLE CHANGE THEMSELVES
When you evoke a persons own
desire, ability, reasons and need for change,
you are fuelling the human engines of



SELF MOTIVATION

I do not change because...

Look for ambivalence

I should change because......

SUSTAIN TALK

CHANGE TALK



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CREATE AWARENESS

NI inion

Where in your management could you reconsider your AB use?

If you would rate

When would be a moment to have a further conversation on prevention of this disease?





DEALING WITH RESISTANCE

Yes, but...
I don't have time for that!

It doesn't take long....





DEALING WITH RESISTANCE

Yes, but...
I don't have time for that!

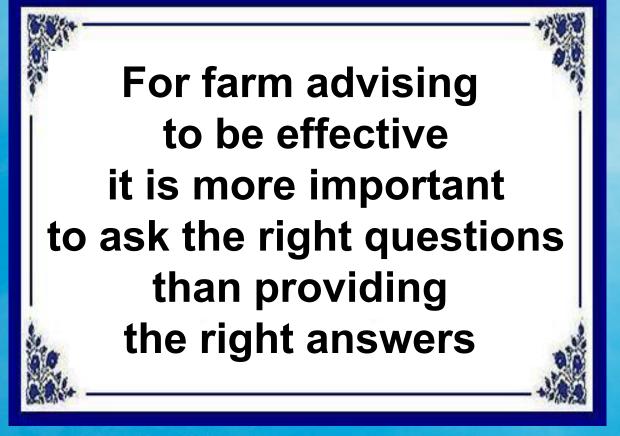
You said your goal is to Given the fact of your limited time, what else could you do to reach your goal? How can I help you?



EVOKE 'CHANGE TALK' BY QUESTIONS



ASK QUESTIONS!





LISTEN & SILENT are the same!



KEY POINTS

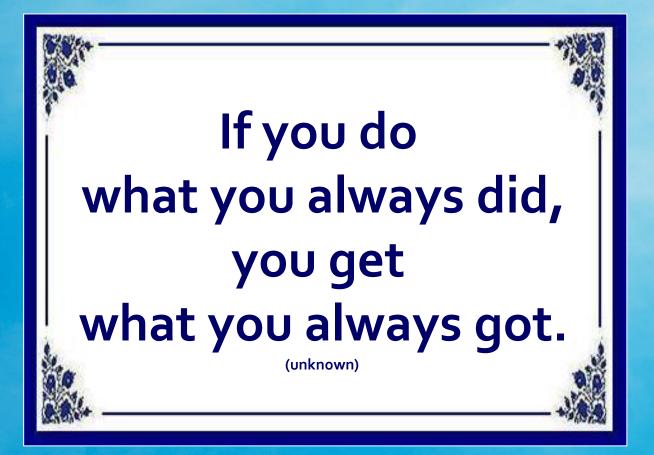
- What is the mindset regarding disease prevention?
 - > it's more than economics!
- What do we currently do as advisors/policymakers?
 - > we bring knowledge but fear to 'stir the brain'
- What could we learn from social psychology?
 - > work on self motivation, use all RESET buttons
- How to apply that in our communication with farmers?
 - > ask questions!
 - > focus on change talk: "What can you do?"





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YOU ARE THE KEY TO CHANGE







IS IT A LACK OF KNOWLEDGE?

"A FARMER IS AN EMPTY CUP THAT NEEDS TO BE FILLED"







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