

# **KUIDAS HINNATA HOBUSE HEAOLU?**

**TÕENDUSPÕHINE RAAMISTIK HOBUSE HEAOLU HINDAMISEKS**



## HORSE WELFARE

\* FOR US, HORSE WELFARE IS NOT ONLY AT THE CENTRE OF WHAT WE DO,  
IT IS AT THE CORE OF WHO WE ARE"



## FEI HOBUSTE HEAOLU TAGAMISE JUHEND

FEI reeglite kohaselt peavad kõik rahvusvahelised ratsaspordialad järgima FEI hobuste heaolu tagamise juhendit ja töstma esikohale hobuste heaolu. Hobuse heaolu peab alati olema olulisem sportlike tulemuste saavutamisest või majanduslikest kaalutustest. Hobuse heaolu silmas pidades tuleb järgida järgmisi reegleid:

### Üldine heaolu

1. Hobuse elutingimused: Hobuse pidamistingimused ja söötmine peavad olema kooskõlas parimate hobusepidamistavadega. Puhas ja kvaliteetne hein, sööt ja vesi peavad olema alati kättesaadavad.
2. Treeningmeetodid: Hobuse treening peab vastama tema füüsilistele võimetele ja vanusele. Hobuse suhtes ei tohi kasutada vägivaldseid või temas hirmu tekitavaid meetodeid.
3. Rautamine ja varustus: Kapjade hooldus ja rautamine peavad olema tehtud kõrgel tasemel. Varustus peab olema disainitud ja sätitud selliselt, et valu või vigastuse tekkimise oht oleks võimalikult väike.
4. Transport: Transpordi ajal peavad hobused olema kaitstud võimalike vigastuste ja muude terviseriskide eest. Transpordivahend peab olema ohutu, hästi ventileeritud, hooldatud, korrapäraselt desinfitseeritud ja pädeva juhiga. Transpordi ajal peab hobustega kaasas olema pädev inimene.
5. Transiit: Kehtivate FEI suuniste kohaselt peavad kõik veod olema hoolega läbi mõeldud ning hobustele tuleb pikema transpordi kestel võimaldada korrapäraseid puhkeperioode ja ligipääsu toidule ja veele.

## EEF EUROPEAN EQUESTRIAN FEDERATION

The Equine Ethics and wellbeing committee released 24 recommendations this year to bring horse welfare into the forefront of all that we do.....

Here are 5 of the recommendations we believe ALL National Federations can start actioning now!



Share, develop and build strategies around the 'Good life for Horses' vision!

Ensure that the horse's interests are always placed before the interests of the human or sport & celebrate equestrians who clearly place their horse's interests before their own



Proactively and positively engage with the public in matters related to equine welfare.

Take a 'zero-tolerance' policy that prevents, prohibits and punishes any practice that compromises equine welfare and safety during and outside of competition.



Empower officials to ensure welfare is paramount, with greater support for ensuring effective enforcement and more accountability of individual horse welfare



**HOBUSE  
HEAOLU**

**KESKKONNA  
SÕBRALIKKUS**

**SOTSIAALNE  
LITSENTS**

**KOGUKOND**

# ÜHISKONDLIK LUBA - MILLEKS SEE VEEL??

Teen, mis tahan?  
Teisi kahjustamata





# **GOOD LIFE FOR HORSES**

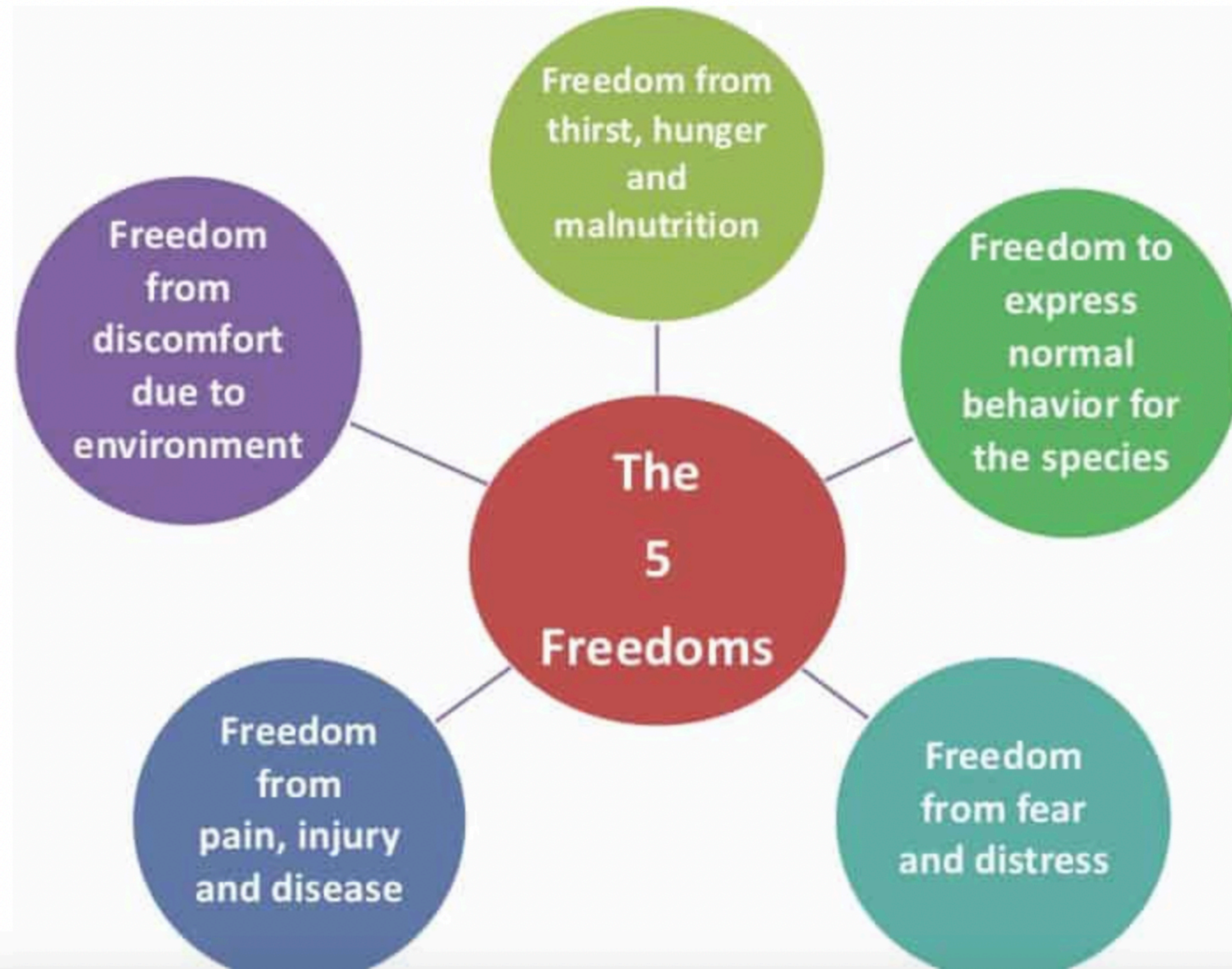
**LIFE WORTH LIVING  
LIFE NOT WORTH LIVING**



**Mis on HEAOLU?**



## VIIE VABADUSE MUDEL





**HEAOLU - LOOMA**  
**KOGEMUS OMA**  
**VAIMSEST JA**  
**FÜÜSILISEST SEISUNDIST**

**HOBUSE SUBJEKTIVNE KOGEMUS**



***télos***

kr.k

**agency** ingl.k





# Basic Structure of the Model:

## PHYSICAL/FUNCTIONAL DOMAINS

DOMAIN 1:  
NUTRITION

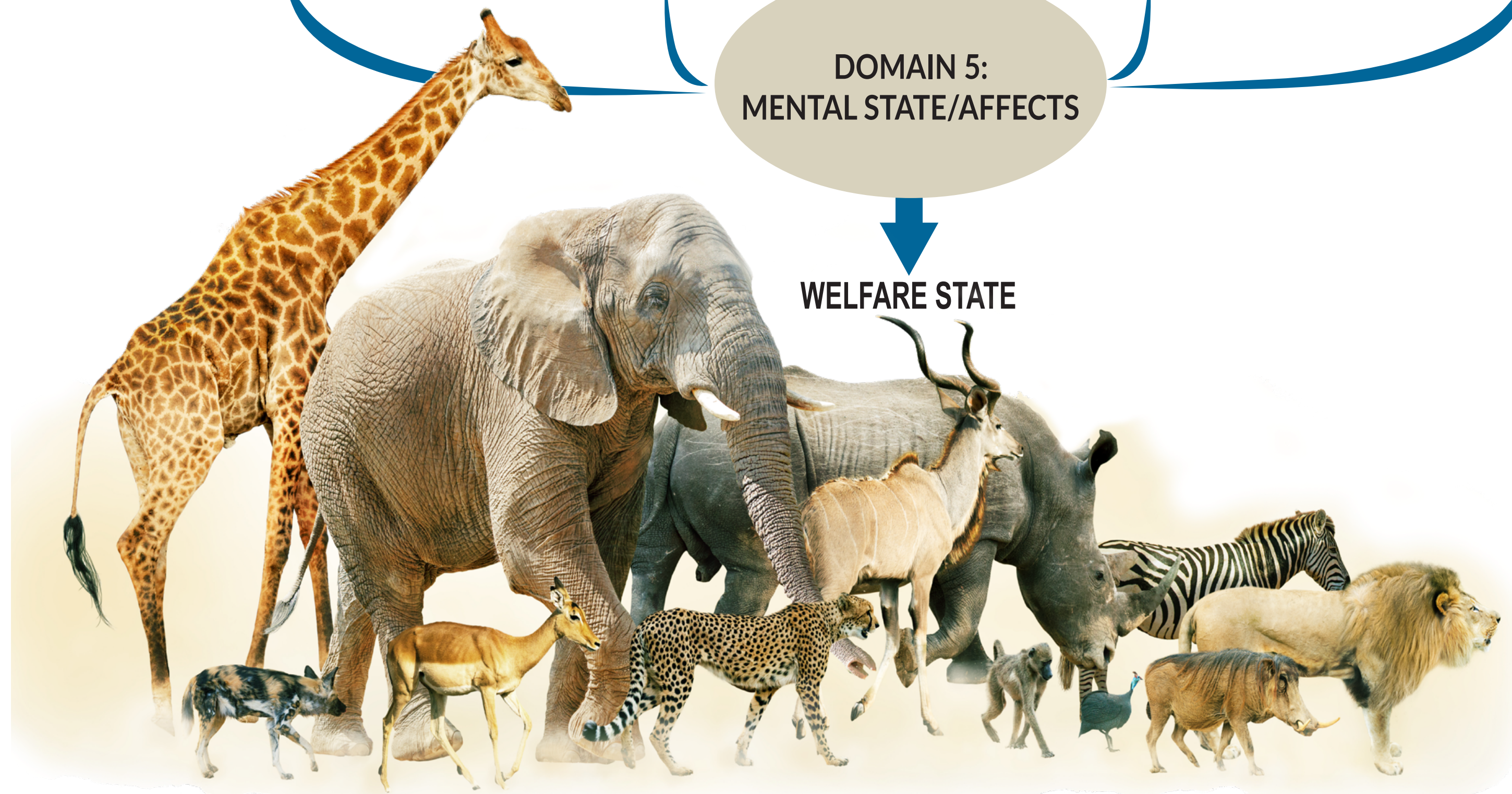
DOMAIN 2:  
PHYSICAL  
ENVIRONMENT

DOMAIN 3:  
HEALTH

DOMAIN 4:  
BEHAVIOURAL  
INTERACTIONS

DOMAIN 5:  
MENTAL STATE/AFFECTS

WELFARE STATE



Adapted from: The 2020 Five Domains Model: Including Human-Animal Interactions in Assessments of Animal Welfare, by D.J. Mellor, N.J. Beausoleil, K.E. Littlewood, A.N. McLean, P.D. McGreevy, B. Jones and C. Wilkins. Animals 2020, DOI: 10.3390/ani10101870





# THE FIVE DOMAINS MODEL FOR WELFARE ASSESSMENT



Working one domain at a time, consider the conditions and provisions within each domain, and observe the horse, looking for signs that reveal their current physical and mental states.

## DOMAIN 1 NUTRITION & HYDRATION



### RECOMMENDED CONDITIONS:

Free access to familiar clean water, a fibre-based and nutritionally-balanced diet, sufficient food, trickle feeding, grazing & browsing, minimum daily salt requirement.

### ASSOCIATED POSITIVE EXPERIENCES:

Feels comfort from good digestive function, pleasure of tastes & textures, of chewing & drinking.

### HIGH RISK CONDITIONS:

Restricted access to water, unfamiliar or polluted water. Overfeeding, underfeeding, fasting periods, low-fibre, high-energy or grain-based diet, exercising on a stomach that is empty of fibre.

### ASSOCIATED NEGATIVE EXPERIENCES:

Feels hunger, thirst, weakness, digestive pain & discomfort.

## DOMAIN 2 PHYSICAL ENVIRONMENT



### RECOMMENDED CONDITIONS:

Effective shelter from weather extremes and biting insects, a well-drained, clean and pliable surface in safe resting areas, for comfort and to encourage full sleep cycles.

### ASSOCIATED POSITIVE EXPERIENCES:

Feels comfort (thermal, visual, auditory, respiratory comfort). Feels well-rested.

### HIGH RISK CONDITIONS:

Extreme weather events (floods, fires, cyclones, heat waves), hot and humid conditions, biting insects, a lack of ventilation, noises, vibrations, odours, and muddy, unhygienic and hard surfaces in resting areas.

### ASSOCIATED NEGATIVE EXPERIENCES:

Feels discomfort, overheated, chilled, tired, sleep-deprived.

## DOMAIN 3 HEALTH & FITNESS



### RECOMMENDED CONDITIONS:

Preventive health program with vaccinations, strategic worming, good biosecurity, regular health and dental checks, hoof care, as well as veterinary care and rest, when needed.

### ASSOCIATED POSITIVE EXPERIENCES:

Feels comfort of good health, energy, vitality and good functional capacity.

### HIGH RISK CONDITIONS:

Poor biosecurity, no preventive health program, lack of biosecurity, over- and under-training, bad or a lack of hoof and dental care, veterinary care, lack of hygiene, acute or chronic stress, sleep deprivation.

### ASSOCIATED NEGATIVE EXPERIENCES:

Pain, weakness, breathlessness, feels vulnerable, exhausted.

## INTERACTIONS WITH THE ENVIRONMENT



### RECOMMENDED CONDITIONS:

Opportunities and sufficient space for free exercise, exploration and foraging in company. Sufficient space to move around safely and avoid injuries.

### ASSOCIATED POSITIVE EXPERIENCES:

Feels interested, occupied, energized, safe, feels in control of choices.

### HIGH RISK CONDITIONS:

Insufficient space to move around safely, restriction of free exploration, long periods of confinement, long periods (more than 4 hours) without feeding and chewing-related activity.

### ASSOCIATED NEGATIVE EXPERIENCES:

Feels bored, frustrated, lonely, hypervigilant, pessimistic, helpless.

## DOMAIN 4 INTERACTIONS WITH OTHER ANIMALS



### RECOMMENDED CONDITIONS:

Opportunities to be and interact with other horses (physical and visual contact, at a minimum across a safe barrier), opportunities to avoid conflicts, establish and maintain bonds.

### ASSOCIATED POSITIVE EXPERIENCES:

Feels secure, protected, confident, sociable, energised, playful.

### HIGH RISK CONDITIONS:

Isolation from other horses (lack of physical and visual contact), overstocking, inability to avoid social conflict, frequent social disruptions, artificial or abrupt weaning.

### ASSOCIATED NEGATIVE EXPERIENCES:

Feels anxious, insecure, fearful, lonely, frustrated, exhausted, yearning for company.

## INTERACTIONS WITH HUMANS



### RECOMMENDED CONDITIONS:

Regard for safety and emotional states, correct use of desensitisation and training methods. Gradual training, clear signals, train for self-carriage.

### ASSOCIATED POSITIVE EXPERIENCES:

Feels safe, confident, rewarded, optimistic, in control, enjoys variety.

### HIGH RISK CONDITIONS:

Disregard for emotional state, errors in timing of pressures and reinforcements, shaping errors, punishment-based training, clashing or blurry signals, restrictive and ill-fitting equipment.

### ASSOCIATED NEGATIVE EXPERIENCES:

Feels anxious, in pain, insecure, confused, coerced, uncertain, pessimistic, helpless.

## DOMAIN 5: MENTAL STATE



### NEGATIVE STATE

The horse cannot resolve all the negative experiences, and has no, or very few, positive rewarding experiences.

Welfare state: **POOR**



NEITHER NEGATIVE NOR POSITIVE  
The horse can resolve all the negative experiences but has no, or very, few positive rewarding experiences.

Welfare state: **NEUTRAL**



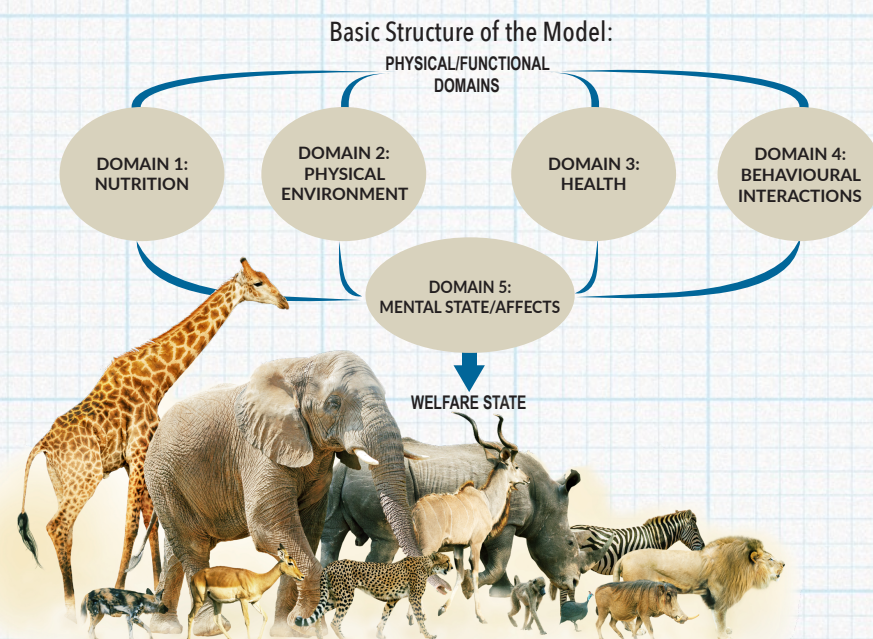
### POSITIVE STATE

The horse can resolve all the negative experiences and is benefiting from a wide variety of positive rewarding experiences.

Welfare state: **GOOD**

The aim of welfare assessment is to monitor your horse, identify changes and opportunities for making improvements. For best results, work on evaluating the welfare state for each domain separately, rather than overall.

# The 2020 Five Domains Model for Animal Welfare Assessment and Monitoring



## Domain 1: Nutritional Conditions and their Associated Domain 5 Affects

Negative Conditions		Positive Conditions	
<b>Nutritional inadequacies:</b>	<b>Negative affects:</b>	<b>Nutritional opportunities:</b>	<b>Positive affects:</b>
Restricted water intake	→ Thirst	Drink correct quantities of water	→ Wetting/quenching pleasures of drinking
Excessive water intake	→ Water intoxication	Eat enough food	→ Postprandial satiety
Restricted food intake	→ Hunger (general)	Eat a balanced diet	→ Pleasures of food tastes/smells/textures
	→ Hunger (salt)	Eat a variety of foods	→ Masticatory pleasures
	→ Weakness of starvation	Eat correct quantities of food	→ Comfort of satiety
Poor food quality	→ Malaise of malnutrition	Force-feeding, excessive energy intake	→ Gastrointestinal pain, nausea/malaise
Low food variety	→ Eating-related boredom		
Voluntary overeating	→ Feeling bloated or overfull		



## Domain 2: Physical Environmental Conditions and their Associated Domain 5 Affects

Negative Conditions		Positive Conditions	
<b>Unavoidable physical conditions:</b>	<b>Negative affects - forms of discomfort:</b>	<b>Enhanced physical conditions:</b>	<b>Positive affects - forms of comfort:</b>
Close confinement; overcrowding	→ Physical: general stiffness, muscle tension	Space for spontaneous locomotion	→ Physical comfort
Unsuitable substrate, wet/soiled ground	→ Physical: musculoskeletal pain, skin irritation	Suitable substrate, well-drained ground	→ Physical comfort
Air pollutants: NH <sub>3</sub> , CO <sub>2</sub> , dust, smoke	→ Respiratory: breathlessness, air passage irritation/pain	Fresh air dissipates contaminants	→ Respiratory comfort
Aversive odours	→ Olfactory: revulsion at foul or repellent odours	Foul smells dissipated by fresh air & good hygiene	→ Olfactory comfort
Thermal extremes	→ Thermal: chilling, dampness, overheating	Effective shelter and shade available	→ Thermal comfort
Loud or otherwise unpleasant noise	→ Auditory: impaired hearing or ear pain	Effective noise control measures are in place	→ Auditory comfort
Light: inappropriate intensity	→ Visual: eye strain due to flashing, glare or darkness	Light intensity kept at tolerable levels	→ Visual comfort
Monotony: ambient, physical, lighting	→ Malaise from unnatural constancy	Within-day environmental variability maintained	→ Congenial variety and predictability
Unpredictable events	→ Anxiety, fear, hypervigilance	Predictability achieved by established routines	→ Relaxation-based ease and calmness
Physical limits on rest and sleep	→ Exhaustion	Conditions conducive to rest and sleep	→ Well rested

The Model emphasises that what matters to animals in welfare terms is their subjective experiences, i.e., their affects. It also recognises that particular physiological mechanisms and specific affects interact dynamically. When the conditions in Domains 1 to 4 give rise to negative affects, they tend to be welfare compromising; when they give rise to positive affects, they tend to be welfare enhancing. Thus, the Model provides a coherent and informative basis for evaluating the welfare significance of different conditions.

Adapted from: The 2020 Five Domains Model: Including Human-Animal Interactions in Assessments of Animal Welfare, by D.J. Mellor, N.J. Beausoleil, K.E. Littlewood, A.N. McLean, P.D. McGreevy, B. Jones and C. Wilkins. *Animals* 2020, DOI: 10.3390/ani10101870



## Domain 3: Health Conditions and their Associated Domain 5 Affects

Negative Conditions		Positive Conditions	
<b>Presence of:</b>	<b>Negative affects:</b>	<b>Minimal or no:</b>	<b>Positive affects:</b>
Injury: acute, chronic, husbandry mutilations	→ Pain (many types), breathlessness, debility, weakness, sickness, malaise, nausea, dizziness	Injury	→ Comfort of good health and functional capacity
Disease: acute, chronic		Disease	→ Comfort of good health and functional capacity
Functional impairment: due to limb amputation, other therapies; genetic, lung, heart, vascular, kidney, gut, neural, or other problems		Functional impairment	→ Comfort of good health and functional capacity
Obesity or leanness: physical and metabolic consequences	→ Affects of being too fat or thin, and of metabolic and pathophysiological sequelae	Extreme body condition scores	→ Comfort of good health and functional capacity
Poisons	→ Many affects due to mode of action	Poisoning	→ Comfort of good health and functional capacity
Poor physical fitness, muscle de-conditioning	→ Physical weakness and exhaustion	Poor fitness (fitness level good)	→ Vitality of fitness and pleasurable vigorous exercise



## Domain 4: Behavioural Interactions and their Associated Domain 5 Affects

INTERACTIONS WITH THE ENVIRONMENT			
<b>Exercise of 'agency' is impeded:</b>	<b>Negative affects:</b>	<b>Exercise of 'agency' is promoted:</b>	<b>Positive affects:</b>
Invariant, barren, confined environment (ambient, physical, biotic)	→ Boredom, helplessness	Varied, novel environment	→ Interested, pleasantly occupied
Inescapable sensory impositions	→ Depression, withdrawal	Congenial sensory inputs	→ Likes novelty, post-inhibitory rebound
Choices markedly restricted	→ Various combinations: startled by unexpected events, neophobia, hypervigilance, anger, frustration, negative cognitive bias	Available engaging choices	→ Calm, in control
Environment-focussed activity constrained		Free movement	→ Engaged by activity
Foraging drive impeded		Exploration, foraging	→ Energised, focussed
INTERACTIONS WITH OTHER ANIMALS			
Animal-to-animal interactive activity constrained	→ Loneliness, depression	Bonding/reaffirming bonds	→ Affectionate sociability
	→ Yearning for company	Rearing young	→ Maternal, paternal or group rewards
	→ Thwarted desire to play	Playing	→ Excitation/playfulness
	→ Sexual frustration	Sexual activity	→ Sexually gratified
	→ Thwarted hunting drive	Hunting	→ Alert engagement, highly stimulated
Significant threats	→ Anger, anxiety, fear, panic, insecurity, neophobia	Absence of threats	→ Secure, protected, confident
Limits on threat avoidance, escape or defensive activity	→ Exhaustion	Using refuges, retreat or defensive attack	
Limitations on sleep/rest		Sleep/rest sufficient	→ Energised, refreshed; post-inhibitory rebound
INTERACTIONS WITH HUMANS			
<b>Negative human attributes and behaviour:</b>	<b>Animal behaviours and negative affects:</b>	<b>Positive human attributes and behaviour:</b>	<b>Animal behaviours and positive affects:</b>
Attitude: uncertain, fearful, indifferent, insensitive, impatient, oppressive, belligerent, domineering, callous, cruel, vindictive	→ Behaviours (e.g.): long flight distance, hypervigilant, attack/fight, hyper-reactive, escape avoidance, freezing, cowering, appeasing, withdrawn, non-compliant	Attitude: confident, caring, sensitive, patient, kind, empathetic	→ Behaviours: short flight distance, calm alertness, at ease with imposed hands-off or hands-on contact, compliantly responsive, explores novel events, seeks contact, variably bonded with humans
Voice: hesitant, angry, loud, shouting		Voice: confident, calm, clear, encouraging, pleasantly rhythmic	
Aptitude: inexperienced, unskilled, untrained, unqualified		Aptitude: experienced, skilled, trained, qualified	
Handling/controlling: erratic, rough (slap, hit, kick, grab, poke, beat, whip); excessively forceful, violent; punishment-focussed; more negative pressure than is needed for training objective	→ Affects: anxiety, fear, panic, terror, neophobia; insecurity, confusion, uncertainty, persistent unease; helplessness; pain from injuries; negative cognitive bias	Handling/controlling: skillful, gentle (stroke, touch, push, guide); firm, temperate, restrained; reward-focussed; mimics allo-grooming by conspecifics; using subtle pressure cues, secondary reinforcers and timely release of aversive stimuli	→ Affects: calm, confident, at ease, feels in control; enjoys variety; finds being bonded with humans rewarding

# Hobuse pidamine vs hobuse heaolu: FÜÜSILISED / VÄLISED TINGIMUSED LOOVAD VAIMSE (SISEMISE) HEAOLU



# Domain 1: Nutritional Conditions and their Associated Domain 5 Affects

Negative Conditions		Positive Conditions	
<b>Nutritional inadequacies:</b>	<b>Negative affects:</b>	<b>Nutritional opportunities:</b>	<b>Positive affects:</b>
Restricted water intake	→ Thirst	Drink correct quantities of water	→ Wetting/quenching pleasures of drinking
Excessive water intake	→ Water intoxication		
	→ Hunger (general)		
Restricted food intake	→ Hunger (salt)	Eat enough food	→ Postprandial satiety
	→ Weakness of starvation		→ Pleasure of salt taste
Poor food quality	→ Malaise of malnutrition	Eat a balanced diet	→ Pleasures of food tastes/ smells/textures
Low food variety	→ Eating-related boredom	Eat a variety of foods	→ Masticatory pleasures
Voluntary overeating	→ Feeling bloated or overfull	Eat correct quantities of food	→ Comfort of satiety
Force-feeding, excessive energy intake	→ Gastrointestinal pain, nausea/malaise		→ Gastrointestinal comfort

Adapted from: *The 2020 Five Domains Model: Including Human-Animal Interactions in Assessments of Animal Welfare*, by D.J. Mellor, N.J. Beausoleil, K.E. Littlewood, A.N. McLean, P.D. McGreevy, B. Jones and C. Wilkins. *Animals* 2020, DOI: 10.3390/ani10101870



## Domain 2: Physical Environmental Conditions and their Associated Domain 5 Affects

Negative Conditions		Positive Conditions	
<b>Unavoidable physical conditions:</b>	<b>Negative affects - forms of discomfort:</b>	<b>Enhanced physical conditions:</b>	<b>Positive affects - forms of comfort:</b>
Close confinement; overcrowding	➔ <i>Physical</i> : general stiffness, muscle tension	Space for spontaneous locomotion	➔ <i>Physical</i> comfort
Unsuitable substrate, wet/soiled ground	➔ <i>Physical</i> : musculoskeletal pain, skin irritation	Suitable substrate, well-drained ground	➔ <i>Physical</i> comfort
Air pollutants: NH <sub>3</sub> , CO <sub>2</sub> , dust, smoke	➔ <i>Respiratory</i> : breathlessness, air passage irritation/pain	Fresh air dissipates contaminants	➔ <i>Respiratory</i> comfort
Aversive odours	➔ <i>Olfactory</i> : revulsion at foul or repellent odours	Foul smells dissipated by fresh air & good hygiene	➔ <i>Olfactory</i> comfort
Thermal extremes	➔ <i>Thermal</i> : chilling, dampness, overheating	Effective shelter and shade available	➔ <i>Thermal</i> comfort
Loud or otherwise unpleasant noise	➔ <i>Auditory</i> : impaired hearing or ear pain	Effective noise control measures are in place	➔ <i>Auditory</i> comfort
Light: inappropriate intensity	➔ <i>Visual</i> : eye strain due to flashing, glare or darkness	Light intensity kept at tolerable levels	➔ <i>Visual</i> comfort
Monotony: ambient, physical, lighting	➔ Malaise from unnatural constancy	Within-day environmental variability maintained	➔ Congenial variety and predictability
Unpredictable events	➔ Anxiety, fear, hypervigilance	Predictability achieved by established routines	➔ Relaxation-based ease and calmness
Physical limits on rest and sleep	➔ Exhaustion	Conditions conducive to rest and sleep	➔ Well rested



# Domain 3: Health Conditions and their Associated Domain 5 Affects

## Negative Conditions

### **Presence of:**

*Injury:* acute, chronic, husbandry mutilations



### **Negative affects:**

Pain (many types), breathlessness, debility, weakness, sickness, malaise, nausea, dizziness

*Disease:* acute, chronic

*Functional impairment:* due to limb amputation, other therapies; genetic, lung, heart, vascular, kidney, gut, neural, or other problems

*Obesity or leanness:* physical and metabolic consequences



Affects of being too fat or thin, and of metabolic and pathophysiological sequelae

Poisons



Many affects due to mode of action

Poor physical fitness, muscle de-conditioning



Physical weakness and exhaustion

## Positive Conditions

### **Minimal or no:**

Injury



### **Positive affects:**

*Comfort* of good health and functional capacity

Disease



*Comfort* of good health and functional capacity

Functional impairment



*Comfort* of good health and functional capacity

Extreme body condition scores



*Comfort* of good health and functional capacity

Poisoning



*Comfort* of good health and functional capacity

Poor fitness (fitness level good)



Vitality of fitness and pleasurable vigorous exercise



# Domain 4: Behavioural Interactions and their Associated Domain 5 Affects

## INTERACTIONS WITH THE ENVIRONMENT

### Exercise of 'agency' is impeded:

Invariant, barren, confined environment (ambient, physical, biotic)

Inescapable sensory impositions

Choices markedly restricted  
Environment-focussed activity constrained

Foraging drive impeded



Boredom, helplessness  
Depression, withdrawal



Various combinations: startled by unexpected events, neophobia, hypervigilance, anger, frustration, negative cognitive bias



Anger, anxiety, fear, panic, insecurity, neophobia



Exhaustion

### Negative affects:

### Exercise of 'agency' is promoted

Varied, novel environment

Congenial sensory inputs

Available engaging choices  
Free movement

Exploration, foraging



### Positive affects:

Interested, pleasantly occupied



Likes novelty, post-inhibitory rebound



Calm, in control



Engaged by activity



Energised, focussed

## INTERACTIONS WITH OTHER ANIMALS

Animal-to-animal interactive activity constrained



Loneliness, depression  
Yearning for company



Thwarted desire to play



Sexual frustration



Thwarted hunting drive

Significant threats  
Limits on threat avoidance, escape or defensive activity



Anger, anxiety, fear, panic, insecurity, neophobia



Exhaustion

Bonding/reaffirming bonds  
Rearing young



Affectionate sociability  
Maternal, paternal or group rewards



Playing

Excitation/playfulness



Sexual activity

Sexually gratified



Hunting

Alert engagement, highly stimulated



Absence of threats

Secure, protected, confident



Sleep/rest sufficient

Energised, refreshed; post-inhibitory rebound



## INTERACTIONS WITH HUMANS

### **Negative human attributes and behaviour:**

*Attitude:* uncertain, fearful, indifferent, insensitive, impatient, oppressive, belligerent, domineering, callous, cruel, vindictive

*Voice:* hesitant, angry, loud, shouting

*Aptitude:* inexperienced, unskilled, untrained, unqualified

*Handling/controlling:* erratic, rough (slap, hit, kick, grab, poke, beat, whip); excessively forceful, violent; punishment-focussed; more negative pressure than is needed for training objective

### **Animal behaviours and negative affects:**

*Behaviours (e.g.):* long flight distance, hypervigilant, attack/fight, hyper-reactive, escape avoidance, freezing, cowering, appeasing, withdrawn, non-compliant

*Affects:* anxiety, fear, panic, terror, neophobia; insecurity, confusion, uncertainty, persistent unease; helplessness; pain from injuries; negative cognitive bias

### **Positive human attributes and behaviour:**

*Attitude:* confident, caring, sensitive, patient, kind, empathetic

*Voice:* confident, calm, clear, encouraging, pleasantly rhythmic

*Aptitude:* experienced, skilled, trained, qualified

*Handling/controlling:* skillful, gentle (stroke, touch, push, guide); firm, temperate, restrained; reward-focussed; mimics allo-grooming by conspecifics; using subtle pressure cues, secondary reinforcers and timely release of aversive stimuli

### **Animal behaviours and positive affects:**

*Behaviours:* short flight distance, calm alertness, at ease with imposed hands-off or hands-on contact, compliantly responsive, explores novel events, seeks contact, variably bonded with humans

*Affects:* calm, confident, at ease, feels in control; enjoys variety; finds being bonded with humans rewarding



This guide is an adaptation of the Five Domains Model of Welfare Assessment and Monitoring that shows how it can be applied to achieve good horse welfare. The model has four physical or functional domains and a mental domain that acknowledges the horse's experience.

The aim for providing good welfare is to achieve physical and functional well-being, as well as give horses the opportunity to experience positive emotions in all areas: nutrition, health, environment, behaviour and interactions with humans.



## Nutrition

### The physical domain

#### Restrictions:

- Not enough water
- Not enough food
- Poor quality food
- Lack of food variety

#### Opportunities:

- Drink enough water
- Eat enough food
- Eat a balanced diet
- Eating correct quantities
- Eat a variety of foods

Minimum standard of  
**Care**



### The mental domain

#### Negative experience:

- Thirst
- Hunger (general)
- Hunger (salt)
- Malnutrition, malaise
- Bloated, over full
- Colic (gastrointestinal pain), gastric ulcers

#### Positive experiences:

- Wetting/quenching and the pleasure of drinking
- The pleasure of different tastes, smells and textures
- The pleasure of salt taste
- The pleasure of chewing for long periods
- Post prandial satiety (comfortably full)
- Gastrointestinal comfort

**Welfare**



## Health

### The physical domain

#### Signs of ill-health:

- Disease (acute, chronic)
- Injury (acute, chronic, surgery)
- Functional impairment (due to limb, lung, heart, kidney, neural or other problems).
- Poisons
- Obesity/leanness
- Poor physical fitness (muscle de-conditioning)

#### Signs of health:

- Little or no disease
- Little or no injuries
- Little or no dysfunctional body systems
- Well nourished
- Body condition is appropriate
- Good fitness level

Minimum standard of  
**Care**



### The mental domain

#### Negative experience:

- Breathlessness
- Pain (many types)
- Debility, weakness
- Sickness, malaise
- Nausea
- Dizziness
- Physical exhaustion

#### Positive experience:

- Comfort of good health and a high functional capacity
- Vitality and fitness

**Welfare**







As well as providing for the physical and behavioural needs, how many positive experiences can you make available to your horse on a daily basis?



## Environment

### The physical domain

#### Restrictions:

Thermal extremes  
 Unsuitable footing  
 Confinement  
 Pollutants and odours  
 Noise  
 Monotony - ambient, lighting

#### Opportunities:

Thermally tolerable  
 Suitable footing  
 Space for free movement  
 Fresh air  
 Noise acceptable  
 Normal environmental variety

Minimum standard of  
**Care**



### The mental domain

#### Negative experience:

Discomfort due to:  
 Chilling, overheating  
 Physical pain, skin irritation, muscle stiffness and tension.  
 Breathlessness, auditory impairment, eye strain  
 Malaise from unnatural constancy

#### Positive experience:

Comfort:  
 Thermal  
 Physical  
 Respiratory  
 Olfactory, visual  
 Herd living  
 Variety related comfort

**Welfare**



## Behaviour and human interaction

### The physical domain

#### Agency is impeded:

Barren environment  
 Choices markedly restricted  
 Constraints on environment-focused activities (exploration, grazing)  
 Constraints on horse-to-horse interactions.  
 Sleep/rest deprivation  
 Training confusion  
 Inconsistent human interaction

#### Agency:

Varied, novel, engaging environmental challenges  
 Free movement  
 Exploration  
 Foraging  
 Bonding  
 Rearing young, sexual behaviour  
 Sufficient sleep/rest  
 Consistent, clear training

Minimum standard of  
**Care**



### The mental domain

#### Negative experience:

Frustration, loneliness  
 Boredom, helplessness  
 Depression  
 Sexual frustration  
 Anxiety, fear, panic, anger  
 Neophobia  
 Exhaustion

#### Positive experience:

Calm, engaged, in control  
 Affectionate sociability  
 Maternally rewarded, sexual gratification, playfulness  
 Secure, protected, confident, likes novelty, energised

**Welfare**



Adapted by Cristina Wilkins, *Horses and People Magazine*, 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



B

# Five Domains Model for Welfare Assessment

## Nutrition

- Enough clean water
- Enough food
- Nutritious, appropriate diet
- Food is presented in a varied, interesting way
- Spends time chewing and foraging

## Environment

- Can move around, get up and lie down easily
- Able to exercise freely
- Can avoid environmental extremes
- Lives in a complex and stimulating environment

## Health

- A healthy weight
- Free from injury
- Free from symptoms of disease
- Free from pain or distress
- Physically fit

## Behaviour

- Can express a range of important behaviours
- Has some control over the environment
- Can interact socially with other horses
- Can avoid conflicts or threats

### MENTAL STATE (Subjective Experience)

- Do they find eating and drinking pleasurable and satisfying?
- Do they appear comfortable in their environment?
- Do they appear to be functioning well?
- Do they appear satisfied, in control, socially engaged, confident, secure?



### OVERALL IMPACT ON WELFARE

*Adapted from: The 2020 Five Domains Model: Including Human-Animal Interactions in Assessments of Animal Welfare, by D.J. Mellor, N.J. Beausoleil, K.E. Littlewood, A.N. McLean, P.D. McGreevy, B. Jones and C. Wilkins. Animals 2020, DOI: 10.3390/ani10101870*



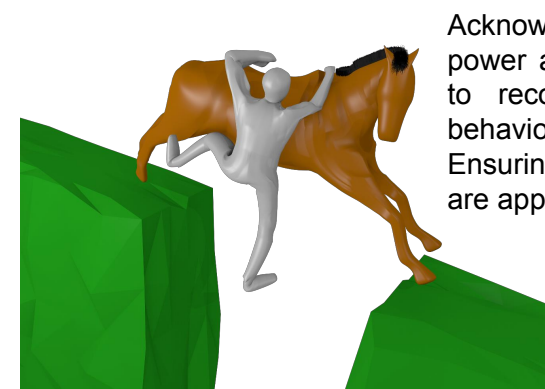


# First Principles of Horse Training



Human and horse welfare depend upon training methods and management that demonstrate:

## Human and Horse Safety



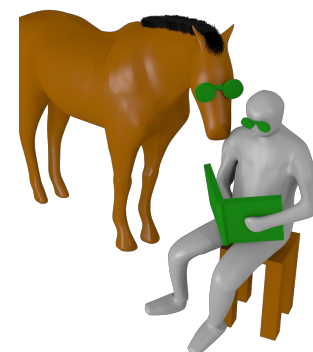
Acknowledging the horse's size, power and flightiness. Learning to recognise flight/fight/freeze behaviours early. Ensuring horses and humans are appropriately matched.

## The Nature of Horses



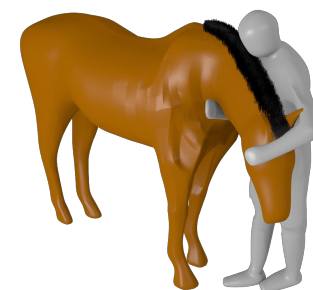
Meeting horse welfare needs such as foraging, freedom and equine company. Acknowledging that horses may perceive human movements as threatening. Avoiding dominance roles during interactions.

## Mental and Sensory Abilities



Acknowledging that horses think, see and hear differently from humans. Keeping the length of training sessions to a minimum. Not overestimating or underestimating the horses' mental abilities.

## Emotion



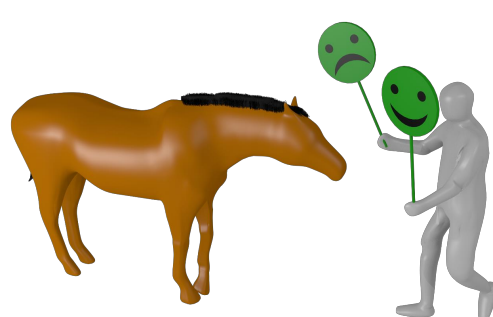
Understanding that horses are sentient beings capable of suffering. Encouraging positive emotional states. Acknowledging that consistency makes horses optimistic for further training outcomes. Avoiding pain, discomfort and/or triggering fear.

## Classical Conditioning



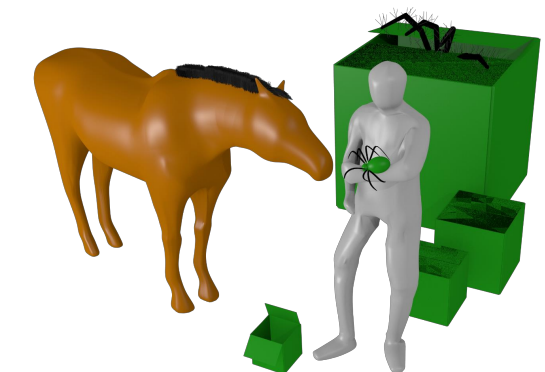
Click!

Acknowledging that horses readily form associations between stimuli. Always using a light signal before a pressure-release sequence.



Understanding that behaviours become more or less likely as a result of their consequences. Removing pressures at the onset of a desired response. Minimising delays in reinforcement. Using combined reinforcement. Avoiding punishment.

## Desensitisation



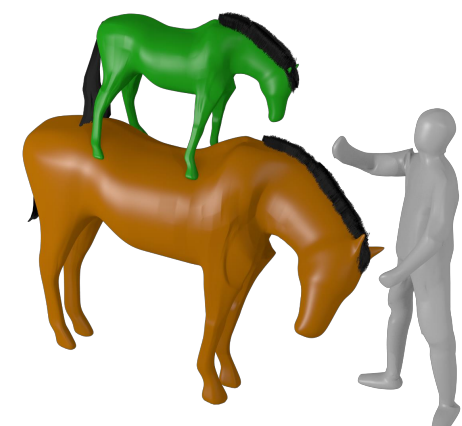
Learning to apply correctly systematic desensitisation, over-shadowing, counter-conditioning and differential reinforcement. Avoiding flooding (forcing the horse to endure aversive stimuli).

## Shaping



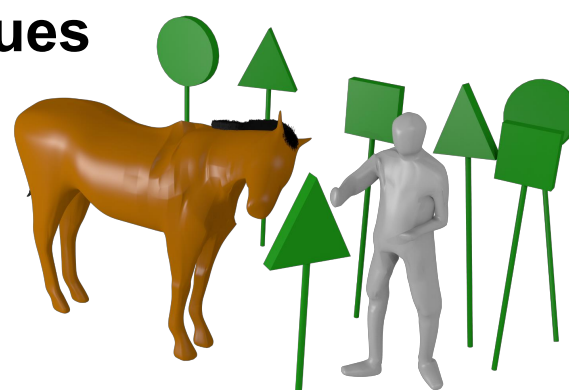
Breaking down training into the smallest achievable steps and progressively reinforcing each step toward the desired behaviour. Changing the context (trainer, place, signal), one aspect at a time. Planning the training to make it obvious and easy.

## Self Carriage



Training the horse to maintain gait, tempo, stride length, direction and body posture. Avoiding forcing a posture or maintaining it through relentless signalling (naggin).

## Cues

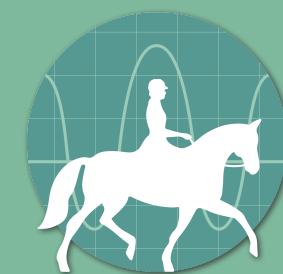


Ensuring the horse can discriminate one signal from the other. Ensuring each signal only has one meaning. Timing the signals with limb biomechanics. Avoiding the use of more than one signal at the same time.

Modified text and figures: Rudolf Leuthardt

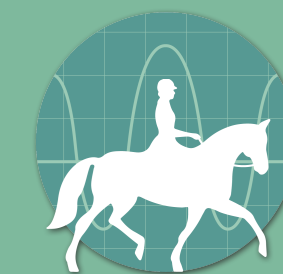
This poster is a summary of the First Training Principles. To read the extended version go to:

[www.equitationsscience.com](http://www.equitationsscience.com)



# First Training Principles

Human and horse welfare depend upon training methods and management that demonstrate:



## 1. Regard for human and horse safety

By acknowledging the horse's size, power and flightiness | By learning to recognise flight/fight/freeze behaviours early. By minimising the risk of causing pain, distress or injury | By ensuring horses and humans are appropriately matched.

## 2. Regard for the nature of horses

By meeting horse welfare needs such as foraging, freedom and equine company | By respecting the social nature of horses. By acknowledging that horses may perceive human movements as threatening | By avoiding dominance roles during interactions.

## 3. Regard for horses' mental and sensory abilities

By acknowledging that horses think, see and hear differently from humans | By keeping the length of training sessions to a minimum. By not overestimating the horse's mental abilities | By not underestimating the horse's mental abilities.

## 4. Regard for emotional states

By understanding that horses are sentient beings capable of suffering | By encouraging positive emotional states | By acknowledging that consistency makes horses optimistic for further training outcomes | By avoiding pain, discomfort and/or triggering fear.

## 5. Correct use of desensitisation methods

By learning to apply correctly systematic desensitisation, over-shadowing, counter-conditioning and differential reinforcement. By avoiding flooding (forcing the horse to endure aversive stimuli).

## 6. Correct use of operant conditioning

By understanding that horses will repeat or avoid behaviours according to their consequences | By removing pressures at the onset of a desired response | By minimising delays in reinforcement | By using combined reinforcement | By avoiding punishment.

## 7. Correct use of classical conditioning

By acknowledging that horses readily form associations between stimuli. By always using a light signal before a pressure-release sequence.

## 8. Correct use of shaping

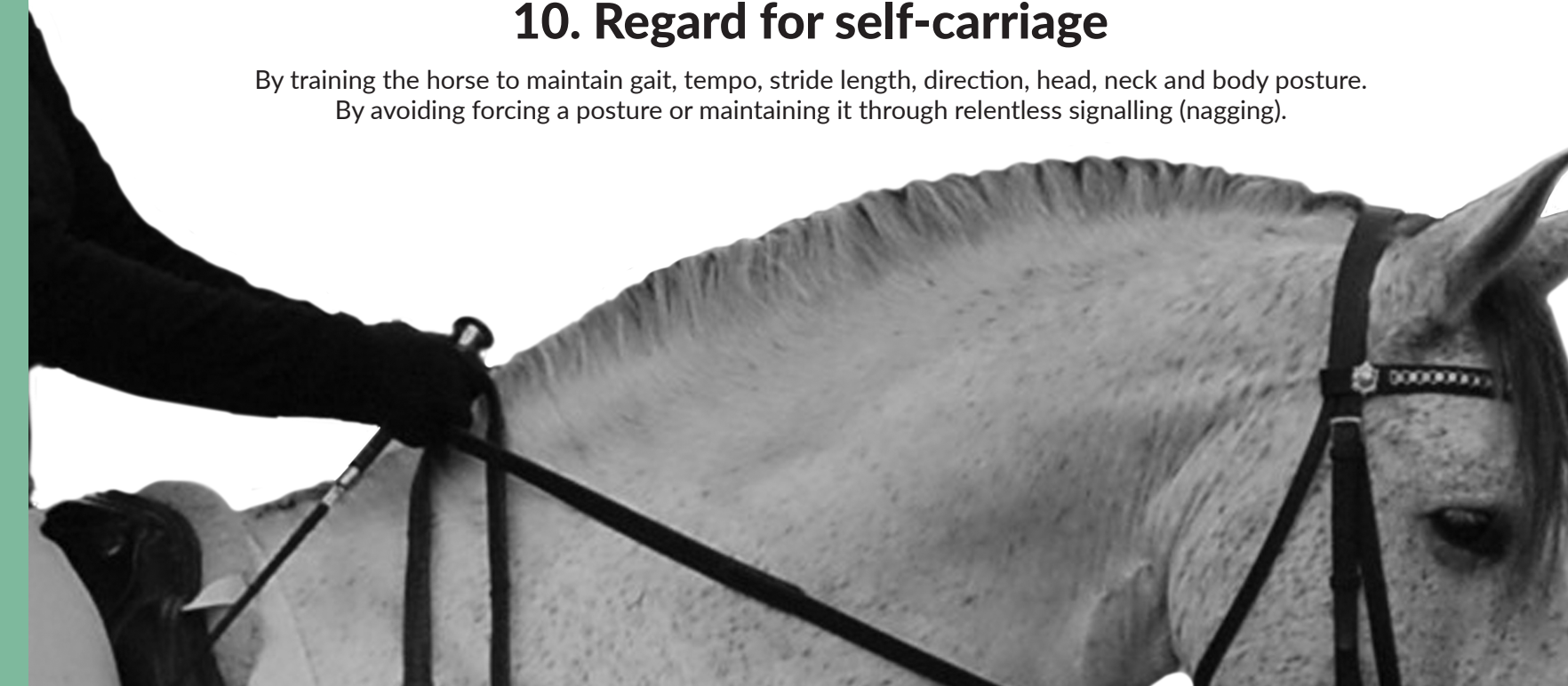
By breaking down training into the smallest achievable steps and progressively reinforcing each step toward the desired behaviour. By changing the context (trainer, place, signal), one aspect at a time | By planning the training to make it obvious and easy.

## 9. Correct use of signals or cues

By ensuring the horse can discriminate one signal from another | By ensuring each signal only has one meaning. By timing the signals with limb biomechanics | By avoiding the use of more than one signal at the same time.

## 10. Regard for self-carriage

By training the horse to maintain gait, tempo, stride length, direction, head, neck and body posture. By avoiding forcing a posture or maintaining it through relentless signalling (nagging).



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# **APPENDIX O – THE FEI EQUESTRIAN CHARTER**

**Equine welfare involves the physical, psychological, social and environmental wellbeing of the Horse, and all Horses involved in sport and leisure activities should be able to live a good life. The FEI requires all those involved in sport involving Horses adhere to the FEI Code of Conduct, and to acknowledge and accept that at all times the welfare of the Horse must be paramount by pledging to the FEI Equestrian Charter.**

- I understand that it is a privilege to involve Horses in sport and this comes with responsibilities to the Horse.**
- I commit to respecting the Horse as a sentient creature capable of feeling both positive and negative emotions, and to ensuring its welfare is always my priority.**
- I undertake to continually develop my understanding of Horse behaviour and welfare needs, and to proactively use this knowledge to provide a good life for Horses with which I am involved.**



# KONFLIKTİKÄITUMINE

Loomal on raskusi vaimse või füüsilise ebamugavustundega toimetulekul. Looduses selliseid käitumisi ei esine.

McGreevy et al.2005

**Conflict behaviour:** Stress-induced behavioural changes that arise from conflicting motivations, especially when avoidance reactions are prevented. Conflict behaviour may be agonistic behaviours, redirected aggression or displacement activities. If the stressor is recurrent, conflict behaviour may manifest as repetition and ritualization of original conflict behaviours. Stereotypies and self-mutilation may develop from severe, chronic or frequent stressors. In equitation, conflict behaviours may be caused by application of simultaneous opposing signals (such as go and stop/slow) such that the horse is unable to offer any learned responses sufficiently and is forced to endure discomfort from relentless rein and leg pressures. Similarly, conflict behaviour may result from incorrect negative reinforcement, such as the reinforcement of inconsistent responses or lack of removal of pressure.



**Poker Face:** Discrepancies in behaviour and affective states in horses during stressful handling procedures. K.Squibb et al.2018

Behaviourally assessed equine personality is not predictive of physiological stress sensitivity. A.Jolivald et al.2022

Fake it 'til you make it... C.Rudd et al.2022

Recreational horses' facial expressions prior to mounting. K.Olczarek & N.Lazarczyk 2022

-Ridden Horse Pain Ethogram (RHpE) (Dyson et al 2018)

-Equine Grimace Scale (Dalla Costa et al 2014)



# Hea heaolu eelised:

- Ühtne heaolu st kõigi heaolu parem
- Paremad tulemused
- Odavam
- Ohutum



# AITÄH!

OLGE EESKUJUKS!

KÜSI ENDALT, MIDA SAAN TEHA PAREMINI

