

# **7<sup>th</sup> Vet Student Seminars on Pet Food Nutrition Campus Tour 2019**

## **Implementing Animal Welfare with “THE FIVE DOMAINS MODEL”**

# What does WELFARE mean?

- In short it refers to the state of the animal, the treatment it receives and providing for its physical and mental needs.
- Formally known as “The 5 freedoms” is the assessment and management of animal welfare by Professor Emeritus David Mellor.
- It is the development of a welfare strategy which is being implemented in many areas of the world including farming and zoos and in our case - the horse industry which is a hot topic.

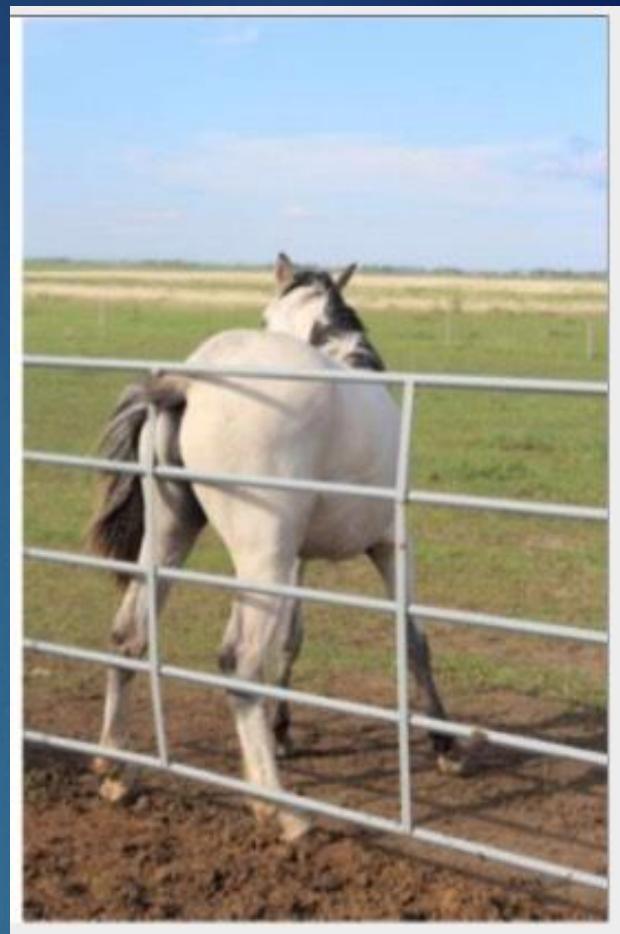
# **Why is it a hot topic in today's society?**

**With worldwide attention looking on our business whether it be professional or a hobby, now more than ever we have to be aware of the horses positive and negative experiences particularly in domesticating our sport equestrian horses.**

# Why are we discussing the five domains model around the world at the moment?

Because It has become the basis of a reliable model that all industries can base themselves upon.

- Animals have the ability to feel pleasure and pain, like humans.
- Animals also seek to avoid painful experiences and set boundaries.
- We are dealing with SENTIENT animals.

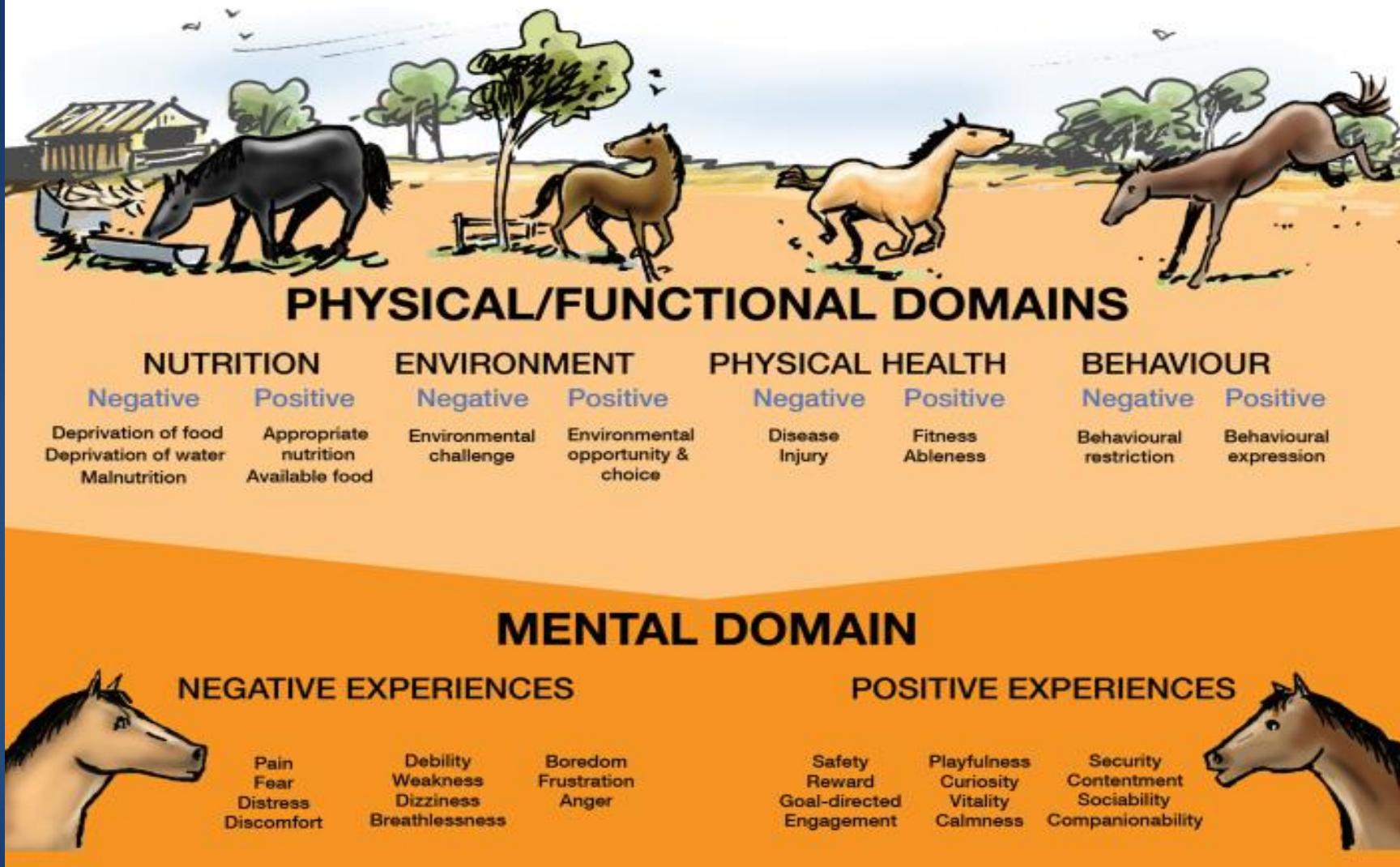


Sentience is the capacity of an animal to have positive and negative experiences that matter to them. An effective welfare and “The five domains model” is a very good vehicle for exploring, understanding, managing and assessing these such experiences.

# Introduction to the “THE FIVE DOMAINS MODEL”

WARREN SUTTON – HORSE EDUCATOR IN ANIMAL BEHAVIOUR

# The Five Domains Model



## Physical / Functional Domains

### Survival-Related Factors (Nutrition, Environment & Health)

Nutrition		Environment		Health		Situation-Related Factors	
						Behaviour	
<b>Restrictions:</b>	<b>Opportunities:</b>	<b>Unavoidable/ Imposed conditions:</b>	<b>Available conditions:</b>	<b>Presence of:</b>	<b>Little or no:</b>	<b>Exercise of 'agency' impeded by:</b>	<b>'Agency' exercised via:</b>
Water intake Food intake Food quality Food variety	Drink enough water Eat enough food Eat a balanced diet Eat a variety of foods	Thermal extremes Unsuitable substrate Close confinement Atmospheric pollutants: CO <sub>2</sub> , ammonia, dust, smoke	Thermally tolerable Suitable substrate Space for freer movement Fresh air	Disease: acute, chronic Injury: acute, chronic, husbandry mutilations Functional impairment: due to limb amputation, or lung, heart, vascular kidney, neural or other problems Poisons	Disease Injury Functional Impairment Poisoning	Invariant, barren environment (ambient, physical biotic) Inescapable sensory impositions Choices markedly restricted	Varied, novel engaging environmental challenges
Voluntary over eating Force feeding	Eating correct quantities	Unpleasant/strong odours Light: inappropriate intensity Loud/otherwise unpleasant noise	Pleasant/tolerable odours Light intensity tolerable Noise exposure acceptable	Obesity/leanness	Body condition appropriate Good fitness level	Constraints on environment- focused activity Constraints on animal-to- animal interactive activity	Congenial sensory inputs Available engaging choices Free movement Exploration Foraging/hunting Bonding/reaffirming bonds Rearing young Playing Sexual activity Using refuges, retreat or defensive attack Sufficient sleep/rest
		Environmental monotony: ambient, physical, lighting	Normal environmental variability	Poor physical fitness: muscle de-conditioning		Limits on threat avoidance, escape or defensive activity Limitations on sleep/rest	
		Unpredictable events	Predictability				

## Affective Experience Domain

### Mental State

Negative	Positive	Negative	Positive	Negative	Positive	Negative	Positive
Thirst	Wetting/quenching pleasure of drinking	Forms of discomfort: Thermal: chilling, overheating Physical: joint pain, skin irritation	Forms of comfort: Thermal Physical Respiratory Olfactory	Breathlessness Pain: many types Debility, weakness Sickness, malaise Nausea Dizziness	Comfort of good health and high functional capacity	Anger, frustration Boredom, helplessness Loneliness, isolation Depression Sexual frustration	Calmness Engaged, in control Affectionate sociability Maternally rewarded Excitation/playfulness Sexual gratification
Hunger (general)	Pleasure of different tastes/smells/textures	Physical: stiffness, muscle tension	Auditory, Visual				
Hunger (salt)	Pleasure of salt taste	Respiratory: e.g. breathlessness					
Malnutrition malaise	Masticatory pleasures	Olfactory					
Bloated, over full	Post prandial satiety	Auditory: impairment, pain					
Gastronintestinal pain	Gastrointestinal comfort	Visual: glare/darkness eye strain					
		Malaise from unnatural constancy	Variety related comfort	Physical exhaustion	Vitality of fitness	Anxiety, fearfulness, panic, anger Neophobia Exhaustion	Secure/protected/ confident Likes novelty Energised/refreshed

Adapted from Mellor, D.J. (2017). Operational details of the Five Domains Model and its key applications to the assessment and management of animal welfare. *Animals* 7(8), 60; doi:10.3390/ani7080060.

2018



www.horsefa.asn.au







World Horse Welfare

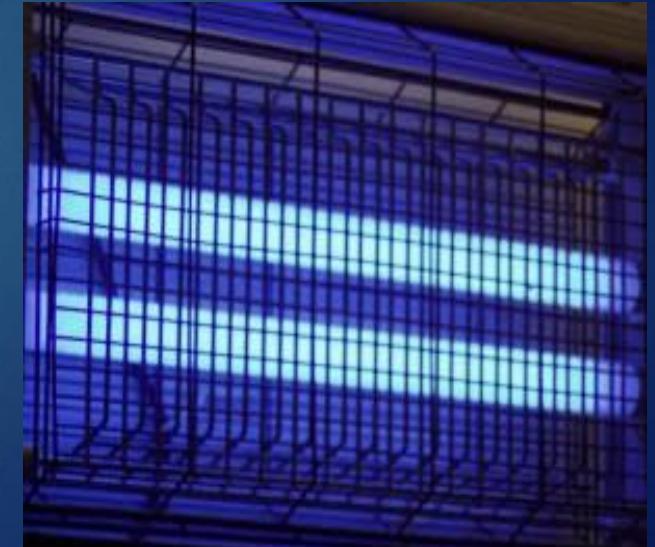


**The Five Domains Model acknowledges what animal welfare scientists have been thinking about & working on for 30 to 40 years.**

**The Model is new, the research isn't.**



The Acceptance of the wider public & animal lobbyists alike need confidence in us to know that we are trying our best in horse welfare turning what used to be known as “BEST PRACTICE” to “GOOD PRACTICE”.



**This model has had an impact upon zoos and aquariums as well.**

**Animal welfare is generally difficult to assess objectively,  
this is where the behavioural indices (#5) are key indicators for  
the models effectiveness.**

We also need to consider cultural and environmental factors with our horses and the country's they live in.



Building of any equine centre whether it be veterinary, breeding, riding schools or just stables out in your backyard, it's not hard to implement the five domains into your plans.

<https://you.be/6J1H2h9pKE>





**Even though there are many ways in which our horses welfare can be compromised. Like on occasions, hopefully rare, when a person punishes an animal for failing to perform. Such incidents, if observed by the public, would invite close critical scrutiny and damage our trust in individuals and/or cultures.**



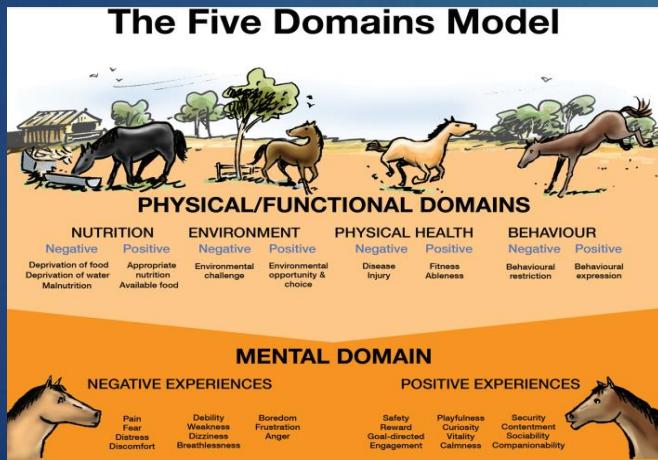
# What hope do we have for the five domains model?

H - Having  
O - Open  
P - Purpose  
E - for Everybody

**The model adapts itself to different cultural needs in different countries that might have different needs and understanding.**



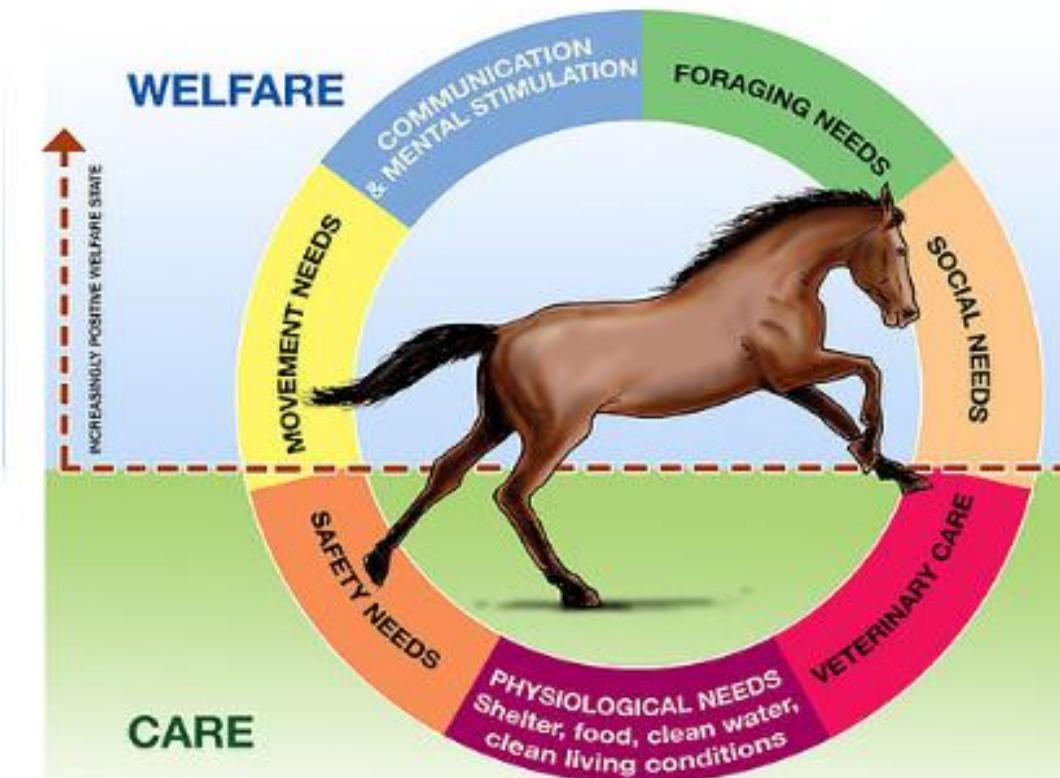
**When you become qualified vets in the field of the future ,  
It can give you advice to educate animal owners to what  
is “good practice” & standards of welfare.  
Laminate it, keep a photo on your phone or glue it in your  
diary for future reference.**



Physical / Functional Domains							
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Survival-Related Factors (Nutrition, Environment & Health)							
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## HORSE WELFARE - WELLNESS - WELL-BEING



# Where to next Thailand?

- \* Simply understanding and educating people in their current situation of animal welfare and good practice is the first step.
- \* Introducing a welfare plan can be a delicate topic for some people with budget pressures, be patient and never lose sight of the end result for the animals you are trusted upon In your care for your client.

**Using the model to evaluate the welfare status of a horse in your care during competition and into their retirement. Look at what's acceptable, common sense and don't be afraid to have a conversation about the horses welfare that maybe compromised.**



**Put a plan into place with target dates, for example, more weight through better quality or amounts of nutrition and change the environment on horses that are mentally not coping, for example, horses that are susceptible to biting insect/fly infestation.**





**Keep informed about horse handling and riding education clinics or trainers willing to give their time for private lessons to see better outcomes with positive experience for both horse and rider.**





**These five domains are not set in stone, they're not a legal document either, they are simply been put together to guide, educate and see all of our feathered, furry, woolly and for the most of us our beautiful horses to give us great joy and pleasure.**

There will always be speculation on any paper that have been researched to make positive change.

I always say to the horse community I may be teaching or volunteering with;

***“change the way we look at things  
and the things we look at change...”***

# Acknowledgements

- Prof E. David Mellor – Dr. Andrew McLean
- Equine Science International - [www.esi-education.com](http://www.esi-education.com)
- HORSE SA - [www.horsesa.asn.au](http://www.horsesa.asn.au)
  - Natural paddocks, unnatural behaviours.
  - Tips for the care of confined horses.
  - DIY 5 minute horse welfare assessment starter kit.

Thanks for your attention!

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