

Appendix 1. General indicators and brief descriptions of the health state, behavioral and mental indicators used for the animal welfare index in the assessment of the welfare state of 127 urban draught horses.

Indicator	Categorization	Description
General		
Age	Years	Determined by history from the owner and confirmed by inspection of teeth (Crane 1997).
Sex	Mare, stallion or gelding	Recorded by observing the external genitalia.
Conformation	Adequate/inadequate	Determined to establish whether the horse has a speed or draught type morphology. Calculated using the anamorphic index (Speed < 2.12; Draught >2.12) (Cassai 1944).
Estimated live weight	Kilograms	Calculated using the modified equation for Chilean horses described by Meyer (1992).
Welfare		
Physical state (0.357)^a		
Body lesions (0.039) ^b	Present /absent	Wounds of any size and severity were recorded by their location. Lesions at the labial commissures were included.
Body condition score (BCS) (0.039) ^b	Adequate/inadequate	Assessed on a five-point scale from 1 (very thin) to 5 (very fat) including half scores (Burn et al 2010a).
Pulse rate (0.039) ^b	Normal/abnormal	Assessment based on reference values described by Knottenbelt (2006).
Respiratory rate (0.039) ^b	Normal/abnormal	Assessment based on reference values described by Knottenbelt (2006).
Rectal temperature (0.039) ^b	Normal/abnormal	Assessment based on reference values described by Knottenbelt (2006).
Mucous membranes (0.039) ^b	Normal/abnormal	The oral mucous membrane was assessed based on the color of the mucosa using criteria described by Mekuria et al (2013).
Hoof health (0.039) ^b	Adequate/inadequate	The observer assessed shape, conformation and quality based on the criteria described by Popescu et al (2014) and Burn et al (2010b).
Limb conformation (0.039) ^b	Adequate/inadequate	The observer assessed conformation based on the criteria described by Popescu et al (2014).
Skin and coat health (0.039) ^b	Adequate/inadequate	Assessment based on the criteria described by Popescu et al (2014). The presence of external ectoparasites of any species anywhere on the body was included.
Behavioral state (0.227)^a		
Approximation test (0.056) ^b	Ignore/friendly/Avoid/Aggressive	Assessment based on the criteria described by Popescu & Diugan (2013).
Walk down side (0.056) ^b	Ignore/friendly/Avoid/Aggressive	Assessment based on the criteria described by Popescu & Diugan (2013).
Chin contact (0.056) ^b	Accepts/avoids	Assessment based on the criteria described by Burn et al (2010b).
Allowing observer to pick up limbs (0.056) ^b	Accepts/avoids	This indicator was included to evaluate the horse's habituation and type of response (positive or negative) to usual handling, as occurs during shoeing.
Mental state (0.416)^a		
General attitude (0.104) ^b	Alert/apathetic or depressed	Assessment based on the criteria described by Popescu & Diugan (2013) and Burn et al (2010b).
Company (0.104) ^b	Has company/doesn't have company	The observer assessed if the horse is kept with another horse or not.
Facial expressions (0.104) ^b	Normal/abnormal	Assessment of the facial expressions of pain, e.g. if the horse's facial muscles are tightened or not, or if their eyes are open.
Pain (Lameness) (0.104) ^b	Present /absent	The observer assessed presence of lameness, uneven stride, reluctance to put weight on one or more limbs, uneven head-nodding or hip movement (Burn et al 2010b).

^aWeights of the dimensions used for construction of the animal welfare index for working horses according to the methodology described in Lanás et al (accepted).

^bWeights of the indicators within each dimension calculated according to the methodology described in Lanás et al (2018).

Appendix 2

Photographs used in the Owner's Perception of Equine Pain Scale showing: (A) halter burn wound, (B) fetlock rope burn wound, (C) poor trimming and shoeing, (D) cannon and pastern rope burn wound, (E) articular capsule wound, (F) mastitis, (G) open tibia fracture, (H) castration, (I) saddle sore, (J) subsolar abscess, (K) septic arthritis in foal, (L) skin lesions on withers, (M) dermatophilosis, (N) evisceration, (O) hoof overgrowth, (P) laminitis with hoof loss, (Q) pectoral burn wound.





