

# **Exploring the recognition and management of obesity in horses through qualitative research**

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*By*

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This thesis is based on research carried out in the Department of Epidemiology and Population Health, Institute of Infection and Global Health, University of Liverpool.  
Except for where indicated, this thesis is my own unaided work.

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## Abstract:

### **Exploring the recognition and management of obesity in horses through qualitative research - *Tamzin Furtado***

Equine obesity is one of the biggest welfare challenges facing the UK's leisure horse industry, with up to 60% of horses obese or overweight, leading to a plethora of health problems such as equine metabolic syndrome, laminitis, arthritis, and soft tissue injuries. Veterinary research has examined how to effectively diet horses in a hospital setting, but has not explored the issues owners face in day-to-day equine management which lead to equine obesity, how owners conceptualise weight as a part of horse health, or how owners might effectively address excess equine weight.

This study brought together data from diverse sources, including 16 discussion threads from open-access UK discussion fora, interviews with 28 leisure horse owners and 19 equine professionals, focus groups with 24 horse owners, and two years of observational field notes. These data were analysed using a grounded theory approach in order to determine the common themes and explore the challenges surrounding equine obesity.

The study found that the changing role of the UK's horses toward being companion animals has led to an equine environment which is potently obesogenic. For example, many owners prioritise caring and nurturing behaviours over exercising their horses, and the loss of safe hacking spaces has led to owners reducing their horses' activity levels. In line with the leisurisation of the horse, a commercialist market has arisen to cater for it, with items which encourage the horse owner to care through consumption; for example buying rugs, feeds and accoutrements which humanise the horse. Further, the leisure horse industry has led to the diversification of working farms to livery yards, providing spaces where horse owners have little ability to alter their horse's management and grazing. In this environment, it is inevitable that horses will increase in weight if there is no intervention.

As a result of these factors, owners had a complex relationship with their awareness of equine obesity, and often ignored or did not fully recognise their horses' weight status until the horse began to suffer from a comorbidity such as laminitis, leading to the owner re-assessing their care. Professionals considered obesity a serious welfare issue, and felt pressure to find ways of revealing excess weight to owners, but considered it a contentious topic. When weight management was discussed between owners or between owners and professionals, owners preferred approaches tailored to their own horse, yard set-up and time availability. The 40 weight management strategies identified in the study were categorised into four areas; reducing grazing, reducing supplementary feed, increasing exercise and increasing thermoregulation, in order to help owners to plan effective weight management whatever their situation. Using theory from behaviour change science, these strategies were collated into a guide and decision making tool to help owners create individualised plans for managing their horses weight. Recommendations for equine welfare groups and professionals were also developed to assist these stakeholders in managing equine weight at an individual, yard, or societal level.

## List of abbreviations

BCS: Body Condition Scoring

COM-B: Behaviour change model (Capability, Opportunity, Motivation – Behaviour)

DIY: Do-it-yourself livery

EMS: Equine Metabolic Syndrome

FG: Focus Group

ID: Irish draught horse [breed]

IDI: In-depth Interviews

ISH: Irish Sports Horse [breed]

PRE: Pura Raza Espanola [breed]

RDA: Riding for the Disabled Association

TB: Thoroughbred

TPB: Theory of Planned Behaviour

YM: Yard Manager



## Introduction

As modern human lifestyles evolve, obesity is becoming as much a problem for the companion animals around us, as it is to humans. Research suggests that the prevalence of overweight dogs in the UK is currently at around 70%(1), with cats thought to be not far behind(2,3). Tackling pet obesity is different to tackling human obesity, though no less difficult. Canine obesity expert Alex German suggests that there is no clear, validated, successful method which ensures sustainable weight loss in companion animals in the home setting, because of the human-animal relationship complicating dieting processes which are easily achievable in a hospital setting(4–6). Owner attitudes and “parenting style” towards pets are considered to be closely linked to weight status(7).

While weight problems in leisure horses is at comparable levels to dogs and cats, the equine lifestyle is necessarily very different to other pets, and provides additional complications when it comes to obesity management, even before considering the complexities of the human-animal bond. Horses are grazing animals and require near-constant access to forage (such as grass) in order to avoid gastrointestinal problems such as ulcers and colic, which can be fatal. Weight management methods which might reduce the bodyweight of dogs, such as simply restricting food to a certain amount per meal, are therefore more complicated for overweight horses, who require near-constant access to forage. Further, horses are herd animals, and restricting them from grass often entails separating them from their companions, which can cause distress. Unlike dogs, horses often reside away from the home settings, and some of the day-to-day aspects of their care (such as which field they live in) may not be under the control of the horse owner. Equine weight fluctuates seasonally in line with the seasonal grass growth; reducing weight is not necessarily an event which can be performed once and then maintained, but must be renewed annually. If we cannot find sustainable weight loss for humans, cats and dogs, it is no surprise that equine obesity remains problematic.

Yet, this is a life and death issue. While horses are at risk of the same issues as overweight humans, cats and dogs such as osteoarthritis and decreased insulin sensitivity, horses suffer from an additional problem: laminitis. This painful, debilitating and sometimes fatal hoof

condition often occurs as a result of hormonal imbalances in relation to difficulties with insulin sensitivity. Recent research has suggested that around 10% of UK leisure horses will suffer from laminitis, often as a result of being overweight(8), and these cases may be fatal.

So far, little has been done to address equine obesity on any wide scale, beyond calls for equine professionals to address obesity with owners of obese horses, and the release of leaflets about the dangers of obesity in horses(9–11). However, human behavioural change sciences clarify the importance of starting any public health initiatives from a contextual knowledge of the lived experience of those whose behaviour is to be changed, and human public health offers lessons learnt from unsuccessful campaigns which have failed to do so. This project therefore seeks to bring together equine veterinary science around obesity, qualitative research about the experience of the horse owners, and information from the field of behaviour change science about how human behaviour can be addressed in order to reduce the prevalence of overweight horses.

This thesis describes the results of in-depth qualitative research which examines the issues surrounding equine weight and its management. Chapter 1 presents a review of the literature around equine obesity and its prevalence, as well as the existing research around the human-horse bond and its potential effects on management. I also describe research around the nature of human behaviour change, which is fundamental to understanding how to improve animal welfare in issues such as obesity; we cannot hope to improve the welfare of animals without first changing human behaviour.

Chapter 2 presents the methods used in this study, including the theoretical background to the sociological approach, the use of grounded theory methodology, and the data collection procedures. This chapter also reports the research objectives and aims.

Chapter 3 gives an introduction to the results of the overall study, describing the theoretical model developed from the results, and how this model helps us to understand the lifeworld and experiences of the horse owner; for example how the owner thinks about horse husbandry, the influences surrounding them, and how they relate to their horse. This chapter also describes how the model highlights that horses are surrounded by an obesogenic environment as a result of the changing horse-human relationship, and therefore increasing obesity levels are inevitable if intervention does not occur.

Chapter 4 focusses on the horse owner as an individual; how owners come to consider themselves as “horsepeople”, and how they are initiated into equestrian life, as well as how they perceive their horse within their wider “real life” of work, family and so on. This chapter explores how these owners perceive their relationship with the horse, and how they make decisions around its care and behaviour. I discuss how each element contributes to obesity by constructing the horse as a companion animal which must be protected and cossetted.

Chapter 5 described the owners’ construction of the horse itself; an animal which is simultaneously prized for being biddable and compliant, as also having a “wild” side behaviourally and physiologically. I explore how owners described having created transformations in their horses, usually moving the horse from a “wild” state toward compliance with the owners’ ideals, and that this transformation was key to the relationship the owner described with their horse. This chapter explores how these constructions of the horse are relevant to obesity, often because the horses’ “wild” side is considered potentially dangerous by owners, who moderate the activities performed by the horse in order to preserve their own, and the horses’ safety. Further, the management choices undertaken by owners in order to create such transformations are themselves obesogenic.

Chapter 6 presents the influences surrounding the horse owner, including social networks, professional advisors such as vets and farriers, the yard manager/owner, and the wider equestrian society. This chapter describes how horse owners consult and are affected by these networks, but present themselves as advocates for their horse as an individual and thus moderate the advice they receive from others. This chapter also explores the effects of the relationship between horse owner and yard owner, as well as the influences of commercialism which have occurred as horses become a leisure industry. Each of these components leads to obesogenic effects on the horse.

Chapter 7 describes the culmination of the factors presented in 4, 5 and 6 on the horse owner; the complex process of recognition of fat and its status as partly a symbol of health, and a sign of disease. This chapter describes how owners spoke about their initial recognition of obesity and how they decided to make changes to their horse’s management as a result of it.

In chapter 8, I discuss how the conceptual model presented as a result of this project helps to clarify the ways in which horses are exposed to an obesogenic environment, and owners face battles to make changes. This chapter links these findings with models of human behavioural change, in order to ascertain the problems to overcoming equine obesity in an individual horse-owner combination and at a wider societal level, and presents recommendations for practice as a result of this change.

## Chapter 1: Literature Review

Equine obesity is a multifaceted welfare problem for UK horses, made more complex by the varying recognition it receives from different groups of stakeholders. Obesity is considered by equine professionals to be a serious and preventable welfare problem, “*certainly the biggest welfare problem facing UK horses today*”(12) with potentially life-threatening consequences for horses caused mainly by obesity-related diseases such as Equine Metabolic Syndrome (EMS), laminitis, and osteoarthritis. An aptly named report, ‘Horses In our Hands’(13) brought together a group of experts and lay people to discuss the welfare challenges facing horses, and placed inappropriate nutrition as the second biggest challenge following unresolved stress/pain. Yet, to horse owners obesity may be largely unrecognised; an invisible problem in plain sight. Several studies have shown that owners fail to recognise overweight horses(14–17), and this is supported by veterinary opinion(18). In fact, horse owners may find obesity amusing, with numerous memes depicting overweight horses with humorous comments minimising its severity. How can a welfare problem be so prevalent and carry such severe consequences for the animal, and yet be so under recognised by those responsible for its management?

This literature review explores this question, examining the research and theories that shed light onto the factors surrounding obesity and its management, and identifying the gaps in knowledge which exist in current literature. Firstly, I will examine the existing research around the prevalence and risk factors for obesity, before moving on to consider how public health research around behaviour change might provide insights into the best ways to assist owners in managing obesity. Finally, I will consider the existing research around human-animal relationships, and how these relationships might play a role in creating the epidemic of obesity which is present in the UK today.

## 1.1 Obesity in UK horses: existing research

Epidemiological and veterinary research has produced a great deal of information about equine obesity prevalence, risk factors, physiology and diet management. Examining this information provides insight into the factors which surround obesity, as well as illuminating gaps in current knowledge.

Accurately estimating levels of obesity in the population of UK horses is a challenging task, partly because owner-reports of weight and body condition are likely to be under-estimates, meaning that researchers cannot necessarily rely on self-report; for example Wyse et al. found that just 50% of owner-estimates of body condition scores (BCS) were in agreement with a professionally rated condition score of their horse, with the majority of owners underestimating their horse's BCS (16,17). However, various studies have attempted to provide an indication of the prevalence of obesity. In the largest study conducted in the UK so far, Robin et al. collected owner-reported data for 792 horses and ponies randomly selected from a sample of veterinary practices and found the prevalence of obesity to be 31.2% (19). The researchers suggested that due to this study's reliance on owner-reporting, the levels might well be higher. Other studies agree that levels of obesity are indeed higher, particularly when focussing solely on leisure horses: Stephenson et al. compared owner and expert-rating scores for obesity, then adjusted owner-reported scores by the difference in owner and expert scores, in order to attempt to adjust for the owners' bias(17). As a result, they considered obesity in the horses of non-professional horse owners in the UK to be at 54%(17); other studies using independent raters found levels at 45%(16) (in leisure horses in Scotland) and 65%(20) (in horses competing at an unaffiliated UK championship). Although the earliest study from 2008 reported the prevalence of obesity in leisure horses in Scotland to be 45% and more recent estimates are even higher, due to the lack of commonality in study methodology and the differences in region and horse use it is not possible to obtain a clear picture of whether levels of obesity are still increasing.

Equine weight fluctuates throughout the year(21,22), meaning that a horse which is obese in summer may not be so in the winter, and therefore studies estimating obesity at population level should ideally account for these seasonal changes. Exploring this issue, Giles et al(23)

followed 96 leisure horses, measuring them during late winter and late summer, and overcoming the issue of owner-reporting by using a single trained observer at two time points. This study found that seasonality was significant, with obesity prevalence 27% during the winter, increasing to 35% during the summer(23); however the seasonal variation in individual animals in terms of weight was lower if the horse was obese (i.e. obese horses were more likely to remain obese, while others fluctuated more through the seasons). In contrast, Robin et al.'s data collected information at one time point, but spanning two years, and did not find a significant difference for obesity risk depending on season(19); whether this effect is observed may, of course, depend on the characteristics of the seasons measured, for example the rainfall during summer or temperature during winter.

Breed is considered to be a major risk factor for obesity, with breeds such as UK native breeds, cobs, Welsh breeds and some draught horses found to be most likely to be obese (23)(19). Native breeds may still be found living in their natural state in some parts of the UK, such as the New Forest, Dartmoor, Exmoor, Wales, and the Scottish highlands; these horses are therefore well adapted to cope with a wild lifestyle, meaning that the domesticated life may provide more "home comforts" than is healthy for them; indeed some researchers dub obesity a "disease of domesticity" for such horses(24). For example, native ponies are adapted to travelling large distances in feral circumstances while eating only sparse moorland grasses(25), yet 86.1% of UK leisure horses are provided with supplementary feed(26); could this be partly responsible for the number of overweight horses? One study found that supplementary feeding did not have a statistically significant effect on obesity(23). However this study did not adjust for exercise levels: it could be related to the fact that horses who are working harder are often fed more supplementary feed(19) in order to offset the energy requirements, meaning that other types of food intake (such as forage) and exercise may be more to blame for obesity prevalence.

Research shows that turnout at grass is a significant risk factor for obesity (19,23,27). Giles et al. found that horses subjected to grass intake-control methods such as grazing muzzles, restricted grazing or moving from field to field had a seasonal belly girth change of 5.4% less than those whose grazing was uncontrolled. Some researchers have suggested that many

horses are pastured on ex-dairy grasses which they describe as “*mars bars*” or “*rocket fuel*” (12), particularly for those native ponies that have evolved to live on exposed, rough moorland hillsides.

An increasing number of horses are owned for leisure purposes or kept in their retirement(28–32), and this represents a particularly potent risk for obesity. Horses that are not used for competing are twice as likely to be obese as those that do compete (competition horses are likely to be undergoing extensive exercise during training); non-ridden animals are three times as likely to be obese (Robin et al., supported by (23,33)). This could be in part due to the fact that the average amount of exercise per week for a leisure horse is particularly low, at around 3-5 hours(19), with only 4.8% of non-competing horses being involved with high-intensity exercise. Low level exercise did not have a statistically significant effect on whether the horses were obese or not compared with no exercise at all, suggesting that exercise may need to be relatively intense to have an effect on weight(23). Given that more than half of the UK horse population is used for pleasure riding (Hotchkiss et al estimate 56.7% for sole pleasure use and 67.2% for pleasure plus another use such as showing(31)) and 12% are retired(26), the leisure horse population is therefore an important area for further research.

## 1.2 Defining obesity in horses

Researchers have found that few owners know the precise weight for their horses(19,34), regardless of whether the horse was over- or under-weight. Weight estimation of horses is problematic in itself. Few premises have access to an equine weighbridge (usually these are only available at the veterinary practice or when consulting a nutritionist) and so weighbridges are generally not a practical method for regular weighing for this reason. Alternative methods of estimating weight include using body measurements and calculations that can provide a relatively accurate readings(35–37), or use of a weight-tape. Weight tapes are readily available in tack shops and quick to use, though may not necessarily be accurate(36). In particular, these methods simply provide a number, without reference to the



expected weight of the horse; the point at which it becomes overweight or obese is overlooked.

Defining at what point a horse (or other animal) becomes “obese” is problematic; in human health, the construct of “obesity” is considered by some to be based on arbitrary numerical cut-offs which problematise certain bodies, while normalising others – thus promoting stigma(38–44). The discussion of whether it is helpful or productive to label obesity a “disease” continues in human and animal health(39,45,46). However, in general the veterinary and scientific literature around companion animals does consider obesity a “disease” and even recommends the clarification of this point to owners; in his talks for professionals, German(47) recommends that professionals say that a pet “has obesity” in the same way that one might “have diabetes”, rather than “is obese” in the same way that we might describe a horse’s other fixed traits such as “is bay” or “is a cob”. In this way, obesity is constructed as an aspect of an animal’s health rather than a wider descriptor for who the animal *is*.

For animals, therefore, obesity is considered “*a disease in which excessive body fat has accumulated to such an extent that the health of an animal may be adversely affected*”(48); here, the adverse effects on health are given importance, as well as the simple accumulation of fat itself. However, these adverse effects may not appear until many years after the obesity is identified, highlighting the difficulty of labelling an animal obese. The *amount* of fat in the equine body in comparison with other factors has been given specific attention(15,49,50), and it is generally considered that body condition scoring provides the most useful and accessible method of assessing this in real-life situations, though with suitable training and consideration of the wide range of equine body types(51).

Body condition scoring provides a framework for measuring a horse’s fat and muscle using a visual and tactile reference system: this is relatively straightforward to achieve, but subjectivity may make condition scoring difficult in practice. Numerous studies have demonstrated that people have difficulty estimating body condition scores, with

underreporting common in relation to their children(52), and their animals(16,17,23,53–56). Nevertheless, body condition scoring has been utilised for many years, and currently two systems are commonly in use, the “Carroll & Huntingdon” 0-5 scale, and the “Henneke” 0-9 point scale(37,57–59)). Both scales are used by owners and professionals, though Huntington had horsemen with no previous familiarity with the scale condition score 15 thoroughbreds to determine the ease of use of the system, and determined that the scale provided “an objective assessment” of condition, and suggested that the 0-5 system is “simpler to use” for owners than the 1-9 scale as proposed by Henneke et al.(37) though some researchers prefer the use of the 9 point scale(24).

BCS can be a useful, quick, non-invasive tool for estimating weight, but it is not without its problems. In their study on forage-based dietary restriction using five welsh mountain ponies, Dugdale et al. (60) utilised a range of weight measurement techniques including physical measurements, condition scoring using the modified Henneke scale, and measuring the depth of superficial and accessible fat deposits with transcutaneous ultrasonography, as well as the use of a weighbridge. Dugdale’s team found that BCS was not a sensitive measure of weight loss; substantial physiological changes occurred with weight loss which was not associated with condition score alterations. For example, modest weight loss, not sufficient for an alteration on the BCS, was nevertheless associated with reduced hyperinsulinaemia, and they noted:

*“It was notable that a one or 2 point increase in BCS (between 6 and 6.9 and 8) was associated with a doubling of body fat content. That such dramatic fat deposition is associated with only relatively modest changes in BCS raises an important issue.”(61)*

Using the same scale in a study concerning the weight loss of 12 horses with EMS, McGowan et al. also noted:

*“In the current study, after 6 weeks there was a significant decrease in both BM and BCS, although changes in the latter would have been difficult to detect clinically”.(62)*

One of the problems with any BCS scale is the subjectivity of the score given(51), which

may contribute to the underreporting of obesity by owners who think that the body shape is appropriate for their horses. Mottet et al found that five expert raters had diverging views when condition scoring 56 different horses, and although the correlations between their scores were '*acceptable or even good*' ....*their ability to detect changes in adiposity over time was relatively poor*' (63). The researchers note that non-professionals would have given scores covering a much greater variability. This issue is not limited to horses; a study of canine obesity found that owners were still unable to correctly condition score their dogs, even following guidance on the use of a condition score(54).

An additional and complementary body condition scoring method is the cresty neck score, which focusses on the fatty deposits on the neck alone(64,65). Morrison found that the animals that individuals were most likely to recognise as obese were those with 'visually apparent' fat, such as a crest(15). This suggests that the cresty neck score may be a useful tool in assisting owners in identifying overweight animals *if* they have a cresty neck, though this may not apply to all, and may be complicated for animals such as stallions, which may have a cresty neck without being otherwise obese.

Therefore, there is no simple, clear and objective means for owners to identify whether their animal is an appropriate weight, which may contribute to the problem of underreporting of obesity. In a questionnaire based study, Murray et al. found that 60% of owners reported regularly tracking their horse's weight, most commonly through the use of weigh tapes (62%), or guessing(66). Participants' responses on the use of BCS provided conflicting information across two questions, firstly suggesting it was little used compared to other methods, but later suggesting that 46% of owners were familiar with BCS and did use it as a method of assessing weight. It is possible therefore that other methods, such as use of weight tapes, were perceived as more practical in the first instance, with BCS used as a 'back up'.

### 1.3 Owners' perception of weight

Some researchers consider that leisure horse owners' perception may have become skewed as obesity becomes the 'norm', rather than being perceived as a welfare problem(10,20). However, few research studies have been conducted so far in relation to owner perception of weight and body image of horses. One of the few studies in this area assessed owners' ability to estimate the body condition of different types of horses, via a simple rating-exercise in which respondents were asked to identify the overweight/obese animals from 12 photographs of different types of horses(15). Only 11% of respondents correctly classified the animals, showing the difficulty with visually identifying obesity across different types of horses and body shapes. Two cob breed horses particularly confused respondents: 70% of participants rated these two horses as overweight when they were not, suggesting that respondents were unfamiliar with how to assess appropriate body scores on more heavily-muscled breeds. In an extension of this study, the same researchers also found that respondents considered it more appropriate for dressage horses and show ponies to have significantly higher body condition score than those in other disciplines; reflecting the increased size of horses competing in these spheres (20,67).

### 1.4 Managing weight

Once obesity has been identified as an issue, reducing it appears at first glance to be relatively straightforward, achievable simply by reducing the horse's calorie intake and increasing its exercise(68,69). In a hospital or research setting, several studies have found that suitable weight loss can be achieved through strict dieting, returning the horses to an appropriate body condition and improved insulin sensitivity(62,67,70–72). However, researchers in both canine and equine obesity have found significant difficulties in assisting owners to make changes to their animals' weight in the home setting(5,71), suggesting that research into owners' abilities to plan and carry out equine weight management is imperative.

Most commonly, weight loss strategies discussed in the literature include: restricting the horse's grazing partially or totally, for example through stabling or the use of a grazing muzzle or small paddock; feeding the horse on forage that has been pre-soaked in order to remove some of its nutrient content but still provide fibre and satiety; and, feeding a specially designed feed to meet nutrient requirements. For horses, exercise alone can sometimes be adequate in reducing weight and may also improve insulin sensitivity(73).

However, there is little consensus within the scientific community about the details of appropriate weight management methods, and there are consequences for getting it wrong; horses whose rations are restricted too severely may develop equine gastric ulcer syndrome (EGUS), colic, or hyperlipaemia(68,74), with serious and potentially fatal results.

Furthermore, research has shown that some horse owners may be suspicious of equine science(75), and even owners who wish to follow evidence-based practices and have access to scientific literature may struggle to weigh up the wealth of conflicting information from scientific literature and the equestrian media. For example, whether hay should be soaked for at least six hours in standing water to reduce its water soluble carbohydrate (WSC) concentration as suggested by Longland et al(2016)(76), or whether this risks the horse receiving inadequate nutrition(77), or the introduction of harmful bacteria, as found by Moore-Colyer et al(2014)(78). Owners might be confused about whether to provide 1.5% of their horse's current bodyweight in dry matter (65,79), 1.25%(80), or another amount. It may be unclear how to adjust this amount, if feeding soaked hay with potentially insufficient nutrient profiles to meet minimal dietary requirements in the horse(62,77).

Alternatively, owners could instead opt for to free-feed hay, since some professionals consider that horses will self-regulate their intake appropriately(81,82). If using an ad-lib diet, owners could use a small-holed haynet in order to decrease the amount the horse can eat per hour and therefore increase overall eating time, as found by Ellis (2015)(83); however anecdotal reports by vets and research groups suggest that in doing so they risk injury to their horse's teeth(84).

Similar conundrums exist around grazing muzzles, which have been shown to reduce the horses' intake successfully(23,85,86). However, guidance around grazing muzzle use suggests that they are not left on the horse 24 hours a day(87), yet weight management options which include periods of time of unrestricted intake may contribute to laminitic episodes(8).

Weight management decisions are therefore not straightforward, with owners needing to weigh up multiple options to determine what is practical for their situation. In reality, horse owners may need to use a combination of methods depending on their horse, the yard, and their own circumstances; canine research shows that those methods may work best when individually tailored to the owner(88), an approach that has also been successful with horses(72). However, no research has so far looked at the difficulties owners face when deciding on, and deploying, such methods in their horses.

### 1.5 Bringing about change

Research has therefore clarified the prevalence of, and some risk factors for, obesity, as well as methods which could potentially remedy it in individual horses in a clinic, and which *could* impact horses kept by clients. However, identifying what can be done to impact the prevalence of obesity on a larger scale, and encourage horse owners to manage their horse's weight proactively, remains a more significant problem. Some researchers suggest that education will assist in the obesity prevalence: '*Unlike many other welfare problems, obesity in horses can be addressed by educating owners and by simple changes to husbandry practices*'(16). Such a view has been supported by industry representatives and other researchers(10,70).

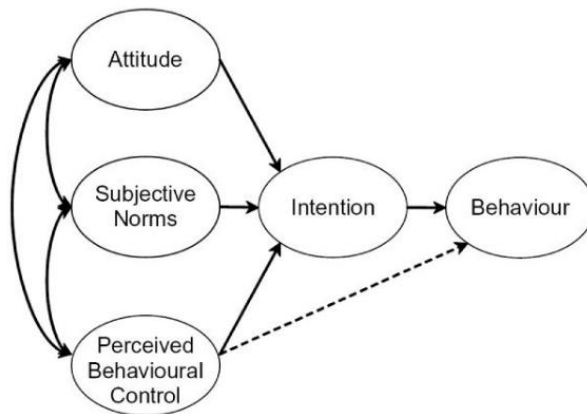
The idea that education alone will make an impact on health is now contested in human public health due to an improved understanding of behaviour change science, and this warrants examination in relation to animal health and welfare; it may be the case that education alone is not sufficient to make alterations to this welfare problem, but that other types of interventions would be of use.

Traditionally, public health campaigns have relied on the idea that education about a topic will instigate behaviour change. Those educational messages are often aligned with “awakenings”; images or messages designed to shock the reader into making a change, as in the example below.



**Figure 1; behaviour change campaign from Public Health England(89) which uses traditional messaging, aiming to shock the reader into making a change.**

These campaigns are aligned with traditional views of how humans alter their behaviour, as shown by the Theory of Planned Behaviour (TPB)(90,91):



**Figure 2: the Theory of planned behaviour(92)**

The TPB posits that our *intention* is the most important factor in our ability to alter our behaviour, and that other factors (such as our belief of our own efficacy) impact our intention. The TPB would posit, therefore, that reading a message about healthy eating might educate an overweight person, and - subject to the other modifying factors in the model - this could cause them to have increased intention to lose weight and thus, alter their eating behaviour(93).

However, though the central concept is still useful and the TPB has been well-used across many studies, it is limited through its omission of essential elements of our behaviour(94), such as the impact of our habits(95), and knowledge about how to cope with performing the new behaviour(96). The impact of social norms and environmental barriers or enablers of the behaviour are also downplayed, since these merely feed into the person's intention to perform a behaviour. In a meta-analysis of empirical research related to the TPB, Armitage(97) found that the TPB could account for only 27-39% of the variance in behaviour and intention; other researchers, too, consider it to be outdated(98).

As the science of behaviour change has evolved, a growing body of researchers have argued that intention and behaviour are not necessarily linked at all. Instead, these researchers

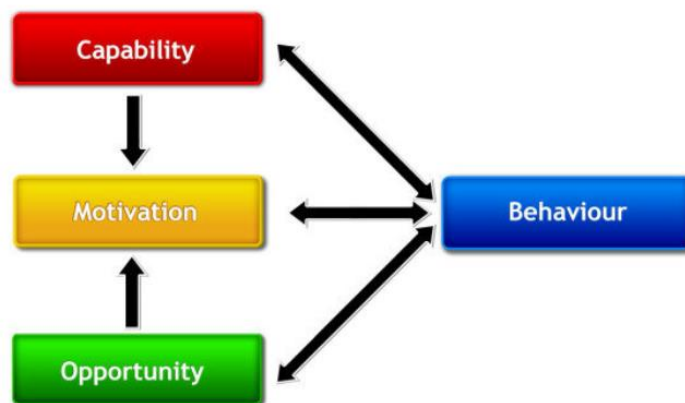


theorise that intention correlates to only 20% of our actions(99), and that attitudes *follow* behaviour rather than the other way round: the key to encouraging behaviour change is to first establish small changes in people's behaviour, which will then lead to a change in their attitude and motivation(26). This theory was used successfully with the *Stoptober* Campaign(100) for smoking cessation; unlike many previous public health campaigns, this did not focus on education and the reasons for stopping smoking, but instead encouraged individuals to make a public commitment to changing their behaviour for a set time period – one month – by making a pledge on social media. The *Stoptober* campaign is considered highly effective, having generated an additional 350,000 quit-smoking attempts(100) in the UK.

Many other behaviour change programmes have followed suit by focussing on assisting people to change their behaviour in a positive and public way, rather than focussing on educating them about the “negative” behaviour that they are already doing. For example *Couch to 5k*(101) encourages people to take up more exercise through having an achievable goal and step-by-step, fun tutorials, rather than educating people about losing weight. Similarly *Change4Life*(102), encourages simple ‘sugar swaps’ to improve healthy eating, rather than telling people why it would be better to eat a healthier diet.

Likewise, Jacob and Isaac (2012) considered that altering behaviour and habits are the most important component for reducing levels of human obesity, rather than educating individuals, in their review of the use of cognitive behavioural therapies (CBT) for weight management(103). The authors advocate clear goal setting (e.g. walk at least four times a week), process orientation (focus on how to change habits) and a focus on small, rather than large, changes; these could be successfully incorporated in a variety of settings ranging from clinics to internet-based programmes. It may be the case that aspects of such behavioural therapies could be utilised in encouraging horse owners to address their overfeeding behaviours, for example encouraging the owner to replace ‘treat feeding’ with attention or grooming(6).

As a result, public health campaigns have changed considerably over the past few decades to allow for this new perception. Accordingly, a multitude of models of behaviour change have come into existence to explore different aspects of behaviour. In order to navigate the use of these competing multiple models, researchers at the Centre for Behaviour Change at UCL conducted an analysis which combined the central aspects of the seventeen models they judged to be the most high quality, culminating in the COM-B system(104), standing for Capability-Opportunity-Motivation – Behaviour (Figure 3).



**Figure 3: the COM-B system of behaviour change (105)**

While motivation is included in this model, it is supported by other factors considered to be of equal importance; the capability to perform the behaviour (both physical capability and psychological capacity), as well the opportunity to perform the behaviours, both physically and socially. The COM-B model is well-recognised and validated(106), and has been used in multiple settings across human health(107–111), and its use is now being extended toward human behaviours which affect animal health(112). It provides a useful framework for considering the requirements which are important when helping someone instigate a specific behaviour. For example, for anti-smoking campaigns, the physical *capability* – the person’s capability to be able to physically perform the task - might form a major barrier, with physiological withdrawal symptoms thwarting peoples’ attempts; providing extra support around this issue, and bolstering the individual’s motivation may be necessary to help them

overcome this issue. Contrastingly, for campaigns which encourage people to pick up their dog's faeces, physical capability is unlikely to be the issue unless the person is very old or physically impaired. Instead the physical *opportunity* – the environmental factors which surround the issue – might need support through the provision of extra bags and bins in parks, alongside campaigns supporting the social opportunity to pick up the droppings, through making it a social norm(113).

Behaviour change science draws on the concept that, as humans, we want to present our “best self”, and that we tend to prefer actions which support a positive self-image(114); hence pledges on social media to perform an action are positive, while educative campaigns which tell us that we are doing something “bad” may be less successful. In fact, research into cognitive dissonance has showed that presenting someone with facts which argue against their beliefs only makes them more protective of those beliefs and actually increase their strength of belief, while simultaneously making them feel more negative(115).

As a result, behaviour change science posits that we must first fully understand the individuals whose behaviours we wish to change, which enables us to find solutions which can either shape the environment to make desired behaviours easier to achieve, or to work with the individual/population to empower them to make changes which support their self-image(114,116).

Behaviour change science within animal welfare is a new, evolving field of study. Because humans are generally in control of every aspect of a domesticated animals' life (with some exceptions), making changes to animal health and welfare necessitates being able to first change human behaviour. Therefore, understanding the factors involved in changing human behaviours in relation to animal keeping is important in order to be able to implement change. For example, many educational programmes related to companion animal obesity have focussed primarily on warnings about the health risks involved in obesity, with the blame laid at the feet of the vets for not communicating the severity of the long term risks(117–119). However, public health models described above show that these educational

models, in particular those that focus on telling people about the long-term outcomes of health behaviour(114), are not optimal for encouraging behaviour change; it may be the case that encouraging small, habit-changing behavioural interventions will motivate owners to make changes to their animal's health, which will have a bigger effect in the long-run. Indeed, a study which educated owners in condition scoring their dogs did not manufacture a sufficient change in their behaviour(54), but a meta-analysis of behavioural interventions aimed at dog obesity found a moderate effect(120).

Aside from helping people to change their behaviour, the COM-B also supports us in thinking about other factors which may be impacting the behaviour; the physical environment, the social norms. For example we have seen earlier that access to grass, an environmental factor, may be one of the biggest risk factors for obesity in horses – this may particularly be the case if the grass is intended for dairy cattle whose energy requirements are extremely high, representing “rocket-fuel” for horses(12). However, no research has considered the combined aspects represented by the COM-B in relation to obesity in horses; the physical environment afforded by this grass and numerous other environmental issues, the social environment presented by livery yards and social norms, the owners' knowledge may all combine to present a picture of how obesity has reached such levels in UK leisure horses, and what can be done to remedy it.

Considering equine obesity from this perspective could provide important insights, and entails the need for an in-depth understanding of the leisure horse owner, considering why these people choose to own horses, how they think about their relationship with the horse, its health, and how they make choices around its management.

#### 1.4 Insights from human-animal studies

Considering the answers to these questions relies on us drawing from the study of animal studies, focusing on the study of the human-animal relationships. Horses are particularly

interesting to consider from these in-depth perspectives because of their evolving role toward companion animal status(32,121), as will be discussed.

The literature suggests that companion animals, or pets (depending on your personal preferences and constructions), are animals kept solely for their role as a companion, rather than for an “economic or utilitarian function”(122); DeMello (2012) considers an animal a “pet” if it is named and given a “person-like” status and identity(123); similarly Sanders (1990) considers that pet owners are routinely engaged in constructing identity and personality for their pets through their day-to-day interactions with it(124).

However, the very concept of a “pet” in itself is somewhat murky, with individual animals potentially fulfilling a wide range of symbolic functions all at once. A sheepdog could be a working animal owned mainly for its efficiency with sheep, yet may also fill the role of companion for a farmer, though it may be unusual for one to be thought of as a *pet*. On the other hand a “pet” lamb brought up in the home, named, and valued for its personality, could still become dinner. Accordingly, much of the literature around human-animal interactions has focussed on the lack of clarity around what a pet really *is*, and the inconsistencies of our views of animals; for example our ability to view individual animals as sentient or cute (the friendly pig in the petting zoo), whilst simultaneously distancing ourselves from other constructions of the same animal (the pigs sent to slaughter)(123,125–127).

These multiple, competing constructions are particularly visible in relation to horses, whose role in society has changed drastically in the past half century. Horses used to be working animals, sporting equipment or social enablers. Now, horses are often referred to as companion animals, owned for their owners’ pleasure; certainly by DeMello’s standards they are a pet, given the fact that they are typically provided with names and constructed to have individual personalities(123). Horses may still be kept either wholly or partly as “working animals” in the UK, using DeMello’s description of animals kept for economic or utilitarian reasons (see above). For example riding school ponies and breeding horses provide financial income for their owners; competition horses arguably fill a niche close to a

working animal, since they are valued for their economic value and functionality. The role of the leisure horse is evolving, with owners seeking to remove their animals from working life, and from being “cogs in a machine” and creating a deep connection and relationship with them(121,128,129). Considering the role that these horses play in the life of their owners is important in order to consider how these owners might make decisions around their horses’ care and welfare.

The language and labels that we use to refer to animals alter our behaviour towards that animal, as discussed by Herzog using the case study of “good” and “bad” mice in a laboratory; “good” mice are those used for experiments, and they are well fed and housed and are protected by laws, while “bad” (free) mice in the environment are constructed as pests, and are unrestricted by the laboratory boundaries. These mice are unprotected by law, and are subject to killing in ways which a “good” mouse would never be treated. Here, the language used around the mice leads to entirely differing constructions of the same animal (many of the “bad” mice are just laboratory mice which have escaped), and to the animals being treated in entirely different manner.

One of the difficulties with discussing our relationship with companion animals is the lack of specific language; anthropomorphizing around animals is discouraged by the scientific community, yet the language around our relationships with other beings is based on our human relations, and thus animals are often described as a “friend”, “child” or sometimes “significant other”(126,130–132); even the word “pet” is supposedly derived from the word for a spoilt or favoured child(125). A Dutch study of horse welfare found that 47% of respondents indicated that their horse was like a *partner* or *child* to them(133). The lexicon around relationships with horses therefore provides insight into the constructions which owners may build around them, clarifying the change from being a working animal toward being a significant emotional attachment for the owner.

In order to deconstruct our relationship with companion animals, a number of researchers have attempted to categorise human-animal relationships. Veevers (1985) proposes three

potential functions: *projective* (the pet serves as a “*symbolic extension of the self*”), *sociability* (the pet facilitates interpersonal interaction by acting as “*social lubricant*”), and *surrogate* (the presence of the anthropomorphized pet acts as a surrogate for human relationships)(134). Contrastingly, Blouin (2015) found that dog owners constructed their relationship on a more purposeful level, with three categories: *dominionistic* (using the animal for a given purpose), *humanistic* (animal as surrogate human) or *protectionistic* (valuing animal for its intrinsic traits)(135). The concepts of being *humanistic* and *protectionistic*, in particular, are supported by other researchers(123); for example Fox(136) found that some owners recognised their pets individuality and “personhood”, but also its innate differences as an animal – what she refers to as “animalness”. Scantlebury et al. classified horse owners into five categories via broad characteristics depending on whether they saw their horse as a pet, as work, as part of their profession; whether they were achievement focussed, and the satisfaction they gained from their relationship with their horse(137). Most respondents displayed a mix of constructs, most commonly describing their horses as pets, whilst still enjoying a sense of achievement and satisfaction as a result of their relationship.

Exploring these constructs of our relationships with companion animals, particularly horses, reveals potentially uncomfortable consideration of the fact that, no matter how they are researched and phrased, these relationships are ultimately benefitting to the human’s goals; the horse has no say in whether it is a pet or a piece of sporting equipment. In *Dominance and Affection: the Making of Pets*(138), Tuan considers animal-keeping to be about an almost innate human need to exert dominance over something, whether that is an animal, human or plant. He considers that human preferences for animals which are passive and submissive (for example, breeding of “ragdoll” cats which are as passive as a toy, and modern dog types such as “cockapoos” which resemble soft toys) suggest that as humans, we are seeking ways to feel powerful (although the animal does not necessarily suffer for this relationship(139)). In Tuan’s view, there is no way of keeping an animal “friend”, because the relationship with a pet is necessarily dominant. He suggests this with reference to training: “*The basis for all successful training is the display of an unchallengeable power*” (p108) and to feeding: “*the act is generous and the pleasure is innocent, although both*

*derive from a base of superiority and power. Making another being eat out of our hand – that yields a special thrill all the greater if the animal is first made to beg, and if it is large enough to crush us in another setting less structured in our favour”* (p80). Tuan’s ideas are considered by many human-animal researchers to be limited[126], due to their omission of the animal’s agency and role in the development of human-animal relationships. Certainly, they present an extremist view which overlooks many of the intricacies of our relationships with animals, in comparison to the work of other researchers who acknowledge the active role of the animal in forming and maintaining relationships(124,129,136,140).

Nevertheless, Tuan’s views on the power relations within pet-keeping provide some food for thought about the inequities in human-animal relationships(122). These considerations are particularly relevant in relation to horses, where overt discussion of establishing power and dominance are an accepted social norm, even when owners simultaneously aim for a deep and meaningful relationship with the horse(128). Many leisure horses are controlled through common technologies of power including chains, bits, spurs, and whips; perhaps the ultimate example of how these have become an accepted norm is the commonly seen child-size whip, with the end used to hit the horse adorned with a sparkly pink heart (Figure 4). A cute whip created specifically for children to hit any other companion animal, for example a dog, would surely be considered controversial, yet within the equestrian sphere this is quite unremarkable.

Birke (2017) described an increasing subgroup of horse owners who eschew traditionalist accoutrements of power, and aim to instead build a relationship with their horse based on “natural horsemanship”; they redefine equestrian items – for example the “carrot stick” (Figure 5), a specific type of whip-like apparatus which is constructed as an “extension of the trainer’s arm” and used to tap the horse, but which natural horsemanship aficionados clarify is “*NOT A WHIP*” [from Burke’s interviews, emphasis in original](128). Similarly, traditional methods of in-hand restraint such as the chifney (a bit which inserts considerable pressure on the jaw if the horse misbehaves) or chain lead rope (which can be passed over the horse’s nose or poll to exert painful pressure) are replaced by a narrow halter with knots in specific pressure points, in order to exert force on the horse’s head. By linguistically



redefining training tools and accompanying them with specific training techniques, these riders are able to secure obedience in their horses, and this obedience is labelled as a relationship.



**Figure 4: left, a whip designed to provide punishment to the horse, whilst appealing to the child rider; right figure 5, a “carrot stick” which may be used to tap or hit the horse but is constructed as “not a whip”**

Physical domination is one tool used to assert control over the horse, but many horses are also subject to numerous other processes which aim to regiment and commodify them; they are confined, groomed, moulded and trained, with every aspect of their health catered to in order to create an obedient, supple and potentially valuable animal(141). However, they are often denied freedom, equine company, and agency to choose any aspect of their lifestyle. The relationships people describe with leisure horses, therefore, differ from many other companion animals, with horses being constructed as “friends” and “partners”, while subjected to considerable physical and emotional processes which aim to regiment and discipline the horse. However, there has been little research considering how this relatively new subgroup of leisure horse owners make decisions around the ways that they train and care for their horses(121).

Again, horse-care differs from the care of many other companion animals in that it is often conducted in a shared space – on a yard – and therefore in the view of other people. Livery yards are complex social microcosms, where actors express their social identity through their

actions; for example through displays of competence(142). As a result Birke suggests that horses become “unwitting social actors” in a social setting – the livery yard – where owners are using their equine care as symbolic of their sense of self(121). Equine care decisions around rugging, exercising and feeding all display important ideas about that owners’ constructions of horsemanship, and the relationship that they have with their horse.

Birke and Hockenhull differentiate between “*caring about [horses], in the sense of affectional bonds.....and caring for—in the sense of ensuring that physical and behavioral needs are met.*” (121), and other researchers construct the embodied acts of “caring for” as *tinkering*, describing ongoing acts of care which might be constantly altered depending on the health and wellbeing of the animal(143). However, if management choices are expressions of a constructed self-identity, I would argue that the constructs of *caring for* through day to day “tinkering” and *caring about* are intricately linked, with management choices symbolising the ethical and moral standards which the individual considers important for their horse.

A pertinent example is provided by the owners who turn their back on traditionalist training practices and adopt “natural horsemanship” techniques; these owners may symbolise their enhanced relationship with their horse by rejecting technologies of control and riding in minimal, or even no, tack and “freeing” the horse from other accoutrements such as shoes and rugs(128). Here the owners’ construction of themselves as a horse-person is closely related to their constructed relationship with the horse, and is symbolised for the social society on the yard by their abandoning of traditionalist accoutrements.

Contrastingly, some researchers consider that owners symbolise “caring for” through the provisions of comfort to their horses; by providing the horse with warm rugs, a comfortable stable, and expensive diets(10,144). These horses are shielded from the elements, from scarcity, from risk of harm.

Research has shown that, across species from parrots to horses, a whole host of physical and behavioural problems abound as a result of companion animals whose needs as an animal are ignored due to the blurred boundaries between human and animal(145–147). For example, dog and cat owners who “over-humanise” their pets are more likely to be those whose pets are obese. Researchers have suggested found that obese companion animals are *“indulged as “fellow-humans,” but they were no longer treated as typical companion animals. Some of their needs were ignored such as exercise and occupation”*(147,148). Owners of obese animals are more likely to share their bed and their food with their animal, and think of their pet as a child. Here, the obesity can be, in effect, an expression of the closeness of relationship between owner and animal (although the research did not find an actual difference in the closeness of relationship between obese pet and owner, compared with non-obese pets and owners)(148). Similarly, German (2015) draws parallels with the owners of obese animals and the parenting styles of obese children, considering that the owners of obese animals may be more likely to be those people who adopt an “indulgent” parenting style, characterised by *“warmth and respect...but limited monitoring”*(7).

Given the change in construction of the horse towards being a leisure animal, often described as a companion, friend, partner or even surrogate child, and the corresponding rise in horses that receive such intense levels of comfort-based care and little exercise, it is possible that the equestrian sphere is also experiencing blurred human-horse boundaries much like those described in dogs and cats above. While horse owners may not follow cat and dog owners in allowing the horse access to human areas such as the house or to share human food, it is possible that horses may be treated as humans in other ways; for example through the owners’ constructs of their horses’ way of life (having meals, going to “bed”, going to “work”) and through their protective behaviours toward the horse, for example shielding it from the weather.

Understanding how owners relate to their pets matters, because it affects how behaviour change can be achieved. For example, educational strategies may not work with owners who humanise their pet, because those owners may also be less aware of their pets’ weight and

disinterested in its nutrition(148); their priorities are different from those of the professionals who wish to educate them.

In parent-child relationships and human-animal relationships alike, food and affection are closely interlinked; as suggested by Bowen “*people get reward from feeding their horse; that’s the time their horses are happy to see them; the owners are getting positively reinforced*”(149). Companion animal obesity could therefore be addressed through taking inspiration from parent-child obesity behavioural models, for example following the addiction model(150), which suggests that behavioural interventions to address obesity must be achieved through progressive steps which ensure that the parent/owner and child/pet both become slowly familiarised to the process: it becomes a habit to behave in a certain way. Other researchers suggest “leveraging” the human-animal relationship, in order to find ways in which the weight management can actually help improve the relationship(55) – for example spending more time walking or playing together.

However, weight loss is not easy to instigate, particularly at a population level rather than individual level; in child obesity, a meta-analysis of 131 weight management studies found that school-based interventions which had home components (such as assisting parents with meal ideas) were most successful(151). It is possible that livery yards or equestrian societies could provide the same social influence and structured environment as the school does for child obesity, but again little research has studied the limitations and opportunities afforded to owners through the livery yard community.

### 1.5 Conclusion:

Obesity is a highly prevalent yet multifaceted welfare problem for UK horses, and may partly arise from the complex constructions of horse owners’ relationships with their horse, as the role of the leisure horse evolves. However, very little research has so far provided insights into how horse owners make decisions around their horse’s health, and whether their relationship impacts these decisions, nor how the physical environment around the

horse owner impacts their choices. These items could be key in illuminating the reasons for the equine obesity prevalence in leisure horses in the UK, and ultimately in finding ways to assist owners in managing their horses' weight.

## Chapter 2: Methodology

### 2.1 Introduction to Methodology and Research Objectives:

Little research exists into owners' perceptions of their horses' weight and their associated management decisions, though the existing literature showed that the issue was complex and would require in-depth exploration. The complexity reflects not just owners' decision making practices but their constructions of disease, the relationships between owners and their horses and the wider environment including the social equestrian world. The aims of the study were:

- To understand horse owners' understanding of a healthy body size for horses, the impact of equine obesity on their horses' health, and the factors associated with equine obesity and its management.
- To understand experiences, perceptions and behaviours of equine professionals and other key stakeholders towards equine obesity.

In order to perform a comprehensive study of the issues relating to obesity in horses in the UK, it was necessary to consider different types of data which would shed light on how owners thought about their horse's health and wellbeing, and how obesity fitted within their personal frameworks. This study therefore sought to utilise qualitative methods to illuminate the complexity of equine weight management. The use of qualitative research methods for animal welfare is becoming increasingly common (137,145,152,153), based on the understanding that we cannot improve animal welfare without having an in-depth understanding of what makes people behave in the ways that they do, how they conceptualise their situation, and what makes them change their behaviour.

In order to plan a qualitative research study, it is important for the researcher to understand how their own views and social realities impact on the subject of study. With a background

in human clinical research, I had dabbled in social science in a very superficial way, but was initially haunted by what one of my supervisors referred to as my “positivist gremlins”. Social sciences require that we consider reality from an altogether different perspective, and that we realise this from the outset and plan our research accordingly. The quantitative researcher relies on numbers as a “reality” and believes in an absolute truth that can be uncovered through the use of scientific enquiry; by “scientific” that means rigorous, repeatable, and independent of the researcher(154). On the other hand, when researching a social phenomena, this approach is not possible with such a black and white world view, because the topic is not likely to be black and white. We cannot understand what it means to be male, or female, or gay, or a mother, because these are socially constructed roles that vary enormously according to the precise nature of the individual’s life and experience, and the society within which that experience happens(155). Moreover, the person studying that phenomena is not simply a “blank slate”, but will naturally frame their research within their own views and experiences(156). Social science, therefore, requires that a researcher understands and acknowledges their own view of how the world and everyday lives are constructed and shaped and how they have come by their beliefs, and how this will impact their research.

Following what I understand to be a rite of passage – an intense period of frustrated rumination on this topic and some questioning of how philosophical enquiry could possibly relate to fat ponies, my study methodology and epistemology came together.

As I learnt more about epistemological theories, I became comfortable with the concept that the world around us is constructed by our experiences and our social world. I felt that it was important to me to have my data and its analysis rooted within the lived experience of subjects in order to study how their experiences had come about, and what was important to them. I was also particularly interested in how language shapes our experiences and understanding. I chose to use multiple data types with a social constructionist epistemology rooted in phenomenological and theories, with a grounded theory method and methodology.

## 2.2 Social constructionism

Social constructionism posits that, while an objective reality exists in the world around us, the meaning placed on that reality is created by individuals who are interpreting it through the knowledge they have built up from their experiences of the social world(155). This social world is shaped by that individual's experiences at a cultural and personal level. Take for example a famous, global logo – the McDonalds “M” or “Golden M” to some. In and of itself, the M has no meaning whatsoever; for the readers of some languages it may not even be a letter M, but simply a symbol of, perhaps, two hills. Yet to different individuals this symbol could have some very distinct and important meanings, based on that individual's culture, education, experiences, and attitudes: to some it may be constructed as a treat; family time, a literal and figurative “happy meal”. To others it is a symbol of our over-consumptive society. As such, the meaning of “Golden M” is a construct based on the social experiences of an individual.

Social constructionism has its roots in the phenomenological approach developed by Husserl, though initial roots can be seen far earlier in studies of sociology, for example Mannheim and Scheler's early 20<sup>th</sup> century discussions about the sociology of knowledge, and importance of social processes and social history in knowledge(157). Social constructionism is not distinct from phenomenology (the study of lived experience)(158), but is rather an extension of it, meaning that the two are complimentary to one another; social constructionism takes a phenomenological approach, but adds to it the layers of complexity that arise from studying the experience in the context of its social and cultural landscape(159).

Social constructionism posits that the social world is not fixed, but is continuously evolving (157) and that we cannot separate phenomena from our own experiences of the phenomena in question (160). Social constructionism can therefore help us to illuminate the “cultural landscape” of a phenomenon (161), that is, the cultural and social norms surrounding an idea. To continue the above example, how society and culture perceive the McDonalds “M”



in relation to other cultural markers; what does that “M” represent, and how do people experience it? What affects their construction of the “M”?

Social constructionism provides particular insights when studying preventable diseases, because it illuminates the complex conceptual factors which impact on a person or a society’s understandings and choices of health, or the absence of health(41). In the case of obesity, for example, how does obesity get shaped as a clinical concern? At what point and how is it defined as a disease? And when is an obese person or animal “diseased”? Is this classification different if you are a medical professional or lay person? Is it different depending on whether you are African, South American or British? High or low socioeconomic status? Obesity is particularly interesting to consider from a social constructionist viewpoint, because of the multiple representations of what constitutes a healthy body image around the world, and because of obesity’s relatively recent ascent to the position of a ‘global disease epidemic’(39,41,42). Social constructionism provides other ways of thinking about obesity, because food and eating are central social activities in nearly all cultures around the world, and heavily culturally specific.

Animal-keeping, and especially pet-keeping, are also strongly socially bound constructs that have wide-ranging cultural meanings, which can be usefully framed through a social constructionist epistemology; at what point is the horse a “pet”, and what is a pet at all?

Social constructionism posits that each of us as individuals carries with us a consciousness which contains a plethora of existing social constructions, which are honed by our experiences and the society around us; this is defined as the *Lebenswelt* “life-world”(162). The constructions within our *lebenswelt* are heavily moderated by our culture, society, and the language that we use(39). These ideas led to Berger and Luckman coining the term ‘social constructionism’ in relation to how we construct the realities of our lives(155). Berger and Luckman’s main book, *The Social Construction of Reality*, illuminates the constructions which are taken for granted in the world around us; for example when two individuals converse together they are constantly realigning their reactions based on the

actions of the other in conversation, and how language affects our ontologies. Stam clarifies that social constructionism is ‘*not a single target... nor a single movement*’ (159), and that the term is often used so indiscriminately that it is ‘nearly impossible to classify a single position’; somewhat problematic for wannabe social scientist PhD students.

A criticism of social constructionism historically has been what Stam describes as its ‘woolly headed relativism’ (157), suggesting that social constructionist researchers are inconsistent in their ontology. He suggests that their inconsistency springs from at once claiming that a problem does not exist except as a social construction, while at the same time taking for granted its existence to enable the researcher to study it.

However, Gergen does not consider this to be a problem, asserting that social constructionism can be both an epistemology and an anti-epistemology. It can at once question the foundational basis of a phenomena, as it also reflexively appraises or casts doubt on the assertions it is making (160). Therefore, this is not necessarily a flaw in the theory itself, but in how it is applied during research, and whether the researcher understands that this reflexivity must be taken into account. Gergen suggests: “*don't ask whether a given statement is ultimately true, but "what happens for good or ill if we claim this to be true?" For me this removes all foundational disputes.*” (reported during interview: Cisneros-Puebla & Faux, 2008). Therefore, Gergen suggests that the aspect of constructionism which many view as a stumbling block, can be overcome simply through the researcher’s approach to the problem.

Hacking suggests that many social constructionist researchers are unclear about the classification of the item in question; for example when studying gender. ‘The social construction of gender’ must implicitly involve the social construction of what it means to be male and what it means to be female, as well as what it means in a given context to be masculine, feminine, what sexuality means, and so on. Hacking argues that the interesting point for study is not whether or not something is a social construction or not, but how these

constructions relate to one another; in the example above, how masculinity and femininity relate to one another, and how they interrelate respectively to concepts of sexuality(158).

These two critiques highlight the important aspect of social constructionism; that it is the interconnections between phenomena of interest that illuminate important areas of interest.

Social constructionism has since been widely used across the fields of sociology, psychology and anthropology(156,161,163,164) to illuminate aspects within cultures to examine the contextual factors which have contributed to social phenomena.

### 2.3 Grounded theory

Grounded theory is both a method (a tool for data analysis) and a methodology (an approach to data collection and analysis) which enables researchers to analyse and yield theory from data. Its main premise is that researchers studying a phenomena suspend their own prior knowledge, and study the data in great depth in order to allow theory to “emerge” from it, rather than imposing their own preconceptions onto the data(165).

Grounded theory fits well with a social constructionist viewpoint because the in-depth nature of the methodology facilitates the uncovering of social constructions within the experience of the participants’ social world(166). I was keen to use grounded theory because I wanted to allow the data to “speak” for itself, allowing the participants’ stories and ideas to iteratively inform the subsequent analysis and theorising of the project.

As with many sociological approaches, grounded theory is not consistently definable in any one way, and its use varies widely between academics(167), partly because it has evolved over time as different researchers have defined and refined different aspects of it(166).

The idea of grounded theory was initially proposed by Glaser and Straus in 1967(168), who suggested that one researcher or a small team could develop theory through examining data extremely closely without prior knowledge of the subject area, in order to inductively develop theories around the data. This iteration of grounded theory was moderated by Strauss and Corbin, who more closely described the actual methods necessary to perform Grounded theory – for example the ways in which the researchers could navigate the data to uncover theory(169). However, both approaches arguably reside within positivist ideas that is an objective reality which could be “uncovered” by the researcher in their study of the data(167,169). Contrastingly Charmaz (165) describes a version of the theory more in line with the social constructionist viewpoint; that there is not one discoverable reality, but instead a constructed set of ideas, and that the researcher themselves are part of uncovering and constructing theories around those ideas. Other researchers have introduced or focussed on other aspects of grounded theory; for example aligning it with critical realism(157,159), which focusses on the phenomenological side of the experience of the humans involved in the research as well as the structural aspects surrounding those people.

Navigating the differing theoretical approaches to grounded theory is challenging, but importantly there are key facets which prevail across all its variants; these are referred to by some as the “shared core”(167), and these are:

### 2.3.1 Being “grounded” and theoretical sensitivity

The “grounded” in grounded theory relates to the idea that the researcher allows theory to *emerge* from the data, rather than being hypothesised by the researcher and placed onto the data. To ensure that the researcher does not impose their ideas on the data, grounded theorists suggest that the researcher should ideally be naïve of the research topic, so that they do not have preconceived ideas about what they expect to find. This allows the researcher to be sensitive to the data, and is referred to as *theoretical sensitivity*(166,170).In grounded theory data collection and analysis remains as “grounded” as possible – for example, employing minimalistic and flexible interview guides which use open questions, allowing the researchers to shape the interview with the experiences important to them. The coding

process can still be “emergent” through staying “close to the data”; that is through ensuring that the codes that arise are developed inductively through close analysis of elements of the source data(171).

### 2.3.2 A constant comparative method

A central component of grounded theory is the use of constant comparison of data. The constant comparative method “*combines systematic data collection, coding, and analysis with theoretical sampling in order to generate theory that is integrated [and] close to the data*”(172). In order to enable this process, data are collected and analysed in a non-sequential manner. For example the researcher might interview three participants and perform some coding and analysis, before collecting another type of data which is coded and compared with the original data, and so on. As Corbin and Straus described “*the analysis begins as soon as the first bit of data is [sic] collected*”(169). The themes derived from the data are then constantly contrasted with other incidents, to determine the contextual factors and relationships between themes(171,173).

The type of coding performed happens in different stages as the data analysis is refined. Though researchers use different names for these coding processes, they can generally be split into two categories:

- Open coding/substantive coding: this process takes the data line-by-line and aims to examine incidents to determine the underlying processes and actions. Corbin and Strauss describe that the process of open coding “*....is to give the analyst new insights by breaking through standard ways of thinking about or interpreting phenomena reflected in the data*” (169)
- Focused/Theoretical coding: this process emerges as the individual codes are clarified and the relationship between them becomes clear; larger, more theoretical fragments of text may be coded, and they can be linked together under theoretical codes, with theoretical connections tested as more data is collected (165).

The process of “memoing”, the writing of memo notes throughout the process, captures the emergence of themes and theories during the ongoing data collection and analysis(165,167,174).

### 2.3.3 Theoretical sampling

Unlike quantitative approaches to research in which the sample population is defined at the outset and aims to achieve a representative sample, grounded theory requires that the sampling in any project is dependent on the data collection and analysis as it progresses(170,171,175). The analyst decides what data to collect next and where to locate it in order to develop the theory as it emerges(168). This enables the researcher to flexibly adapt their project as it moves forward. For example, if one began researching mothers’ approaches to meal preparation for children, one might begin by interviewing a range of families; however an emergent theme may exist around exclusivity and single-child familial relationships compared with multiple-child relationships, and this would inform the type of families subsequently interviewed. Contrastingly if, for example, culture and ethnicity appeared to be particularly important, then the diversity in culture and ethnicity might be further explored by researchers. The sample is considered complete once theoretical saturation is complete; that is, until analysis of new data does not result in the development of any new themes and codes(174).

## 2.4 Data Types used for the research project:

Given the broad aims of the project, it was important to bring together different data types in order to present a comprehensive view of the environment and cultural landscape surrounding horses and their owners. Over a two and half year period a variety of data were collected and collated:

- Analysis of discussion fora (focussing on obesity and weight management);
- Field notes of equine environment taken over a two-year period;

- In-depth interviews with horse owners (not focussing specifically on obesity or weight management);
- In-depth interviews with professionals and para-professionals (focussing on obesity and weight management);
- Focus groups with horse owners (focussing on obesity and weight management).

Observational data (the discussion fora and field notes) were important for this study in order to provide a window into the experience of horse owners, without observer effects influencing the data in any way. Discussion fora are well-used by horse owners, and therefore provided an ideal means of collecting observational data; there are numerous examples in research literature of the use of discussion fora for this purpose(176–180). Field notes were collected throughout a two year period, which recorded my own experiences and observations as a horse-owner and as a researcher in relation to equine obesity; this allowed varied observations to be captured, including for example information about horse feed and marketing, the equine media, etc.

In-depth interviews (IDIs), also known as semi-structured interviews, are favoured by qualitative researchers for inviting participants to speak about their experience with little prompting from the interviewer(156). IDIs often have a loose structure and some questions or prompts, but the individual interview and detail is very dependent on the participant, and what that person might want to say. This is particularly important for a grounded theory methodology, in which allowing the individual the space to explain their experience with limited prompting helps to uncover the constructions on which their experience is built. Therefore, IDIs were employed across a range of respondents to generate data about horse owners' and professionals' experiences. Interview guides were created prior to all the interviews and pilot tested informally via discussion with horse owners and professionals known to the researcher (pilot tests were not audio recorded). The interview guides provided a loose structure, and aimed to simply provide prompts via open questions, and be adapted to each interview. The interview guides are available in appendix F.

The aim of the horse owner interviews was to ascertain the management decisions and choices owners made about the health and welfare of horses generally, and to determine how obesity fitted into their personal constructs of equine wellbeing. Although a central concern of the study was the construction of obesity, the broader context within which it sat enabled the study to be packaged as one of equine wellbeing. This was to avoid creating in the minds of the potential participants an over concentration on a horse's weight. While this was considered to be ethical it raised particular concerns which were addressed in the ethics committee application (see below).

Focus groups were used as an additional data collection technique, in order to provide specific data about how owners constructed ideas around weight management. This acted as a complement the IDIs by encouraging a focus on specific topics around weight management in more depth. Using the results of the other data-types as a basis for planning, focus groups using participatory exercises were planned to discuss obesity and weight management with horse owners, with the group dynamic used to encourage horse owners to interact and share experiences, prompting rich discussion around certain topics.

### 2.5 Ethics approval

The study plan received ethical approval from the University of Liverpool Veterinary Ethics committee. The application was also submitted to a public advisory panel (PAP) which allowed a lay audience to consider its merits and discuss any areas of concern. Both the PAP and EC considered the issue of focussing the study on equine wellbeing while primarily being interested in the issue of equine obesity. As a result a debrief was added following the interview, to explain that obesity and weight management were the main purposes of the study.



## 2.6 Forum sampling and data collection procedure

The discussion forum data was derived from a range of different UK public open access fora. A google search was used to identify potentially relevant sites using the terms *horse discussion forum uk*, and the first three relevant, open-access websites were selected for analysis. From these fora, search terms were used to extract relevant discussion threads from Jan 2015 onwards: the search terms used were: *obese, overweight, fat*. Discussion threads were excluded if they had less than one response, or if they were irrelevant to equine weight loss (for example, threads about human weight loss were excluded). This left 16 threads (10 from forum 1, 2 from forum 2, and 4 from forum 3), with 646 individual posts.

Threads varied from discussion of personal situation (“*how to get a pony to lose weight*”; a thread from an individual asking for assistance in her specific circumstance) to a thread discussing showing as a specific problem. The threads were anonymised (names and photos removed) and uploaded into nVivo 10 for analysis.

## 2.7 Interview data collection procedure

To recruit individuals for IDIs, adverts were placed online, often in relevant Facebook groups (for example local equestrian groups), and a number of individuals voluntarily posted them at livery yards. Recruitment was very straightforward, with a number of responses gained within 24 hours of posting adverts. There were also times when I was at yards conducting one interview, and on finishing another person would ask to be involved. As a result, several groups of interviews were undertaken with participants on the same yard, which proved to be useful in terms of considering yard dynamics.

In this way a very broad range of participants were recruited to the study. The sample ranged from those who kept their horses on full livery to those who kept them at home, and a range

of horses from Shetlands to draught horses, 18 months old to retired veterans. A table below summarises the horse owners individually interviewed:

**Table 1, horse owners and horses who participated in individual interviews**

Owner pseudonym	Human age	Horse pseudonym	Horse age	Horse description	Livery
Sally	61	Danny	21	TB	Part livery/track
Anna	39	Harry, Bronwen, Zed	various	Welsh cob, sec A and PRE	Track (YM)
Katie	34	Summer	5	Arab x Welsh	Part livery/track
Angela	40	Billy	11	ISH	Full livery
Cath	55	Star	13	TB	part livery
Leanne	29	Puzzle	20	Lghtweight cob mare	part livery
Jane	62	Mandy	13	Highland mare, insulin resistant	part or full livery
Kayleigh	19	Glam	9	Mid weight cob	DIY livery
Nadia	37	Seamus	9	ID type	Full livery
Alice	26	Princess	2	ISH	DIY livery
Dani	21	Dylan	18	Welsh sec D	DIY livery
Madeleine	64	Caramel, Fudge, Precious, etc	various	3x shetlands, 17.2 ISH, cob type mare, gypsy cob	own yard
Lilian	51	Warrior and Sammy	7	2x Cleveland bay show horses	own yard
Carly	27	Digger	21	Gypsy cob	DIY livery
Sandra	54	Caspar	26	TB ex eventer	DIY livery
Samantha	29	Magic	22/13	Cob x and PC pony	DIY livery
Jill	64	Thunder	17	Tri-coloured gypsy cob	DIY livery
Sue	54	Toby and Merlin	13 and 8	Dutch warmblood and Connemara	DIY livery
Lorraine	50	Violet and Strawberry	14 and 7	Cob, Gypsy cob	DIY livery
Bill	52				
Sophie	16	Rocky and Fly	20 and 7	ISH gelding and Connemara mare	DIY livery (but one other horse - flexible)
Pat	63	Angel, George, Misty	5, 14, 19	Gypsy cob, ID x Clydesdale, TBx	DIY livery
Ruth	69	Rosie	18	Highland	Part livery
Ellie	62	Scruff, Cloud	19, 24	Dales, cob	DIY livery
Liam	28	Buzz	5	TB	Full livery
Phil	64	Sammy and Milo	19,19	ISH and welsh	DIY livery
Evie	35	Domino	12	Morgan horse	Varied
Polly	60	Flash	21	Welsh sec D	DIY

The interview was loosely structured based on an interview guide which used open questions (appendix F). However, the interview process was driven by the information given by the participants, meaning that some interviews focussed on specific areas while others covered a broader range of topics, depending on the information volunteered by the interviewee.

Before the interview the horse owner participants were not informed that weight management was a key area of interest in order to minimise observer effects. Instead they were told that the interview was about how horse owners made decisions around their horse's health and wellbeing. However, if they brought up the issue themselves (for example, one participant asked to be interviewed so that she could tell me about what she referred to as her "insulin resistant highland") then these words acted as a trigger for me to inform the participant that weight management was one of the main aspects of interest to the study, and therefore more depth on this issue was covered. Discussions about weight management were brought up spontaneously by the participants in all but three interviews. After the interview, all interviewees were debriefed, which included explaining to them that the main aim of the interview had been to find out about owner priorities around weight management. However, it was also made clear that the wider implications of how health and wellbeing are managed by owners were of great importance and relevance to the study. This seemed acceptable to owners, who often readily agreed during the debrief that weight management was a major difficulty facing them and/or their friends and yard peers.

Most participants were interviewed at their horse's yards, and seemed happy to show me their horse, their set-up, feed room, etc, though it was made clear that this was optional to them. Being at the yard acted as a useful prompt for further questions, and meant that they could show me rather than tell me about their horse care (for example 'half a scoop' of feed, or point to a pre-made dinner). Meeting the participant and their horse allowed me to build rapport and gave a useful sense of context to the interview. It also meant that we could talk as tasks were done, so for example some interviews involved bringing in horses from the field, or watching the horse on the horse-walker.

However, yard interviews did have drawbacks; for example sometimes other people would come and interrupt the interview to ask about other yard matters, and sometimes other factors such as high winds meant that the audio was not very clear.

While I endeavoured to visit most yards in person, due to the geographical distances to be covered several interviews were conducted over the telephone or using Facetime. For example one interviewee showed me around her farm using the camera on her phone whilst we spoke, and showed me her horses. This was a very useful way of talking to someone who was situated far away, but it was harder to build rapport and the data seemed less in-depth than some other settings with some participants. Other participants seemed very happy to talk over the phone, and needed little prompting; they often sent pictures of their horses and yards in order to facilitate conversation.

Generally participants were eager to participate and talk about their horses; indeed, several participants began narrating their stories without even waiting for the first question to be asked. Several interviewees commented that they did not usually get the chance to speak solidly about their horse for an hour or so, and that they'd enjoyed participating for this reason. They often commented that they'd thought in advance about the things that they wanted to say about their horse or their horse's management, and this is evident in some of the transcripts. The interviews were generally around one hour in length, but could be up to 3 hours (mean 1:10 hours, range 29:32 – 3:09 hours).

Interviews with professionals were managed differently, with recruitment achieved through social media, existing practices, and existing contacts. These interviews took place at a location most convenient for the interviewee, which was often a coffee shop or quiet room in the practice. Professionals were interviewed specifically about their experiences with owners with obese or overweight horses, and again an interview guide was used to loosely structure the interviews (appendix F). Professionals had less time available for interviews, and particularly vets often had to rush off mid-way through the discussion, though we were often able to pick up later to resume our talks. The average time for professional interviews was

45 minutes (range 0:20 to 1:16 hours). Five interviews with commercial equine nutritionists from a past project about laminitis were utilised for this project with permission from the ethics committee. This choice was made because the interviews covered relevant information about discussions about weight management from commercial nutritionists, and therefore reduced the burden on participants by avoiding the need for re-interview.

**Table 2: professionals who participated in individual interviews**

Pseudonym	Role	Gender	Interview type
Helen	Yard manager	Female	Face to face
Anna	Yard manager	Female	Face to face
Sam	Farrier	Male	Face to face
Lottie	nutritionist	Female	Face to face
Keith	farrier	Male	Face to face
Shaun	farrier	Male	Face to face
Nina	equine welfare staff – charity	Female	Face to face
Nicola	Behaviourist	Female	Face to face
John	Yard manager (farmer)	Male	Face to face
Alex	Farrier	Female	Face to face
Susanna	vet	Female	Face to face
Sarah	vet	Female	Phone
Becky	vet	Female	Phone
Bryony	vet	Female	Phone
Jenny	nutritionist	Female	Phone – past project
Verity	nutritionist	Female	Phone – past project
Lisa	nutritionist	Female	Phone – past project
Tilly	nutritionist	Female	Phone – past project
Nat	nutritionist	Female	Phone – past project

In all individual interviews I used two recording devices, in case one failed, and also took notes as the owner spoke; these were used to assist in follow-up questions and later analysis.

For the horse owner interviews I also recorded field notes about the location, set-up, horse, and my own impressions.

In the horse owner interviews I had initially planned to take a covert condition score of each horse in order to compare my own impressions of the horse with the owners' descriptions of their condition and weight. However, in practice it was often not possible to do so, for example because the horse was wearing a rug or was not present at the interview. Instead, I tried to take field notes on my overall impressions. I did not feel that this detracted overall from the data because I was interested mainly in the interviewee's assessment and how they had come to make it, rather than my own personal view of their horse.

We had planned to conduct interviews until data saturation was reached; in practice this was harder to ascertain than planned, because each owner's situation is so unique. However, at 26-28 diverse horse owners, I was satisfied that for weight management, the same themes were consistently arising, and moreover those themes were consistent with the data from the discussion fora and focus groups.

Audio recordings were transcribed either by me or by a professional transcription company, and each transcription was then read whilst listening to the original audio, in order to check for errors, before being anonymised and included in the analysis.

## 2.8 Focus groups data collection procedure

The aim of the focus groups was to involve horse owners in in-depth discussions about the weight management methods that they employed with their horses, and how they achieved these methods. The focus groups were conducted during June 2018 at Leahurst Equine Practice. The Leahurst Equine Practice Facebook page, as well as local equestrian social media groups and notices in local feed and tack shops, were used to recruit for the participants, who were all local horse owners; two of the participants also worked with

horses in a professional capacity, with one an equine behaviourist and one running a riding school. The advert described that the focus group was about weight management and would form part of a research project. Recruitment proved unproblematic; in fact the first group filled so quickly that we were able to use the waiting list to fill the second group the following week.

Participants were invited to send photos of their horses if they wished to do so, with those photos being shared via Powerpoint during discussion. It was emphasised that this was not obligatory. Most participants chose to send photos of their horses, which were uploaded onto a Powerpoint prior to participants arriving. A veterinary student acted as a second facilitator to help take notes and welcome participants.

The groups took place in the evening, and each group had 12 and 9 participants respectively. The aim of the group was to discuss weight management methods in more depth, and to consider how participants made decisions around weight. Therefore, the weight management guide "*When the grass is greener*", which had been developed for some public engagement activities, was used to facilitate discussion, since it stimulated participants to speak around certain topics, and provided a useful prioritising exercise which was undertaken in the group.

**Table 3: participants who took part in two focus groups**

	<b>Owner pseudonym</b>	<b>Horse pseudonym</b>	<b>Horse description</b>
<b>Focus group one</b>	Georgia	Pip, Piper	Connemara
	Cathy	Storm, Sparrow, Silver,	Fresian horse; welsh type pony, and Connemara
	Jess	Midnight	Fresian
	Daisy (Jess' sharer)		
	Issie	Ebony	Fresian
	Iris	Gypsy	Irish cob
	Amelia	Cookie	Welsh
	Nicola	Coco, Cappuccino	Fell pony
	Zoe	Amigo, Arrow, Avis	Maxi-cob and natives
	Ciara	Tinkerbelle, Tessa, Tornado	Welsh
	Ruby	Fancy, Flash	New Forest, appaloosa X
	Lily	Dawn, Sunshine	Welsh Sec C
<b>Focus group two</b>	Matilda	Rio	Welsh Sec D
	Penny	Hero and Honey	Gypsy cob, Welsh sec D
	Maria (Penny's Sharer)		
	Holly	Dude	Connemara
	Annie	Harvey	Cob
	Abbie	Jester and Junior	Cob
	Harriet	Lucky and Lightning	Cob and highland pony
	Thea (Harriet's sharer)		
	Niamh	Spirit	ISH



The focus group schedule was as follows:

- Explanation of study and reason for focus group; explanation of consent procedure and taking of consent; audio recorders switched on
- Ice-breaker: participants described their horses as if the horse was writing itself a dating profile
- Weight management story: Each participant was invited to tell their horse's weight management story; when they had begun weight management, where they were now and what had/hadn't worked. Whilst the participants spoke, the facilitator wrote their suggestions into one of two sections on the whiteboard: either suggestions as to why the speaker felt their horse was fat (for example, they are unable to exercise) or things the speaker had tried in order to manage weight (for example, a grazing muzzle).
- Follow up: each of the methods suggested for managing weight was read out, with owners noting down any that they *could* potentially take up in their situation.
- Priority setting exercise: owners discussed how they would rate their concern about their horse's weight on a scale of 1-10, and then how they would rate other problems such as their lack of time, other comorbidities etc out of 10. Owners then discussed how they prioritised different aspects of caring for their horse, and discussed how this might lead them to change their management.
- Wrap up and discussion about what they might change in future; completion of feedback forms.

Focus groups were well-received, with individuals rating their enjoyment of the workshop and its usefulness very highly, as well as the group yielding rich data about specific areas of interest.

Audio recordings were transcribed by a professional transcription company, and each transcription was then read whilst listening to the original audio, in order to check for errors, before being anonymised and included in the analysis.

## 2.9 Data analysis

Grounded theory proposes that the processes of data collection, analysis and theory building are carried out simultaneously(165), and this project aimed to do so by working in short phases. Initially data were collected from discussion fora and initial coding was completed, before beginning a small subset of interviews; some open coding was performed on the interview data, then compared with the forum data before more interviews were conducted, and so forth. As such, the data analysis and theories generated slowly evolved as the data was collected and analysed.

The data were uploaded into NVivo files(181), separated broadly by type: one for forum data; one for horse owners and focus groups; and one for professionals. This was so that coding did not force data into predetermined categories more relevant to other data types.

Analysis of each source file occurred by initially reading through the source and making annotations and notes made in the research diary, before starting an initial process of “open coding”, which involved “fracturing” the text and analysing it line by line, or fragment by fragment(165)(156). This was performed either on paper or in NVivo (all coding done on paper was later transferred to nVivo).

These codes were then discussed with supervisors, particularly EP, and multiple times in focus groups with other social science research students, where we would check and discuss one another’s coding and themes. After several rounds of revisions, codes were grouped into “nodes” and “categories”; for example “exercising the horse” was placed under “husbandry of the horse” which was placed under “processes of ownership”. I struggled for a while with the idea that there was no one “correct” way of coding, but eventually found my own

methodology, considering it like an art; an informed interpretation of the data, subject to change as my own knowledge improved and refined each code.

Eventually, after many iterations, I was comfortable that I had created concepts which were applicable across the three data types, and could be drawn together in the form of a conceptual model, presented in the next chapter.

### 2.10 Reflecting on interview technique

The first three interviews were conducted as pilots and were critiqued by EP, to assist in my interviewing style. I also attended interviewing training just after conducting them. Although I enjoyed the process of interviewing from the outset, initially I found some challenges. I wanted to rush to fill silences with more questions and found it hard to pick out themes which I could follow up on later in the same interview. I also found that I was so used to discussing horses with the general population that to begin with I sometimes forgot to take a step back. For example in the first interview the owner laughed that she had not had the vet for a whole year, and I automatically said how impressive that was ‘for a thoroughbred’. I made sure to critique my interview style after each interview, and record notes for the future in my research diary, which I reviewed before each subsequent interview.

As the interviews continued I felt that I was becoming more comfortable picking out themes for follow-up, allowing silences if the nature of the interview invited it, and inviting discussions.

However, one thing I continued to find challenging, particularly affecting the “professional” interviews, was that the process of interviewing, however informal, changed the dynamic between me and the participant. It seems to be a maxim for qualitative researchers that the best information comes once the recorder has been switched off(156), and I found that this was particularly true for professionals, who were perhaps a little wary of being recorded

saying anything controversial (even when anonymised). However, I also felt that this effect was partially a result of the fact that I could engage and share my own views after the interview, which led to some interesting discussions which were not present when conducting the actual interview as a neutral researcher. Although we chose not to conduct ethnography for this study, it is one area in which ethnography could have yielded some interesting and less formal opinion.

### 2.11 Reflecting on my positionality as a horseperson and researcher

Although it feels somewhat alien to do so in a formal thesis, it would be unnatural not to reflect on how my own life experiences have shaped this project, particularly as the experiences which life threw at me during the process of my PhD allowed me to reflect on my data in ways which I had not foreseen.

Horses have always been a major part of my life; growing up, my main interests involved jumping and galloping as fast as I could around the Oxfordshire countryside. I remember being utterly mystified by people paying good money for reliable, safe gypsy cobs to walk around on. Riding for me was all about speed, adrenaline, rosettes and fun.

I returned from my undergraduate degree with an archetypal erratic, beautiful Welsh Sec D named Morgan who was (very literally) afraid of his own shadow, as well as most other everyday sights. Buoyed by the possibilities provided by my first proper salary I also quickly and accidentally acquired a thoroughbred mare named Red from a yard I worked at in the holidays; Red was unwanted and older, though still full of life, but was due to be put down because of her owner's lack of interest. Together the three of us formed a cohesive unit, as good a family as I could wish for, and we weathered various ups, downs and moves.

Nine years later, I loaded my horses for our new life in the Wirral for me to begin this PhD. As soon as they were safely installed in my chosen yard, and even though I had no idea where I myself would be living long-term, I felt an overwhelming sense of relief. Where they were, was home. Red was, by this time, around 30 and had been retired for several years but in good health, and Morgan was approaching his sixteenth birthday; I was excited

at the prospect of being able to hack him to the Wirral's beaches (he'd never seen a beach) and take part in endurance rides in new places.

Five weeks into our new life, just as we were beginning to feel settled, I arrived at the yard before work and discovered Morgan not himself; head lowered, he was clearly in pain and – alarm bells for any Welsh – did not want to eat. I phoned the vet and our nightmare day began, snowballing out of control and out of control some more as we learnt together about splenic entrapment, stocks and stomach taps and surgery decisions. Finally, that evening I received the call I was expecting to tell me he was on his feet, and before the voice at the other end had even spoken, I could feel my world sliding apart. He'd died during recovery, out of the blue and for no obvious reason.

Red's and my world fell into disarray. Morgan was – I can't put it better than my respondent who described her horse as being 'the biggest thing in my life that isn't me', and that stood for both me and Red. I would have said that Red made it to her old age because of his presence; she relied on him and she followed him everywhere. Obviously, everything changed at this point, but the reason I'm telling this story here is not pure self-indulgence, but that it ultimately changed my own relationship with horses and provided me with insight which privileged me with a new understanding of the world some of my respondents.

Though she was no less loved for it, the whole time I'd known Red I'd considered her 'older' – her age was how I'd ended up with her after all. We'd had fun together and competed during the first year or two of our relationship, but it had always been a little incidental and just-for-fun, whereas Morgan was the one for whom I had goals and aspirations. Suddenly, then, my main focus changed and centred solely on caring for a recently uprooted, recently bereaved, very elderly retired mare.

I would always have told you that I put my horse's needs ahead of my own, but my subsequent relationship with Red meant that I had to reconsider whether that had really been true. Now, rather than making human-centric plans (dressage, hacking in new places, endurance), suddenly my equine world was entirely horse-centric, and seeing as that was really a new experience for me, it involved a lot of questions. Was Red really OK – physically, emotionally? How could I really know? Who were the ideal field companions to help settle her in Morgan's absence? Did my spending time with her help? What would quality time with me actually consist of, if she could choose? Should I worry about X, Y, Z?

Had I called the vet about too many things recently and would they think I was paranoid?

Red was an old lady – how could I possibly know when the ‘time was right’ to make the right final decision for her? What if she had a long, slow decline and I didn’t notice?

Of course I’d always thought about these things on some level, but they’d never before formed my entire equine world, but had just occurred alongside all my more pressing worries about booking entries for events and whether or not Morgan’s shoulder-in was really on three tracks. It was an interesting experience to have myself removed from the equation – suddenly, all the decisions I was making aimed to be entirely for Red’s benefit.

This feeling was heightened because I felt some turmoil after Morgan’s death for the way in which he and I had spent his life. Despite being an intensely fearful horse, we’d nevertheless achieved all sorts of things in my desire to ‘improve’ him. We persevered in showjumping, we completed numerous endurance rides, we competed in dressage, one day events, mounted games, drag hunting – all sorts of things which were far beyond his comfort level, including a memorable day in which we used him (‘used’ being the operative word) as a film horse, which involved all sorts of umbrellas and other objects of terror. While I felt that I didn’t physically force him to do anything, after his death I wondered if this had instead been an abuse of power. I would have said I loved Morgan for who he was, so why did I want him to do all those things which were of no importance at all to a horse who just really loved hanging out in the sun and eating?

I pondered all these things as I talked with so many different respondents about how they felt about their own horses, and how they made decisions about caring for them. Some, reflecting my own past self, felt that it was necessary in some way for the horse to perform and achieve things at competitions and lead an active life. Other owners felt that they’d found a different way for their horses to live, allowing them choice and agency. However, central to the horse’s preferred activities tended to be – as one respondent put it – friends, food, forage, and freedom. Humans weren’t really required in that equation (though it certainly did provide a potential recipe for obesity!), and the horses often ended up fulfilling a more companion-animal-like role than my own construct of ‘having a horse’.

I would not have understood the respondents who told me that they had ‘pet’ horses, had I not been in this situation with Red. I’d go to her after my interviews and mull over the themes they’d discussed, as we whiled the time away in eachothers’ company, grooming and

hanging out together. I learnt to appreciate her moods and sense of humour and better understand her. In return, our relationship changed; she'd always been a horse with severe separation anxiety, but now that I wasn't making her do anything and I was entirely 'for her', suddenly she was the one choosing to take us off down the road without equine company for an evening walk, was happier stabling, and in many other situations. We'd walk where she wanted – half the time I didn't even have a leadrope clipped on.

Red was hilarious and delightful company, with what seemed like a great sense of her own importance, a love of attention and, weirdly, a love of vets. She taught me about what some of these respondents with horse-pets were telling me. They were enjoying being with their horses without 'doing' anything at all, and suddenly for the first time, I could understand that on a level which I never would have been able to if I remained Tamzin-centred and riding. Having a 'pet' horse might be a high risk factor for making horses fat – fortunately not a problem I had with Red, being an elderly TB - but nevertheless it was exceptionally rewarding, probably more so than any rosette or trophy I'd ever won. Understanding how to make changes to horse obesity requires that we truly understand what the respondents are going through, and Red (who always knew best anyway) was giving me the opportunity for an impromptu auto-ethnography.

It was at this point that I was able to reflect more clearly on some of the aspects of the data which previously would have seemed to my 'horsey' self as unremarkable and I therefore could have missed. Seeing our relationship in a different light allowed me to see how it is common in our society to objectify horses and to treat them as commodities which can be moulded, bought and sold according to our whims, and how our supposed unconditional love for them is instead shaped by whether they behave according to our predefined boundaries of acceptability.

Very sadly, mid-way through my second PhD year, I lost Red following some sort of field accident, probably a stroke, which had caused her to fracture her neck. I'd spent hour upon hour over the past eighteen months worrying about whether I'd know to make the right final decision for her at the right time, and now here it was. It was sudden and horrible, but I was grateful at least that it had been incredibly quick, and she died surrounded by some of her favourite people and at the hands of her favourite vet.

Red's death meant that I was suddenly horseless for the first time in my adult life. I was

heartbroken to lose her, but the fact of her dying was a little more acceptable to me than with Morgan, partly because I'd been prepared for many years that it had to happen sometime because she was so old – and of course, the fact that I felt her entire life in recent years had been lived to the full, with every decision made purely based on what was the happiest and best outcome for her, and I had no regrets there. On the other hand, the shock, horror and guilt I'd felt at losing Morgan which was in some parts absent this time round, was instead replaced by a sheer emptiness at being horseless, which allowed me to reflect on what it really means to be a horse owner.

Having a horse, I discovered, had provided me with a great many gifts that I had not completely understood – they are discussed by some of the respondents, but my experiences gave me a new understanding of some of the things that they were saying. Having a horse provided a rhythm and structure to my day, and a very 'real' purpose, I suppose perhaps a little like parenting, ensuring that Red was happy and well each day. I discovered, as some respondents mentioned, that being outdoors in all weathers and in the cold and dark was very important to me. Perhaps most important of all, given how my thesis focusses on caring and love, I discovered how much I relied and placed value on the simple act of caring and providing unconditional love. I discovered how much I'd enjoyed worrying about Red's care - which feed to feed, whether she had the right rug on, how to best structure her stabling routine in winter. Indeed, the 'caring for' aspects(121) were so deeply embedded that it was several months before changes in the weather stopped prompting an automatic firing of the is-Red-appropriately-rugged neurones in my brain. Six months later and I was still sometimes waking up panicking that I had forgotten to feed her the previous day. I didn't know who I really was without this focus of my life. Again, as Dani says, 'the biggest thing in my life that isn't me'.

I spent many months existing in, and exploring, horse-less life before my good friends procured a companion horse that "just happened" to be a potential Tamzin horse; an Arab gelding named Merlot who had been out of work for some time due to problem behaviours. Slowly, I considered the possibility of building a new relationship, learning about a new individual. I considered the work of Sanders, Fox and Schurman(124,129,136) in how we co-constructed our time together. I tried to take lessons from what my experiences with Red and Morgan and my participants had taught me, in order to allow Merlot's personhood to



emerge. I considered deeply what ownership meant; if I bought Merlot, committed myself to him, what would that mean for us both?

I am happy to say that I finally made the decision to buy Merlot after a year of loaning, on the day I handed in my thesis: symbolic perhaps of the letting go of my past relationships with Morgan and Red, for the future with a new friend (even though it is bizarre anyway to consider that I have “purchased” a friend). The experiences life provided me over the time of my PhD therefore powerfully gifted me new clarifications and a deeper understanding of facets of equine life which I’d never previously considered; gifts in and of themselves, but also allowing me to do a much better job at understanding my participants than I might otherwise have achieved.

## Chapter 3: Introduction to Results

### 3.1 Conceptual model of the construction of constructed horse and owner

Following in-depth analysis of the data, a conceptual model was created which illustrates the different aspects of the constructed equestrian world. The model helps to understand how the horse owner navigates and makes decisions around equine care, using their own knowledge, the horse in their care, and the various modifying factors from the people and society around them. Understanding the equestrian world itself, before considering the issue of obesity specifically, clarifies the priorities and drivers of the owners' behaviours; when this is later linked to obesity, we can see that there are break-downs in every single level of this model, creating an obesogenic environment in which the owner must battle to make changes.

This section focuses specifically on providing an overview of the model of the horse owner, firstly explaining the model before linking each aspect of the model with the obesogenic environment surrounding the horse. Subsequent chapters will go into more detail about each component part of the model and the obesogenic environment which it describes, and will show how the data supports each aspect; as an overview, this chapter describes the model but does not go into detail about the supporting data.

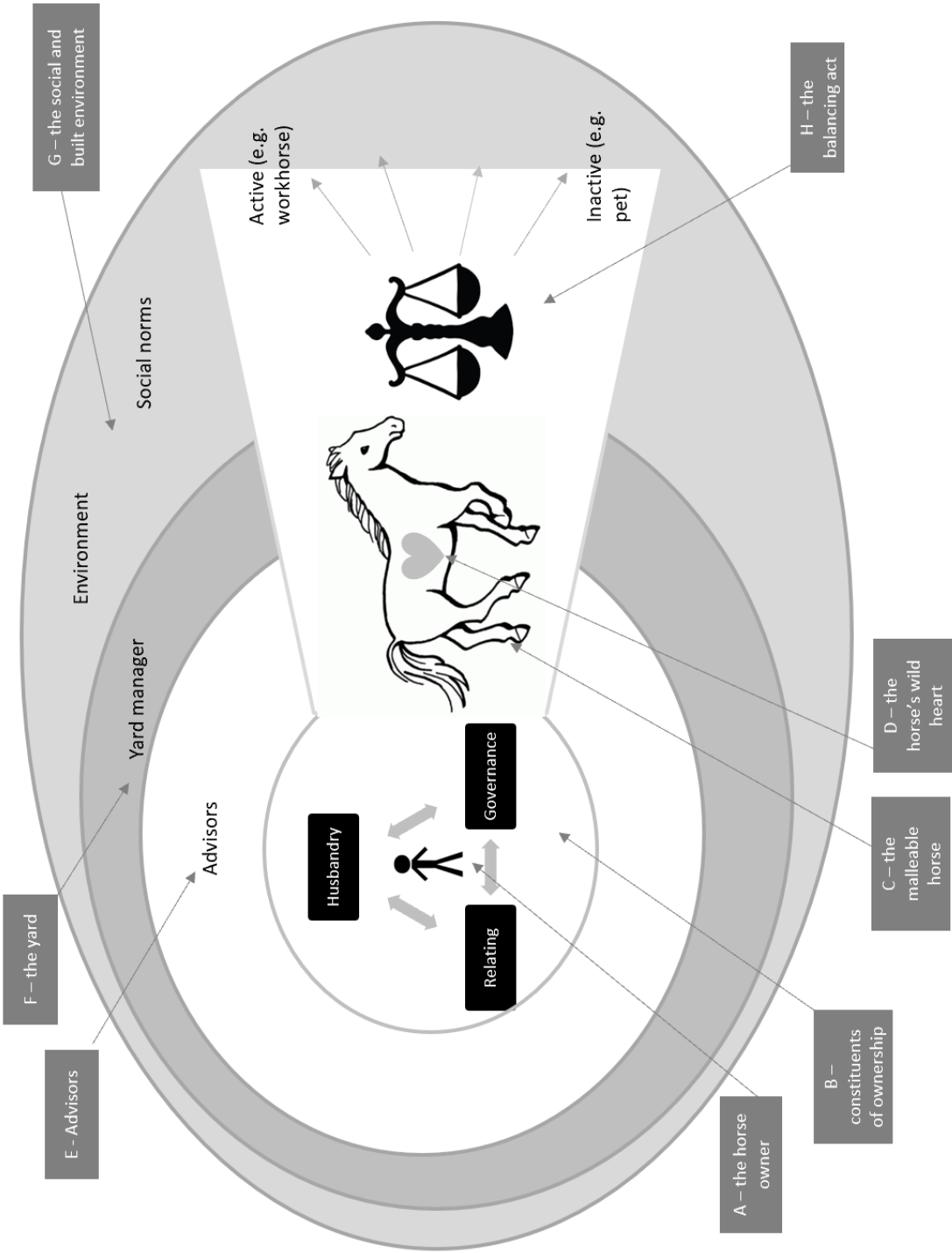


Fig 6, conceptual model of the equestrian lifeworld of the horse owner, showing the owner's influences their horse but is simultaneously influenced by others

### 3.1 A - The horse owner

The horse owner is depicted by the figure in the very centre of the model; the central focus of the model. The data showed that the owner has a sense of their own identity as a horseperson which transcends any one particular horse, but brings together their history as a horseperson, their ideologies, and the pragmatic boundaries present in their lives, such as ability to juggle life constraints (time, money, weather, ageing, confidence) in order to look after the horse. While being a “horseperson” might be variously viewed as a lifestyle, passion or innate need, the reality of horse owning is a leisure activity for the owners in this study, and as such the horses’ care was framed within the realities of an individuals’ daily life; their time, financial, and physical constraints. The horse owner is described in Chapter 4.

### 3.1 B - Constituents of ownership

The owner connects with the horse by the constant alteration of three interlinked aspects; *husbandry*, *governance*, and their *relationship* with the horse, shown in the diagram as surrounding the owner. *Husbandry* relates to the embodied acts of care which are done ‘to’ the horse by the owner (or by staff at the request of the owner), such as feeding, exercise, rugging and so forth. The aim of these aspects is mainly to ensure that the horse is healthy and has good welfare in the opinion of the owner. Their *relationship* to the horse is concerned with the evolving, ever-changing relationship the owner has constructed with the horse. *Governance* relates to the means of control of the horse. This encompasses training methods, the physical means of control such as bits and pressure halters, decisions around husbandry that alter the control the owner has over the horse, and any other way in which the owner chooses to govern the animal.

These three aspects are constantly in flux throughout the ownership of a horse. The choices made about the horse might be affected by any of the other aspects in this model: the weather, the season, the individuals surrounding the horse owner, the physical capabilities of the owner. Further, each of the three aspects impacts the other two; for example, an

alteration in the husbandry of the horse might impact how the horse behaves, causing the owner to alter their handling of the horse, which will in turn alter their relationship with the horse. The constituents of ownership are described in detail in chapter 4.

### 3.1 C - The malleable horse

The horse is presented within the central funnel of the model, in order to show how it is under the control of, and can be modified by, the horse owner's use of the three processes of ownership (husbandry, governance and relationship). The horse is presented by owners as a malleable, changeable presence. It can be manipulated and transformed by the horse owner at their will, to create an alternative form which could be anything from a commodified work-horse (*work* could include competition, physical work such as being a riding school pony, breeding young, etc), through to the potentially more inactive role of a companion animal, for whom the expectations might be less tangible. The horse as a pet may be expected to provide companionship, love, and reinforce the owner's sense of self. For the owners, this process of transformation was at the heart of their ownership; participants consistently discussed and reiterated the change that they had achieved in their horses during their ownership. Owners' constructions of the horse are discussed in chapter 5.

### 3.1 D - The wild heart

While the horses' role in life is as a changeable body, that does not overcome the fact that it is still a horse; a being which owners perceive as 'wild at heart', as presented by the heart at the centre of the horse. Owners considered that horses had their own potentially dangerous agendas and behaviours and these modify many of the husbandry and governance behaviours which are done to the horses, as well as the relationship that the owner constructs with the horse. Understanding and overcoming the horses' potentially wild-at-heart behaviour was a recurring theme for horse owners throughout the study. Owners' constructions of the horse are discussed in chapter 5.

### 3.1.2 Modifiers around the owner

The horse owner is generally not alone in their management of the horse, being encircled by several levels of modifiers which impact the owners' horse keeping ideas, actions and decisions, as described in chapter 6. On the diagram this is illustrated by the concentric circles around the horse owner.

#### 3.1.2 E – Advisors

At the closest level are those who are seen as support and advisors for the horse owner. This includes specialist expertise which has been brought in to assist in managing and manipulating the horse. It also includes the farrier, vet, instructor, physiotherapist, etc, and also the individuals' support network such as friends and peer support, which could include online support. This level of support provides direct assistance and advice to the owner, but also works through the owners' compliance to social norms; the owner is expected to follow these norms and behave in certain ways, such as following the advice of professionals.

#### 3.1.2 F - Yard manager

The next layer is that of the yard manager or land owner; this person has extensive impact over the horse's life and management whilst the horse is within their geographical boundary. The yard manager may also manipulate the behaviour of the support network and specialist expertise, for example by prescribing which experts are permitted to visit the yard and horse, by choosing their clientele and therefore the level of knowledge and type of ideologies surrounding the horse owner, or simply by designating certain acts and rules about how and where the horse can be kept. Yard owners' rules were common to all yards discussed, and could govern many aspects of horse-keeping, whether the owner was a farmer on a DIY (do it yourself) livery, right up to a purpose-built full livery yard.

Of course, some owners chose to remove this layer of control by managing their own land; however, they still imposed their own restrictive land management methods and rules on horse-care, through their need to manage and protect the land as well as the horse itself.

### 3.1.2 G - The built environment and equine society

Beyond the yard itself, the owners described the influence of wider factors; the social norms, equine environment, and commercialisation that make up the UK equine society. For example, the feed industry has commodified, ritualized and moralised horse feed in the past two decades; where previously horses might have been fed “straights” mixed by the owner according to need (“straights” are one ingredient, such as chaff, oats, sugarbeet, or barley), the commodification of the practice of feeding has meant that it is common practice for owners to feed commercial food mixes and be extremely concerned about providing a nutritionally perfect diet. Owners may also be influenced by the wider equestrian media, and equine events such as major horse shows.

### 3.1.3 H - The balancing act

These aspects combine together to determine the horses’ energy inputs and outputs, represented by the scales on the image. For example, an owner that treats their horse in a utilitarian manner for its financial worth might have a pragmatic relationship with the horse which depends on the horse being at optimum fitness, and so the owner may refine its feed, care and exercise according to its turnout and workload. The horse’s energy input and outputs are balanced, and hence the horse’s condition is optimum. Contrastingly, an owner whose horse is constructed as a companion animal may be more invested in their relationship with the horse, as opposed to its fitness; their husbandry may be focussed around caring for the horse and providing for it, but without the energy outputs that match its inputs, and hence the scales are tipped to the “inputs” and this horse will become overweight.

Each level on the model is not necessarily clear-cut; a particular owner may not be concerned with orthodoxy and may shun the advice of their peers, experts and social norms. The yard manager is likely to be influenced by others within the model, including for example, the vet or the horse owner themselves. However, overall this model describes well the experience of the owners and professionals interviewed in this study. The aspects of husbandry, relationship and governance – which are heavily influenced by the modifying forces of support networks, yard managers, specialist experts and society - serve to modify the horse at the will of the owner. The horse owner, therefore, is constrained by numerous external pressures in their bid to care for and transform the horse into an animal of their choosing.



### 3.2 The obesogenic environment

The factors which contribute to the high prevalence of obesity in horses are evident in each aspect of this model, and hence the model shows the *obesogenic* environment which surrounds UK horses. The term obesogenic environment is used in the study of human health, where it describes environments which promote obesity; for example the loss of green spaces, prevalence of fast food outlets, and the high price of fruit and vegetables in comparison with processed foods(182). The concept of an obesogenic environment has not previously been applied to animal health and welfare, but in this project all aspects of the diagram were seen to have obesogenic effects on the horse, creating an environment in which weight gain could be considered inevitable without intervention.

The data explaining how these factors create an obesogenic environment will be discussed throughout the following chapters, culminating in an explanation of how owners recognise and respond to equine obesity in chapter 7.

#### 3.2.1 A - The horse owner

For the owners in this study, horses were considered a leisure pastime, meaning that the horse owner is therefore heavily restricted by their own “real life” requirements, such as time and finances. This left owners ill-equipped to make changes to husbandry processes which may be necessary to manage an overweight horse, such as increasing the exercise the horse needs, soaking hay, stabling etc. Furthermore, many owners expressed that they were not confident assessing their horses’ body weight or welfare, because of their over-familiarity with the horse; seeing the horse every day meant that they were unable to view changes objectively.

Many horse owners were also concerned about their personal vulnerability while riding and handling horses, and hence their own confidence may be limited, causing them to restrict their equine activities to those which they perceive as “safer”, for example limiting hacking out, not riding at speed, avoiding jumping, or not exercising the horse at all. Owner

confidence, therefore, plays a huge role in the energy outputs to which the horse may be subject.

### 3.2.1 B - Constituents of ownership

The processes of ownership convey the decisions the owner makes about how to care for, control and relate to the horse; as described, these things are constantly altering based on changes to the horse itself, the owners' knowledge, social norms, the environment, etc. However, as the model highlights, it is not necessarily straightforward for an owner to make alterations to some aspects of horse care: they may receive conflicting advice from those around them, they may be unable to make changes due to the yard rules and environment, etc. As a result, quick and minimal-effort changes appeared to be prioritised; new feed being a good example. Many of the owners in the study fed multiple feeds aimed at solving particular management problems, such as weight problems, hoof care, behavioural problems, etc. Of course, this can lead to overfeeding and further weight problems.

Furthermore, owners suggested that horse care practices were very diverse and had been moralised, with some owners choosing to try to keep their horses as “naturally” as possible (for example, outdoors all year, with constant access to co-grazers as a “herd”, and ad-lib forage). Such owners sometimes chose not to ride their horses as part of this return to “naturalness”. Other owners took an opposite moral pathway, choosing to cocoon their horses in measures perceived as securing their safety, such as stables, rugs, CCTV, individual paddocks to minimise risk of injury, and so on. Unfortunately, both ends of this spectrum appeared to have obesogenic effects. Those horses kept “naturally” were often not required to exercise, and constant access to feed was a perceived part of the “natural” lifestyle. While such owners might describe being less likely to rug their horses so as to allow thermoregulation and a natural loss of weight in winter, the reality of the rich British grass present in most fields meant that further intervention might be needed to ensure the horse lost weight.

Contrastingly, while formalised exercise might be more likely with the “cocooned” approach to horse care, horses were often confined to extremely small areas such as stables and individual paddocks which limited their generalised movement. These horses were also often rugged which limited the need for the horse to expend energy on thermoregulation. Furthermore, owners were very aware of the need for horses, as grazing animals, to have constant access to forage so as to reduce the likelihood of gastric ulcers and colic; this seemed to be at the forefront of their minds. Therefore “humanised” horses were also exposed to an obesogenic environment, though of a different kind to the “naturalised” animals.

Constructs around the relationship with horses may also have changed in recent years, with horses valued by many for their companionship rather than their functionality(121,129). This was the case for the owners in this study, none of whom owned their horses as working animals, and the different relationship of those who owned companion horses compared to workhorses was noted by many of the professionals. As such, the constructed relationship between horse and owner was often at the forefront of the owners’ descriptions of their horse-keeping decisions. This is perhaps highlighted in instances described where the owners chose to go against the advice of professionals; often they described doing so because the professional did not know what was right for “their horse”. A result of their complex and deep relationship with the horse was that some owners described not wanting to “use” their horse, or treat it “like a slave” by ensuring exercise. For them, the relationship with the horse was based around them being able to protect the horse from the need to exercise hard as a workhorse might. Clearly this factor could have obesogenic effects, if the management of the horse was not adjusted to account for the minimal calorie output.

As relationships with horses have begun to change over time, so too have methods of governance. Many interviewees discussed their changing approach to achieving the horses’ compliance, moving from historically brutalised training which favoured physical restraint and tools, to an approach which purports to take account of the horses’ nature. Many respondents described themselves as having been on a journey of knowledge to their new enlightenment. This journey varied, whether that journey resulted in the total removal of all

negative reinforcement and punishment (one respondent), through to “natural horsemanship” (several respondents), or simply shunning physical tools seen as the most harsh (for example chiffrons, discussed by many respondents). This shift is part of the changing societal attitude toward horses as sentient animals, and hence reinforces the aspects discussed as part of the relationship with horses. Owners want to *relate* to their horse as a part of their governance, rather than acting through force. This is hand in hand with not wanting to “treat the horse as a slave” and “use” the horse, and also aligns directly with husbandry options that attempt to increase the horses’ needs “as a horse” by allowing it choice and freedom. Whilst these are absolutely admirable and ethical changes, the part they play in the shift towards the horse as a companion animal means that together, they are also potentially contributing to the obesogenic environment.

### 3.2.1 C - The malleable horse

The horse is subject to ongoing transformations throughout its life. As described above those currently in the “companion” end of the transformation spectrum are often valued for their perceived personality traits rather than their functionality, and therefore may not be expected to expend energy in the same way that a “working” horse might require. Increasingly, horses are companion animals rather than working animals and hence horses whose energy expenditure is quite low are increasingly common.

Furthermore, the horse’s “wild heart” also means that it is adapted, particularly if it is a cob or native pony (the very breeds often also chosen for more inactive lifestyles such as companion animals), to find and survive on little food and expend little energy.

The horses’ perceived “wild heart” can be problematic for horse owners who are not adequately prepared for unexpected behaviour. Perceived difficult behaviours in the horses were much discussed throughout the interviews and focus groups. Owners who were unable to manage these behaviours found themselves less able to exercise the horse adequately. Horse owners displayed a complex relationship with potential danger through the consistent

discussion of the horse's potential dangerousness and the owners' mastery of such danger. However, perceived unmanageable levels of danger led to a breakdown in confidence of the rider, or in physical injury. Alongside the simple fact of human ageing and decreased physical ability, these factors led to many owners discussing "slowing down" and reducing the perceived risk of riding by minimising their activities, avoiding hacking, fast work, jumping, etc, and thus minimising the amount of energy expenditure by the horse.

### 3.2.1 D - Advisors

Horse owners employed numerous specialists in the care of their horses - vets, farriers, physiotherapists, saddlers, nutritionists, instructors, dental technicians, etc. Theoretically these individuals could highlight weight issues to owners before the horse becomes too overweight, and indeed owners sometimes commented that their horse must be an acceptable weight because they had not been told otherwise. However, interviews with professionals suggested that these people had multiple conflicting concerns during a consultation, including the need to find the best way to communicate with the owner. They may be uncomfortable discussing weight with the owner (particularly if the owner is also overweight), and they may not expect that changes will be enacted, or they may not put forward their ideas in a way in which the owner is able to take up. For example, they sometimes suggested that they had told the owner to manage the horse's weight, but when reporting their actual speech they said "the horse is looking like he's been on the grass", or other such minimising phrases which may not be clear for owners.

Horse owners often discussed valuing experience more than qualifications, and as such they also gained advice from friends, fellow liveries, riding clubs and discussion forums; all part of the "supportive communities". It was noted that owners often chose to surround themselves with like-minded individuals. Therefore, and especially because obesity is now so common as to be thought of as "the norm" for some, it is possible that these sources are ill-equipped to provide advice on husbandry, governance and the horses energy outputs. Consequently these sources may perpetuate the obesogenic environment surrounding the horse.

### 3.2.1 F - Yard and yard owner

The yard owners discussed experiencing multiple competing priorities in their management of the land, and although their yard constitutes a service to owners it was commonly understood that there is more demand than supply; horse owners were commodified by yard owners, and were governed by extensive series of rules and regulations. It was not necessarily in the interests of the yard's business model to make allowances for the needs of individual owners and horses. As a result of these factors yard owners often prioritised aesthetically pleasing management options which were often directly opposed to the wishes of the horse owner; for example yard managers preferred neat green fields and therefore fertilised their grass annually, disallowed flexible management options such as electric fences, and disallowed turnout in winter so as to protect the fields. As a result, the decisions of the yard manager directly contributed to the obesogenic environment, by providing an inflexible local environment to the horse.

The rules imposed on the horse owner emasculated them, rendering them powerless and limiting management options. Many horse owners were concerned about bringing up problems with yard owners for fear of reprisal. As a result, owners were sometimes unable to mention problems which were directly contributing to increased weight in their horses; for example if the yard manager was choosing to feed the owner's horse unasked.

Secondly, because of the loss of many British farms in comparison to the increasing number of leisure horses, it is common for livery yards to be built upon ex-dairy land, which is planted with energy-dense rye grasses intended for dairy cattle. This grass provides more energy than is needed for most leisure horses, and combined with the inflexible management options, this was attributed by owners and professionals alike to contribute significantly to the obesity prevalence of horses.

Livery yards also perpetuated the obesogenic environment through the production of bounded safe spaces for handling and exercising the horse (for example arenas). The interviews suggested that these bounded spaces promoted the idea that there are also *unsafe* spaces such as fields and roads, and thus exaggerate owner fears about exercise activities beyond the safety of the yard environment.

### 3.2.1 G The social and built environment

Obesity in horses is now so prevalent that it is described by professionals as a social norm. Many owners described not having realised how overweight their horses were, and there was a great deal of confusion about the ideal shape for a native pony or cob and whether these breeds were “supposed” to have an apple-bottom or cresty neck. This was considered by many to be perpetuated by the discipline of showing, which is widely regarded to prefer overweight horses in many instances.

Furthermore, the changing social status of the horse as a leisure and companion animal is likely to be one of the factors that has led to the increased prevalence of the Traditional or Gypsy cob (now a recognised breed of its own). The social construction of traditional cobs by owners showed that cobs are valued for their docility, trust-worthiness, and their reliable and steady natures, despite the many examples interviewees suggested where cobs flouted these maxims. Cobs are perceived as eternally greedy, cuddly, and an immensely lovable family pet. It is easy, then, to see how these traits combine to create the construct of an animal who physically embodies these traits, socially accepted as fat, unfit and adored.

The equine media and equine society generally promoted the idea that all horses are potentially dangerous, and that activities such as riding on the roads should be carefully managed or limited. This was achieved through constant reminders and linguistic devices which render the horse as a potentially dangerous animal; for example regular magazine articles that are titled “spook-proof your horse” and “stay safe on the road”. As danger is

already constructed an integral part of equestrianism, these constant reminders may serve to contribute to owners' confidence and the type of exercise performed, governance of horses.

Owners also described danger presented by the horse in external environment such as roads, bridlepaths etc. Hacking was therefore viewed as a risky activity, and many minimised their hacking or felt unable to hack at all, because of the lack of access to "safe" hacking areas, generally those with little traffic. As a result, many owners chose only short hacks, or exercised their horses within the confines of an arena, which is likely to minimise the amount of energy expended in a session.

Possibly as a result from the increase in horses owned for leisure, there has been a corresponding increase in the commodification *around* horses. Tack and feed shops contain an array of feeds, supplements, rugs and other accoutrements which are designed to assist owners in some way, and many of which may have obesogenic effects. For example, rugs limit the horse's natural ability to use its own energy to keep warm in winter, lowering its energy expenditure. Commodification around aesthetics (for example, the explosion in colour-specific brushes and shampoos, mane and coat shine, glitter hoof oils and matching saddle-pad/bandage sets) may further encourage owners to objectify their horse by focussing on its physical appearance, rather than ensuring that its needs as an animal (for example exercise) are met.

Extreme commodification can be seen in the feed industry, which moralised horse feed by constructing the concept of the "right" feed, suggesting that nutrition must be 'balanced' and perfect for the horse in a way that far exceeds the detail commonly applied to human diets. As a result nearly all owners feed commercialised bucket-feed to their horse, regardless of whether they are providing actual nutritional requirements. Despite this confusion about adequate nutrition, many owners further moralised the feed process by avoiding feeds that are by-products, instead aiming for "natural" organic and balanced feeds and supplements. Often, feeds and supplements were specifically fed in the hope that they would help to solve behaviour or health problems that owners perceived in their horses. The feed companies



perpetuate such concepts, by providing feeds which appear to have health-benefitting effects (often suggested in the name: *AntiLam*, *Happy Hoof*, *Healthy Hooves*, *MetaSlim*).

Furthermore, perceived improvements to bucket feed to overcome problems in the horse may be prioritised by owners because of the ease of making the change, rather than altering other aspects of husbandry. This may occur because of the limitations imposed by the yard manager and the owner's time and confidence, which make it hard to implement husbandry changes, compared to the ease of altering a feed. Therefore, there has been an explosion in types of available feed and supplements, many of which were fed by the owners in this study.

Finally, the process of learning from experience was seen as important for equestrian society generally, and experience was therefore prioritised for professionals and owners alike. However, it was commonly discussed that there had been significant changes in equestrian society over time due to the commodification mentioned above, changing societal norms, and advances from scientific research. Therefore owners learning from one another may not be sharing appropriate, up to date information about equine care and wellbeing, which could contribute to societal norms such as the endorsement of obese body condition.

This chapter has presented an introduction to the conceptual model of the obesogenic environment surrounding the UK's leisure horses. The following chapters will describe the model's constructs in detail, presenting the data which led to the formation of each aspect.

## Chapter 4: The horseperson and their ownership of horses

This chapter describes the experiences of the human at the centre of the theoretical model. In order to understand obesity in horses it is essential to understand the priorities, experience, and life of the horse owner, and how this person produces and characterises the way the horse is cared for.

### 4.1 The Horseperson

The horse owner interviews demonstrated that being a “horseperson” was a central part of the owners’ sense of self. The discussion that follows identifies how owners become a horseperson, and the myriad of influences on the human affect what that person does in terms of caring for their horse.

#### **A natural affinity with horses**

The stories respondents relayed about beginning their involvement with horses had the feeling of often-rehearsed family biographies. Most commonly, becoming a horseperson was located in a childhood affinity for and love of horses, the genesis of which was difficult to pinpoint:

P10 Nadia: *I always liked horses, I always wanted to be around horses since I was little*

P8 Jane: *I always wanted a horse since I was a child, y’know, but I never had anything to do with them, I just loved them*

P14 Lilian: *I’ve got photos of me as a three year old, my parents could leave me at fetes, because you did leave children in those days, just in the queue for the pony ride. It’s all I wanted was a pony ride.*

The absence of a conscious decision to like horses left horse owners locating their affinity for horses in an inescapable basic physiological trait which defied rational explanation. This

held true regardless of whether the respondent came to horses at a young age or in adulthood:

P14 Lilian: *I think it's something in your blood. It must be because – other people don't understand it, yet other people do. Do you have horses or you're just – a researcher?*

I: *I do yes*

P14 Lilian: *Then you understand, you can't explain it.*

As shown in the extract from Lilian, respondents felt that their horsiness was indescribable, and potentially hard to understand for the uninitiated.

Notably, the concept of loving horses and wanting to learn about them did not always arise from wanting to learn to ride *per se*. However, without exception all of the respondents learnt to ride as part of their initiation into 'horsiness', and learning to ride was therefore a central part of what it was to become 'horsey', even if they later questioned the necessity of riding.

### **Being horsey**

Respondents' first experiences of taking up an active involvement with horses were often described as part of a wider disruption to normality such as a holiday, a house-move, or coming into money, which enabled the individual to take up riding lessons, usually at a riding school. All respondents, even those who grew up in horsey families, described having at least some formal riding lessons, and many described a friction between their desire for riding lessons and the costs involved, which led to a fluctuating involvement with horses during their initial period of learning. However, aside from this, respondents' narratives did not dwell on their time at riding schools, instead constructing this as one of the obligatory steps on the ladder to becoming a horse owner.

Following their first experiences with horses, contact with horses and horse riding was described as an addiction or ‘*obsession*’ (P19, Jill), describing themselves as ‘*hooked*’ (P24 Ruth, P20 Sue) or ‘*bitten by the bug*’ (P19 Jill, P20 Sue) and constructing the horse-world as a place from which there is no return: ‘*obviously you’re in then, aren’t you*’ (P21 Lorraine).

Riding lessons provided many respondents with an opportunity to ‘*hang around*’ (P19 Jill) horses and undertake jobs associated with owning a horse. This willing immersion in the care of the horse often provided an informal apprenticeship-type learning.

P19 Jill: *I gradually started to learn how to pick out, feed, groom, muck out, and all that sort of stuff.*

While horse care is a central component of owning a horse the work associated with looking after a horse provided an opportunity for people just to be around horses.

Inevitably, the respondents reached a stage where they felt that they had learnt all they could from the riding school setting:

P10 Nadia: *I decided that I cannot really progress any further with horses on the school.*

P27 Phil: *I had .... lessons with riding school horses and it, kind of, just stagnates. You don’t really learn anything. You learn so much and then they don’t take you any further.*

The options available to people who wanted to ride but who had outgrown what the riding school had to offer ranged from sharing or loaning a horse to buying a horse.

### **Graduating to horse ownership**

The moment of graduating to horse ownership differed significantly depending on the individual, but was usually a result of a prior decision which formed a step on the “ladder” towards ownership. For example, several respondents bought known horses directly from the

riding schools where they had learnt to ride. Others had to search for the right horse via advertisements, and while some had more surprising stories. One respondent was gifted her loan horse for a birthday surprise and another participant rescued a horse who had been given only six months to live.

Despite the considerable investment of time learning about horses, several respondents made comments about their inexperience and lack of knowledge at the time of becoming an owner:

P7 Leanne: *I was a bit naïve then, back then*

P20 Sue: *Stupidly at the time, how naïve, [I thought] the amount I was spending on lessons and my NVQ, this, that and the other, it wouldn't be that much more expensive owning your own.*

One owner specifically chose a yard where she had a support network to assist her, despite having previously loaned two horses.

P9 Kayleigh: *I'd never owned a horse and there was people on there to help me.*

While respondents felt a very deep and personal attachment to their horses, for every interviewee in the study, learning to ride and obtaining their first horse seemed focussed around *horses* (generic) rather than one specific named horse. None of the respondents in this study took the path of falling in love with one horse, and subsequently learning about horses in order to care for it. Horse ownership was therefore often described through a chain of horses, each one framed in the loss of its predecessor:

P3 Katie: *The reason I got her is, my last I had to have put to sleep*

P4 Angela: *bit of an interesting one really how I got him, because [pause] mmm the mare that I had had damaged a tendon in a fence*

Demonstrated by Katie and Angela, this effect was so strong that it was not at all uncommon for my question “how did you find your current horse” to receive an apparently indirect

answer such as “[previous horse] died because of...”; in the minds of their owners, each horse is inextricably linked to the other horses within the owners’ lifetime.

Other owners explicitly mentioned the consistent replacement of horses:

P18 Samantha: *the first horse, Day, she passed away, I think I was probably nine or ten. Then we, sort of, just always replaced, so we always had two at a time.*

These responses serve to highlight that, while each horse is viewed individually, the horse owner’s identity requires a horse to be present, and the history of horse owners is reflected in a chain of individual horses.

Horse owners learn about horse care from one another in an informal way, with learning which has occurred through experience being valued more highly than qualifications. However, this presents a significant difficulty: the learning which occurs can only ever be as good as the teacher, and thus social norms begin to shape an unregulated “community of practice”. It is this evolving normalisation of ideas and beliefs that professionals in this study argued framed the overweight horse, with yards so full of overweight horses that they are considered the norm, and therefore acceptable:

P29a Farrier Shaun: *I do get asked, people say, "So and so said my horse looks a bit underweight, what do you think?" Most of the time it will be probably just a little bit heavy but then it looks thinner than all the other horses because they're all fat.*

P34 Alex farrier: *It's generally the horses that are really obese and you're like, "Oh, I've got to stop this." They don't see it, or they see it as the norm and they're like, "Oh, well I think they look really well." And they think it looks good, but it doesn't.*

### Horses as recipients of care

All respondents started learning about horses by learning to ride, and all of them had bought horses which were intended to be ridden animals, yet the most common theme which respondents spoke about in relation to the purpose of horses in their lives was about caring for the horse:

P26 Liam: *There's a lot more to horses than just riding them, isn't there? There's a hell of a lot more.*

P9 Kayleigh: *I've not got her to ride, I've got her as a, as a, as a friend, y'know and as something to look after and be mine.*

Caring for a horse produced rewards of its own and friendship, as identified above, was one of the benefits. This maxim was nicely illustrated in the following exchange, in which one respondent exploited the usual convention. When she was asked: 'what do you do with him' - meaning what sort of ridden activities she does with her horse, she responded:

P13 Madeleine: *What do I do with him? Umm feed him, muck him out, ummm [laughs]... Worm him – urrr.*

Madeleine did not misunderstand my initial question, but she neatly and humorously pointed out that first and foremost, she simply cared for her horse.

The act of caring for the horses was central to nearly every interview and was conceptualised in various ways. Some owners felt that having a horse was simply an enjoyable hobby or pastime:

P11 Alice: *on a nice day I like coming up and even if the horses are out, just jogging on and doing bits and pieces that need sorting, yes. I don't know, it's quite a fulfilling hobby, I suppose, in a weird way.....I'm not bored any more on my days off. (Laughter)*

P7 Leanne: *[if I gave up horses] I just think I don't think I could go home after work and shut the door and not have anything to do half the night.*

However, others felt that the time, emotional connection and discipline involved in these acts of caring meant that the horses had become more than a simple hobby, and were instead part of their lifestyle in a much broader sense:

P13 Madeleine: *You just, you can't imagine being without them.*

P22 Sophie: *the fact with horses is that there's so much to learn and so much to do with them that it's kind of a lifestyle. It's not just a hobby that you can rock up on a Tuesday for your swimming class.*

The relationship that people had with their horses served a number of purposes, ranging from an antidote to the stresses of work to an escape from everyday life:

P13 Madeleine: *I have a very stressful job, so I get more from them than they get from me. Cos when I pull onto this yard nothing else matters.*

P17 Sandra: *I don't really do anything else and I'm a mum of two children and he's my little escape in the world*

P21 Lorraine: *it's just like you're focused down, aren't you? Your world closes down and you're just focused on the animal.*

Some respondents, therefore, classified their time spent caring for a horse as “therapeutic”.

### **What does “Ownership” mean?**

Ownership of a horse brought responsibilities and control over the decisions to be made about its life and care, as discussed by Nadia and Kayleigh:

P10 Nadia: *.... to be able to have a horse I'll be able to have control .....if you've got a horse on loan, you cannot 100% decide about everything. And I was always going to be feeling like if, so, for example, I would decide I think I need to take a horse bare foot and I think it's the best decision and if the horse owner would say, "Well, no, it's not something I would like", I think I would struggle with it. Because if I knew that he's better and he may improve or may just improve the better quality of*



*the horse or especially if there is any pathology or whatever, I would probably struggle with leaving it. So I think that's the best part.*

P9 Kayleigh: *If I don't want to ride her I don't have to ride her, she's, she's mine so.*

These owners explicitly point out that it is their ownership of the horses that enables them to choose every element of the horse's care.

However, owners *did* sometimes delegate this decision making and responsibility when putting their horse on full livery. Helen, the owner of a yard which offers full livery packages, recognised owners' difficulty in handing control over to the Yard manager. She noted:

P5 Helen: *It's quite a fine balance really between telling them all what do and, and letting them feel like, well it's their horse and they have some say in the matter* [laughs].

Helen's comment about making the owners "feel like it's their horse" highlights the divergence between what it means to be an owner – with the overall decision making power – and the actual acts involved in caring for the horse, which may be delegated to another party.

### **Managing the horse and "real life"**

For most owners, horses are constructed as a passion, a "lifestyle", and an "escape" from the rest of life – from work, family, home life, and other pressures. However, a topic discussed at great length across the interviews, focus groups and discussion fora was how horse owners described being heavily resource constrained when it came to their horses, largely in terms of time and finances. The impact of these resource constraints often became most visible when changes needed to be made to an established horse care routine:

FG1 Iris: *last year, when Amelia's horse got laminitis, Amelia was very ill when she came on my yard, for three months she was really, really ill and so she didn't ride. It was a consequence of that.*

FG1 Jess: *because it's [my yard is] connected to the house, I've still got quite young children, so it's always juggling, and she [horse] was always the last thing on the list.....I moved her to a livery yard a couple of weeks ago, and this week alone I've ridden her four times. When I leave that livery yard I'm done, I can go home and be mum, be wife, do this and do that, and just see to the older pony and her little companion.*

Respondents discussed numerous examples of life imposing difficulties on their equestrian hobby, ranging from mud and the British winter, to the demands of marriage and children. Often, the first change that was made in order to save time was to stop exercising the horse, contributing to the very limited amounts of physical exercise which many UK leisure horses experience.

## 4.2 Constituents of ownership

Owners described numerous interlinked ways in which they managed the husbandry, governance and the relationship with the horse. Combined with the restricted amount of time available to owners, these procedures often had potentially obesogenic effects for horses.

The embodied acts of providing care, creating relationships, and governing boundaries were frequently referred to as maternal acts, particularly by male respondents:

P26 Phil: *In the actual hacking and playing with horses, maybe men just... maybe it's like a mothering instinct or something. I don't- I said earlier on, an awful lot of women just like to look after the horses*

P28 Farrier Shaun: *I think some of the people, they are - I don't want to stereotype people - middle aged women who have maybe not had kids or have had kids that have left home or are at university. They're lovely people and all they've done is*

*care for their kids and brought them up. They've done a great job. They've got all this love and care and then they need something to transfer that on because there is a gap in their life I guess.*

P33 John yard owner/farmer: *I always say that there are a lot of girls that look after their horses better than they do their menfolk. (Laughter)*

The three male respondents recognised that women's relationship with their horse not only often superseded human relationships but that horses appeared to fulfil a gap in the lives of women. Once again, acts of caring are constructed as central to the ownership of horses.

#### 4.2.1 Husbandry

Husbandry in relation to horse-care encompassed feeding, exercising, monitoring, treating ill-health conditions, and the management of the horse right up to the point of death.

#### **Managing the horse's animality**

Horse owners discussed appropriate management of the horse by considering the similarities and differences between domesticated and wild horses, or between horses and people. Discussions around this theme were littered with reminders of the animality of horses; "allowing the horse to be a horse", "treating them like a horse", juxtaposed with ideas about how much of the care of horses treats the animal like a human.

It was common for owners to shield the horses from aspects of their physiologically animal needs – such as exercise, freedom and socialisation - by humanising them; providing them with a comfortable bedroom which afforded them everything they need in one small space, or with warm rugs or other means of physical protection from the elements or from potential injury. Horses need no longer "be horses" in the words of the interviewees, and thus they can be cossetted and protected – passive recipients of well-meaning care, yet often without the physical exertions which could offset the increased inputs provided by owners. However,

despite the frequency of this approach, many owners openly discussed the conflict between this type of care and what would be required for the horse as an animal:

P26 Phil: *horses grow coats so they can live outside. They've got coats, but wrap them up like you wrap your kids up.*

P17 Sandra: *Horses are designed to live outside as my husband often tells me.*

P18 Samantha: *We're quite keen to have them outdoors because horses have evolved to live outdoors.... we do try to treat them as horses because my mum is a big believer, and I've grown up to be a big believer, that they are probably going to be mentally more stable and happier and physically more stable in their environment, which is being outdoors.*

The three quotes here show owners' awareness of the horse as a domesticated wild animal, potentially having retained some of the qualities which made it successful in the wild. These owners discuss the horses' "wild" ancestry in order to support their choices in management around leaving their horses outdoors because they felt it would provide the horse with a more natural existence.

Sue also acknowledges the metaphorical distance between the life horses "evolved to live" compared with the life they live in a humanised environment:

P20 Sue: *nothing humans do with horses is natural - it's far removed from the life which they evolved to live. So y'know we confine them to small paddocks. We feed on demand if you like so they don't have the right to graze, browse, access to hedgerows and things like that.*

Some interviewees struggled with the potential conflict they felt about the horse living "like a horse" and their own ideas about responsible and safe horse keeping; Kayleigh discusses her decision not to allow Glam to live outdoors overnight, except on very rare occasions as a "special treat":

P9 Kayleigh: *But she's a horse I completely un – I know, it's not, I'm just, I'm, I'm just protective over her and I just prefer – I just feel like she's safer in her stable than in the field. So. Although she's a horse. I'm, I'm not stupid.*

Kayleigh's defences "*I completely un[derstand]*" and "*I'm not stupid*" suggest that people have previously questioned her logic. However, she notes that although she understands Glam's animality ("*she's a horse*"), having the horse stabled enables her to feel that Glam is safe from the harms which might arise from living outdoors, for example she later discusses Glam could run into a fence in the dark.

In some cases, owners created lifestyles for their horses which embraced, rather than avoided, their perception of equine animality, for example encouraging constant movement and foraging behaviours in line with what "wild" herd of horses would experience. Several participants kept their horses on a Track System, a specific configuration of interlinked tracks around the outside of fields, that act as enrichment and are considered to encourage horses to move more frequently and seek out forage, which is placed at different points on the track:

P1 Sally: *Their favourite place for hay is when it's in the hedgerow. They love that, then they feel like they're wild.*

Participants also specifically planted herbs and shrubs which would encourage the horses to browse, and even self-medicate:

P13 Madeleine: *We've planted different plants and different herbs in the hedgerows so that they can self-medicate.*

### **Husbandry: Feed**

Feed was identified as central to horse husbandry and also a key factor in horse obesity. Providing the right feed was of great concern to owners. It was readily discussed by every owner in the study, as well as across the focus groups and discussion fora.

When asked about feed, owners discussed bucket feed and generally ignored the nutrition present in the form of grass, hay and haylage. The construct of providing bucket feed as a "meal" to the horse is deeply embedded in horse care with nearly every single respondent feeding their horse some sort of bucket feed. The strangeness of this was pointed out by several professionals:

P41 Nutritionist Lorna: *The horse owner wants to see their pony or horse gobble up a feed and seem to enjoy it. That's eating like a dog; a horse is a grazer; it shouldn't gobble its food. But they'll [feed companies] put all sorts of flavourings and molasses and so on in the feed so the horse eats it like a dog, not a horse.*

P32 Behaviourist Nicola: *I still think that there are a lot of people that think that horses need to have meals. I don't know where they would be getting that information from, but they think that the feed companies are saying that horses should have meals, or that they have meals themselves, so they think that the horses should.*

Respondents discussed three main reasons for providing feed to their horses: for nutrition (either basic nutrition or “corrective” of a perceived issue); as a reward or “token”, for example to stop the horse from getting jealous when other horses were fed; and as a carrier for a supplement that the horse was having. Owners felt considerable pressure to feed their horses something:

FG 1 Issie: *I do worry about that because I don't give her anything, so she doesn't have a balancer. You read all the magazines and it's all, “You must have a balancer”.*

P8 Madeleine: *I feel as if we're constantly pressured to change feed, to add this, to take that away, and if you just use a little bit of common sense.*

Issie was struggling to diet her horse yet still felt the pressure to provide the nutrition promised through a balancer, while Madeleine describes the pressure she feels from the feed industry encouraging her to alter her practices. Her feelings about this pressure are supported by several of the professionals, who commented on the intensive and very successful marketing of feed to owners causing those owners to feel that feeding commercial mixes is a necessity:

P28 Nutritionist Lottie: *I mean I worked with commercial companies, so I know that marketing that way is done to get people to feel uncomfortable so that they'll buy their product instead.*

Feed was seen as a means of enhancing the horses' health and behaviour. Field notes were made from commercial feed company websites, noting the way in which the names were often suggestive of the idea that the feeds were specifically aimed at correcting a perceived problem: *Calm & Condition*, *Happy Hoof*, *Healthy Hooves*, *Topline Conditioning Cubes*. Although the feed names and information did not specifically say that they were curative, it was clear from some of the comments made by owners and professionals that they were being interpreted in this way:

P28 Nutritionist Lottie: *There are a few that scarily think that by feeding Safe and Sound or MetaSlim that that will slim the horse, as if it's a magic ingredient but not many thankfully.*

Similarly, supplements were generally used with a specific aim in mind, such as stiffness, breathing difficulties, circulatory problems, or skin problems. Many owners fed supplements, with some feeding multiple at one time, as shown by Jane:

P8 Jane: *So she gets Yea-sacc, brewers yeast, seaweed, rosehips, magnesium, I add salt to her food, agnus castus,*

I: *OK – let me write these down and you can tell me what they're all for – so*

P8 Jane: *They're just generally vitamins and minerals. So I did have her on [another balancer] for a bit and I don't think – I don't think it was really any better.*

[later] P8 Jane: *also I started on a joint supplement because she did seem to be a little bit stiff*

[later] P8 Jane: *The other things she gets is a mixture of, well they call it herbal lami-support, it's a mixture of herbs like nettle, milk thistle, and things.*

Jane had put a great deal of thought into her horse's diet and prided herself on her scientific approach to feeding her highland pony, who suffered from Equine Metabolic Syndrome (EMS). Jane was not alone in feeding so many supplements; most owners fed two or three, and several fed more than five. Interestingly, when asked about feed, several owners confidently recited the actual feed and said they did not feed supplements, then later in the interview (as in Jane's example above) they remembered supplements they were now including. This could suggest that the nutritional value of supplements is overlooked,

perhaps because of the small volume fed per day, or that the nutritional value is only seen in terms of the reason for feeding the substance. However, as a vet (p35, Susanna) asserted: “*you’ll be amazed how many supplements are filled with sugar*” and feeding multiple supplements therefore created not only the construct of combining ingredients in a “recipe” to create a meal for the horse, but also contributed to the volume of feed.

It was clear that horse owners were preparing their horse’s feed in the belief that they were optimising its health. According to one of the vets interviewed, owners suggested that feeding horses in this way was a reflection of the way owners sought to individualise their horse’s care.

P39 Vet Bryony: *If you go to complete bowl feed they don’t want that. They want to add a bit of this and add a bit of that. Do you know what I mean?.....more is better and they stir it three times this way and one time that way.*

Bryony believed that changing the way in which owners fed their horse was difficult, but getting owners to reduce the amount they fed was even more difficult. Owners appeared to have developed their own internal logic for doing what they were doing.

The owners in this study were confused by the range and type of feedstuffs available to feed their horse, and were seduced by the promises made on bags of feed that their horse’s health and performance would be improved if the horse was fed in a certain way, as suggested by this nutritionist:

P 28 Nutritionist Lottie: *what prompts people and what they will always write in emails, generally 98% of the time, is that they’re confused, they’ve heard this, they’ve heard that. They don’t feel like they’re doing the best for the horse and they want some good quality independent advice.*

### **Husbandry: Housing**

Providing a safe and comfortable environment for the horse was a major part of ownership, and owners took a great deal of care to provide environments which they felt were optimal.

The majority of the horses described in the study were stabled for at least part of their lives, with the extent often controlled by the yard owner. Stabling was therefore seen by many as



just part of horse-keeping, although for others it was a major ethical concern. For those who utilised stabling to protect the horses and the fields, the stables were often seen as a place of safety and comfort. Owners often used the term bedroom rather than stable to connote the horse's accommodation. This linguistic theme continued to describe other activities involving the use of the stable "putting the horses to bed", the horse having a "duvet day", putting on the horse's "pyjamas". In this way the stable was seen as a cosy restful place for the horse.

Some owners took a great deal of care to prepare the stable to very high aesthetic and hygiene standards. As an example, Kayleigh (P9) mentioned her horse's "bed" 22 times throughout her interview, and sent a picture (Figure 3) to be used in the data, of how she liked it to be prepared each night - absolutely perfect straight lines and banks. As anyone who has prepared a bed will know, this is a time-intensive occupation which may not be fully appreciated by the horse.



**Figure 7** The perfection of Glam's bed (Glam is owned by Kayleigh, P9)

Therefore preparing the stable was a ritualised, almost compulsive act for many, as described in field notes when looking after a friends' night-stabled thoroughbreds:

Field note June 1<sup>st</sup> 2018: *Despite my logical brain preferring not to stable horses, I was struck by the innate comfort and satisfaction I felt while performing this task which I have done thousands of times before; creating the warm and fluffy bed, the full haynet, the feed ready and waiting in the corner. This is encapsulated comfort, whether or not the horse wants it.*

Owners adopted different approaches to managing the horse's environment in the stable. These included using:

- Safe bedding which was not edible or dusty;
- Safe means of feeding hay which meant the horse could not get entangled in haynets or which replicated more “natural” feeding from the floor;
- Stable toys to prevent boredom for the long hours the horse might be locked in;
- CCTV to check the horses' safety at any hour;
- High banks at the edge of the stable to prevent the horse becoming cast;
- Trickle-feeder haynets that slow the consumption of hay down.

For some, the concerns around stabling were more overt. It was clear that many owners felt there were acceptable amounts of time for the horse to spend stabled:

P2 Anna: *I think y'know if you locked me in my downstairs toilet for 23 hours a day and you just fed me y'know through a little slot so many times a day, I'd umm, I'd become very shut down.*

P5 Helen: *I like a lot of turnout. I know some people don't like a lot of turnout for whatever reason... I, you know, I prefer them to be out as much as they can, as much as they feasibly can.*

Anna, concerned about the physical and psychological effects of stabling on the horse, chose not to stable her horses at all. For Helen: “as much as they feasibly can” meant daylight hours in winter. Her horses were brought in before dark for what she described as “safety reasons”, presumably relating to handling horses after dark – not a concern for other owners.

Interestingly, several respondents described turnout as allowing the horse to “*be a horse*”, suggesting that the indoor-kept horse was “de-horsed” in this way; its wildness and agency removed in its humanised environment:

P18 Samantha: *my mum is quite keen on keeping the horse as a horse, you know, outside, not having it stabled its whole life.*

P9 Kayleigh: *I’m just, I’m, I’m just protective over her and I just prefer – I just feel like she’s safer in her stable than in the field. So. Although she’s a horse.*

The horses’ field environment was constructed quite differently from the comfort of the stable; although some owners went to lengths to make the field environment enriching, generally the outside areas were concerning to owners. In fact, the field was often constructed as a place where the horse might need protection: from the elements (e.g. rugs, shelters, stabling); from other horses (some horses turned out alone); from potential danger (e.g. fencing); from parasites (e.g. wormers); from mud (by stabling); and, most of all, from grass itself.

Grass was viewed by many owners and professionals as a significant concern, mainly in relation to laminitis, weight gain, colic or sometimes grass sickness. However, owners were conflicted over how best to manage their horses in a field. On the one hand it was unnatural to keep the horse “cooped up” in its stable full time, and daily turnout was considered optimum, with grass considered “natural”; on the other, they were aware that grass could present a danger to their horse:

P12 Nadia: *In the spring the grass will be coming up, and I will have a big problem....*

As a result, many owners tried to restrict grazing by managing the horses’ field in a specific way, although they often had little control about how grass was managed, particularly when yard managers chose to fertilise it. For owners whose horses had previously suffered from laminitis, the presence of grass was extremely stressful.

### **Husbandry: Exercise**

Unlike feed, physical exercise was constructed as optional for horses. All owners felt that daily turnout was important to allow the horse some movement (even if the turnout area was relatively small), but exercise which the human induced in the horse (for example ridden exercise or lunging) was often described in humanised terms as “work”. This was reflected linguistically throughout the data, with horses given “careers”, “retirement”, “holidays”, “jobs” and “days off”. The language of exercise as work constructed it as something the human makes the horse do, and could potentially be unenjoyable. As a result, some owners disliked “making” their horse exercise, and viewed it as potentially negative:

P9 Kayleigh: *we'll have the odd ride like a little walk around, a little, little trot and stuff, but I mean like constant work, she doesn't, she does, she doesn't want to do that*

P10 Nadia: *not treating your horse as a slave. He's not a slave, he's my friend, so why would I treat him like that.*

Nevertheless, owners did feel it was necessary for the horse to *move* every day, and if yard turnout was reduced or suspended, for example during the winter, some owners increased their efforts to exercise the horse. This was what Lorraine found when looking after her daughter's pony in winter, on a yard that disallowed winter turnout:

P21a Lorraine: *the only reason I started riding was the yard we used to be on there was no turnout in winter. None. It was like half-hour. It was like even if you lunge just it wasn't - right.....to be honest but I was like, "No. It's just not right, is it?" So I used to ride every day. I thought, "It's best to have lessons and do something," and then I just ended up riding. So I'm quite a new rider.*

Some owners felt that horses enjoyed some aspects of being ridden; usually enjoyment on the part of the horse was related to hacking, or high-speed activities such as hunting:

P4 Angela: *I think if you could ask him, ummm, say so should we go for a gallop up Kelsall hill yes, if you say shall we go and do some dressage absolutely not [laughing]. Prance around and you can whip my bum, no I don't think so [laughing] ...hunting, jumping, and galloping round. He'd be quite up for any of those I reckon. And a little plod out with the hacking I think. [pause]*

FG1 Iris: *We find that ours like going out, don't they? They love going out for a hack.*

FG1 Amelia: *It gets them out of the field, you see, it gives them something else to do.*

P36 Polly: *I'll have to find someone who will hack her out. She enjoys it. Somebody younger, with better balance, who's not got the problems I have.*

The three extracts provide different angles on what owners felt the horses enjoyed and what they were able to provide. However, many of the exercise narratives described that riding in general (particularly when hacking) was what made owners feel particularly vulnerable. This inhibited their ability to exercise their horse in some ways. Personal vulnerability and the danger presented by horses were ever-present in the minds of owners. As a result, several owners discussed trying to find ways to exercise the horse without riding it, as was the case for Issie:

FG 1 Issie: *She is ridden, but I did fall off just before Christmas, I'm nearly 50 and it hurt, so I'm having a bit of a problem getting back on. But, we do... [Sympathetic crosstalk 0:59:41] Yes, it hurts nowadays. But, five or maybe six days a week we do a couple of 20-minute sessions a day, and it could be lunging, do a bit of straightness training, and she does clicker training, and things like that. So, she gets a lot of variety. In winter I took her for a lot of long walks, in-hand.*

Issie's experience was not unusual as could be seen from the "sympathetic crosstalk" from other riders who had similar difficulties. Issie managed to provide a certain kind of exercise for her horse which allowed her to remain within her comfort zone.

Some owners created management environments which maximised movement in the field, rather than formally exercising their horses. Track systems were considered by many owners to be ideal for this, or turning out the horse with youngsters or "bossy" horses which would encourage movement.

Therefore the idea of some sort of movement for the horse was important to owners, but physical exercise was not considered *necessary* per se. Most horses in this study would have

been categorised(183) as having no work or very light work, though a great deal of time and energy was devoted to other aspects of their care. This suggests that it may be increasingly common for horse owners to provide only minimal physical exertion for leisure horses, thus contributing substantially to the increasing weight of these horses.

### **Husbandry: Managing health**

Monitoring and managing horse health was constructed as a central aspect of horse ownership for many owners, with the management of common ailments discussed by all respondents as part of horse care. The management of health seemed a delicate balance against the restraints imposed by livery yards, some of which were considered to compromise health (e.g. stabling, dusty environments, and inappropriate turnout).

When measuring health, many owners pointed to their horses' coat shine, eyes, and general demeanour. Several owners discussed close monitoring of their horses urine and faeces as a means of monitoring their health:

P10 Nadia: *this is going to sound very silly, but I like to see the colour of his poo, consistency, and, yes, see how much, when he wees as well so I can see his- that really sounds awful...Urine stream, colours, know how much he drinks, is he drinking, and all that, so definitely everything about just caring about him.*

P23 Linda: *I might have been waiting for the vet because I noticed he wasn't pooing much the day before. I always worry if a horse doesn't poo or wees.*

At times, more intensive measures were taken to monitor the horses' ongoing physical comfort; one yard used thermal cameras to assess whether the horses were warm enough. A horse detailed in the field notes wore a "Fitbit" style tracker which monitored its time resting each night.

Monitoring weight as part of health (methods of weight monitoring to be discussed in chapter 7) seemed associated with ensuring that the horse was not too thin, rather than too fat. As such, an underweight horse was a more urgent concern to owners than an overweight horse. Several owners discussed that checking their horse had not become too thin was a key indicator of poor health, though the horse being too fat was not usually considered

concerning. In fact, being too fat was often referred to with healthful language: being “a little too well”, “in show condition” and “looking very healthy” were just some of the euphemisms collected around overweight. This will be discussed further in chapter 7.

However, owners spoke about some health problems with a sense of inevitability, while their horses might be healthy now they could need a vet at any point in the future.

P1 Sally: *y’know touch wood I’ve not had my vet out since I’ve been here. I’ve jinxed that haven’t I* [laughs]

P13 Madeleine: *this lot here who are amazingly healthy are a blessing.*

Furthermore, horses who had experienced multiple problems were often referred to in affectionate joking terms. Madeleine’s past horse had been called by her vet “his pension fund”, as a result of costs totalling about £25,000 arising from various unrelated incidents over his lifetime. In fact, many owners were proud to relate the way in which they had tackled and overcome major health challenges with their horses and in the process improved their bond with the horse. Monitoring and managing health was therefore an important component of horse husbandry. It enabled owners to lavish care on their horse and create narratives around their horse’s transformations from ill health to good health.

### **Husbandry: Death**

As previously discussed, the identity of a horse owner was contingent upon owning a horse, and the horse owners in this study had often had a succession of horses. Inevitably therefore, the death of a horse featured in the narratives of most of the horse owners in this study. Many owners openly discussed the choices that they had made and the extent to which they were in control of the death of their previous horses:

P13 Madeleine: *I marched those three up to the field where we’ve buried them, because we had three done the week before Christmas, and apart from the instant cry, I’ve not cried once because in here, and in here* [indicates heart and head] *it was absolutely the right thing to do.*

Compared with Daisy, her “horse of a lifetime” who died in a tragic field accident:

P13 Madeleine: *I was absolutely heartbroken....I cry, for her, but I don't cry for the other three because I know that was the right decision.*

Madeline discussed her pragmatic approach to organised death throughout the interview, but her experience with Daisy was quite different, leading her to even keep a straw bank on which Daisy used to lie, and one of Daisy's droppings in a barrel. Interestingly, she also perceived her remaining horses as being particularly affected by Daisy's death. For her, the organised "good" death of the three horses was the "right" thing to do, hence her emotional acceptance of the act.

Providing a "good death" for horses was constructed very differently from what one might expect for other companion animals. An organised and pre-emptive death was viewed as a responsible act by many participants. Several owners talked about causing their horses' death pre-emptively before health conditions became an issue:

P17 Sandra: *I let him go out on a high, you might say, at 35 instead of a low at 40 I suppose is the thing, isn't it?*

P23 Linda: *My will says that if anything happens to me Jessie gets her, he [Misty] can be sold because he's young enough but not too old and he [George] would have to be shot.*

P13 Madeleine: *Better a day too early than a day too late*

In fact, as noted in the field notes, a great number of threads on discussion fora also discussed that putting a horse to sleep was a responsible act. Reasons for making euthanasia decisions which were generally considered acceptable on these forums included the owner's lack of time or money, the horse's ongoing minor health problems, behavioural issues, the owner wanting to sell the horse but being concerned about finding a suitable home, and so on. Further, unlike other companion animals, it is generally considered acceptable to have a horse shot dead rather than euthanised by injection, as discussed by Linda:

P23 Linda - *I rang them up and I said, "I've got a horse that needs to go. I want him shot." I watched how they did it and it was so lovely. The man who comes up is a horseman, he knows exactly what he's doing. He comes up with a pocketful of bits of apple or carrot, he leads the horse out, feeds it, makes a fuss of it and bang, it's*



*gone. It's that quick. They're dead way before they hit the ground.....it's instant with a bullet and it isn't with the euthanasia. I don't want to ever see that again. They gave Lady the wrong dose.*

Linda considers that having the horse shot is providing a “good death” at the hands of a “horseman”, allowing the horse to die quickly and with respect, in comparison to what she later describes as “faffing” with a euthanasia injection.

When talking about death, discussions about obesity sometimes featured, because weight-related deaths were not uncommon. One vet told me:

Fieldnote, January 2018: [first opinion vet]: *I reckon I've put to sleep more horses from obesity related diseases in the past ten years than any other factor.*

This vet considered these deaths “*absolutely preventable*”. Most commonly, obesity related deaths were considered linked to laminitis, and many owners spoke of horses they personally knew who had developed laminitis, or near-misses that their own horses had had as a result. A professional discussed in their interviews how an owner was considering putting her horse to sleep because of its ongoing overweight status:

P35 Vet Susanna: *she's even getting to the stage where she's considering euthanising this horse. Because she feels like the horse is constantly struggling and can't breathe and is very uncomfortable. The poor thing probably is, and the problem is there is no quick fix. It's going to be months of work before it loses weight and starts feeling more comfortable.*

This case was considered to be unusual by the vet, who had offered to have the horse reside at the practice for a time in order to manage its weight intensively. However, when discussing weight problems in their horses, few owners prospectively considered that obesity itself could ultimately be a life-or-death factor for their horse.

#### 4.2.2 Relating to the horse

The relationship achieved with the horse was explicitly discussed by many of the owners involved in this study as the key reason that individuals chose to own horses, and the reason for them keeping the specific horse in their care. Discussions around relationship building were therefore central to many discussions about how the horse was cared for.

Relationships with horses were often described with the language and constructs used around human relationships. Horses were often referred to as “children”, “friends”, “significant other”, “family” and sometimes “teachers”; though they were also referred to as “pets”. Despite the long history of mankind with equestrian partnerships, no specific terms have been developed for the relationship between a human and their horse. People sometimes referred to their horse as the “horse of a lifetime” or their “heart horse” [field notes], terms which designated a particularly special horse akin to having “one true love”.

The horse-human relationship was romanticised in many descriptions. Some owners described having fallen in love, met through fate, or having a special bond with their horse which meant that they were the only person who could handle it. Some owners appeared proud that they were the only person with whom their horse was comfortable:

P6 Cath: *Yeh, yeh, she's just like a one-person, and that's another reason I couldn't sell her because, y'know she'd, she'd stress..... if she went to someone else I know she would rear and she would play up.*

P17 Sandra: *Caspar is kind of one of those one-person horses.*

P9 Kayleigh: *She's just a very one-to-one horse... She's not 100% with anyone else really.*

The three comments here focus on the horse being a “one-to-one” animal – not being at ease with anyone except their one owner. This was often related, as in the three examples above, to the horse having had behavioural problems which the individual had struggled to overcome.

P6 Cath: *I don't know whether half of the bond that I've got with her is because of all the problems. You know if I would have got her and she would have been perfectly behaved and that, because I feel like, like super proud of her, y'know*

However, other owners were comfortable sharing the horse with others, despite their close relationship with it. This was the case for Dani and her horse Dylan:

P12 Dani: *He's my best mate. He's 100%. He's my boy. He's definitely a family member. He's completely like my significant other, if you will, as hectic as that sounds. He's the main thing in my life that's not me.*

[Later] *I've had him so long, he's been such a big part of my life for such a long time, and it just is what I do. It's like going home to your mum. I think just coming up here, he's always there. He cheers me up. He's a nice boy. I like his face.*

Dani's descriptions leave no doubt as to the importance of Dylan in her life, and shows how the horse is constructed in multiple ways. He is her friend but he is also a part of her life: "*the main thing in my life that isn't me*". The concept of consistency is part of the relationship: "*it is just what I do*" and "*he's always there, he cheers me up*" shows how the regularity of care forms part of the owner's relationship with their horse. However, Dani differs from the previous respondents in that she is very willing to share Dylan with others, consistently having two regular sharers but also allowing other people to compete him, which she suggests she enjoys. Thus, the exclusivity of ownership in the examples above did not apply to all owners.

Some of the respondents reflected on whether their horses reciprocated their feelings, or simply saw the owner as a means for providing the things they needed:

P18 Samantha: *whether or not it's just that he is like, "It's my mum, I'd better behave, I can't play around." Or whether it is that, "It's my mum, it's MY mum, here she is." I don't really know, I think it's probably a lot more in my mind that I have a bond with him, but from what my mum and dad have said and what I've seen, I think he does respond to me better. He knows who I am and he can separate me from other people, you know.*

Samantha's description shows that she does not necessarily consider her horse to have the

same emotions as she does, despite her frequently describing their relationship as a “bond”, which is usually a two-way relationship. However, she considers that, because he responds differently to her compared to other people, his relationship with her must be different. Interestingly, she does not suggest that she feels it really matters whether Magic feels a bond with her or not, and this coupled with her constant references to him being allowed to act “like a horse” reflects her acute awareness of her relationship with the horse as an animal other, with different emotional and physical capacities to herself.

The relationship with the horse was often more important to owners than the functionality of that horse. Owners who viewed the horse as a “friend” or family member often also felt that they would not make their horse “work” and would keep it as a pet if it was injured.

Keeping the horse for the rest of its life was therefore generally a result of the relationship that the owner perceived with the horse. They often described selling other horses which they had not “clicked” with or which had misbehaved, but the horse with which they constructed a strong relationship had thereby earned its right to continued life with the owner.

Constructs around human relationships with horses have changed in recent years(121), with horses valued by many for their companionship rather than their functionality. This was the case for the owners in this study, none of whom owned their horses as working animals, and the different relationship of those who owned companion horses compared to workhorses was noted by many of the professionals. As such, the relationship between horse and owner was often at the forefront of the owners’ descriptions of their horse-keeping decisions. This is highlighted in instances where the owners chose to go against the advice of professionals and did so because they felt the professional did not know what was right for “their horse”.

A result of the complex and deep relationship with their horse was that some owners described not wanting to “use” their horse or to treat it “like a slave” through exercise. For them, the relationship with the horse was based around them being able to protect the horse from the need to exercise hard as a workhorse might. This seemed to contribute significantly to the low level of exercise performed by many of the horses in the study, and thus the limited energy outputs of horses that were constructed by their owners as “friends” and companion animals.

#### 4.2.3 Governance of the horse

While the horse is often described as a “friend” or “companion”, caring for a large, powerful “wild at heart” animal (see chapter 5) was nevertheless understood by owners as necessitating a means of control of that animal. As such, numerous means of asserting control were discussed which allowed the owner to interact and manage the horse, and these ranged from hormonal supplements to physical means of restraint. So normalised is the concept of physical restraint of the horse that owners did not generally reflect on the juxtaposition of their romanticised constructed for the relationship with their horse, and their use of dominance to control it.

The most obvious means of governance was in the form of physical reinforcement, usually negative reinforcement or positive punishment. This was aimed at establishing the owner as the “dominant” partner, with the horse established as the obedient servant, while still constructed as a willing participant. This commonly included the use of various head restraints (bits, nosebands, pressure halters and headcollars, etc), as well as whips, lunge reins etc. Combined with the physical aids and “horsemanship” skills of the owner, these accoutrements served to ensure that the horses’ compliance was achieved. Use of force was considered acceptable because of the horse’s animality:

P14 Lillian: *Almost like a Monty Roberts, they're not as nice as, they're not as kind to the horse as you think they're going to be, but they do get the results....They made the outside of the environment not as pleasant as the inside the trailer, and yeh a lot of sort of like the headcollar, the - the sharp headcollar type thing, but it did work and it helped so. Sometimes you've got to be cruel to be kind, or to get the results.*

P17 Sandra: [about a natural horsemanship trainer] *She's quite harsh with it, it wasn't a case of fluffing along but then they're big animals I suppose, aren't they?*

Both quotes provide different takes on the same concept; that force is acceptable to train or correct the behaviour of the horse. Similarly, Madeleine discusses her own feelings about being forceful with her horses:

P13 Madeleine: *I'm the last person to hurt anything just because I can, but don't get me wrong if that big black git decides to kick my head off, he'll get a crack! Because I'm not a fluffy bunny*

When asked what she meant by a “fluffy bunny”, Madeleine referred to a vegan who was offended by a picture of mincemeat which she posted on her Facebook, suggesting that a fluffy bunny was the opposite of a “realist” and that she was not one because she understood that her horses were “animals”.

Angela further illustrates the use of physical acts of control through description of her management of her horse Billy:

P4 Angela: *if you put him in his place quite quickly, you have no problems but [whispers] you've got to be ready to give him a smack [laughs]. My last mare, Cleo, I probably smacked her as much in the entire time I had her as sometimes I will do with, with him in one day. When he's on, on one of his moods.*

Angela considers that “smacking” Billy “puts him in his place”, reminding him that she is in charge and hence subjugating him. Physical restraint or punishment of the horse was commonly mentioned and extremely acceptable to horse people as part of controlling their horse and a way of setting “boundaries” within which the horse could function. These boundaries allowed the horse to know that the owner was “the boss”, which was often constructed as the owner being akin to the dominant horse in a herd, as suggested by Phil:

P26 Phil: *when you're sitting on a horse, the horse has got to know that you're in charge, and be confident in you, hasn't it? Otherwise, you start to reverse the pecking order.*

However, nearly all owners discussed that they felt there were limits to the governance that they would use. Angela, for example, “freed” her horse from strong nosebands and bits. Many owners discussed other disciplinary acts which they would not allow, such as the use of a chifney (a bit for leading the horse, designed to inflict pain on the roof of its mouth if it misbehaves), which was anathema to many owners because it is considered too strong.

Some owners shunned these physical tools, and opted instead for training mechanisms which they felt used less physical force; for example, riding the horse without a bit or even without

any tack at all, or training it using positive reinforcement. These owners described wanting to allow the horse to choose whether or not it obeyed them:

P20 Sue: *I think they're a lot happier for it, they're certainly a lot more chilled because they - what we tend to do, most of the training that we do now is at liberty.*

However, the ultimate aim was still a compliant animal. In this instance, the compliance is constructed as a mutual partnership based on relationship rather than training.

Horses were also governed through less obvious means, for example the use of routine, husbandry choices, pharmaceuticals and supplements. Kayleigh (P9) kept her horse in a routine of being stabled because it made her a “nicer horse” and stopped her from reverting to “herd-like behaviour”; Kath (P7) and Lorraine (P21a) both quelled their mares’ wayward “mare-ish” behaviour through the use of supplements, and not a single owner of male horses in the study owned a horse that had not been gelded.

Therefore, many respondents described themselves as having been on a journey of knowledge to a new enlightened way of getting along with their horse. That journey could have resulted in the total removal of all negative reinforcement and punishment (one respondent); through to “natural horsemanship” (several respondents); or simply shunning physical tools seen as too harsh (for example chifneys, discussed by many respondents). This shift is part of the changing societal attitude toward horses as sentient animals, and reinforces the aspects discussed as part of the relationship with horses. Owners wanted to *relate* to their horse, rather than acting through force. This goes hand-in-hand with not wanting to “treat the horse as a slave” and “use” the horse. It also aligns directly with husbandry options that attempt to increase the horses’ needs “as a horse” by allowing it choice and freedom. Whilst these could be considered admirable and ethical changes, the part they play in the shift towards the horse as a companion animal means that they are also potentially contributing to the obesogenic environment. The energy outputs which would traditionally be required of the governed workhorse are often not replaced when it becomes a “companion”.

#### 4.2.4 Balancing the scales: linking the constituents of ownership

The processes of ownership were constantly balanced and altered by owners in order to change or maintain the horse. Importantly the three facets: governance, husbandry and relating to the horse, were intricately interlinked. For example Samantha discusses how the “bond” she has constructed with Magic is linked closely with her governance of him through natural horsemanship training aimed at improving his obedience:

P19 Samantha: *I would say a word, or I'd click and just touch his leg, and he'd have all his legs pick up in turn as I walked around, and he was just very, very aware of my personal space and following me, but not being on top of me. I think it built trust as well.*

Samantha constructs the training as building trust and the bond, and thus reinforcing the relationship, between her and Magic. However, the actual effect she is describing is his improved attentiveness and obedience. Here and for many other owners, the effects of governance cause compliant behaviour in the horse, which leads the owner to construct a deeper relationship with that horse.

Husbandry choices were widely considered to have specific effects on the horse's behaviour and therefore its governance; for example some types of feed were regarded as being “heating” and therefore causing difficult behaviour:

P13 Madeleine: *y'know if you want one to be a psychopath on the hunting field then you feed it tiger oats, or peas.*

Similarly, incorporating a fixed routine could be used to govern the horse:

P17: *I just decided that it made more sense just to stick with the winter routine all year round and he was the calmest he's ever been*

P9 Kayleigh: *I mean she's, she's a better horse anyway, coming in, and having routine. If you leave her out, you're probably not going to get her in*

Finally, supplements were often used as part of husbandry changes which would improve unwanted hormonal or other behaviours, thus husbandry alterations could themselves be part of governance. Owners were thus constantly altering and “tinkering” with aspects of



care(143) in order to manage their horse's health, wellbeing, behaviour and governance, in turn creating the transformations discussed in chapter 5.

However, the choices owners made in balancing the husbandry, governance and relationship with their horse were not always successful, and one of the most pervasive problems to come out of this imbalance was with the horse's weight. Horse care practices were very diverse and were presented within different ethical frameworks including: keeping their horses as "naturally" as possible (for example, outdoors all year, with constant access to their peers and ad-lib forage); not riding their horse as part of this return to "naturalness"; protecting their horse from the elements; protecting the horse from the risks of outdoor living, such as stables, rugs, CCTV, individual paddocks to minimise risk of injury, and so on. How a horse was cared for had implications for their weight - the combination of limited exercise, and constant access to feed could lead to accumulation of weight.

Contrastingly, while formalised exercise might be more likely with the "humanised" approach to horse care, horses were often confined to extremely small areas such as stables and individual paddocks which limited their generalised movement. These horses were also often rugged which limited the need for the horse to expend energy on thermoregulation. Furthermore, owners were very aware of the need for horses, as grazing animals, to have constant access to forage so as to reduce the likelihood of gastric ulcers and colic. This seemed to be at the forefront of their minds. Therefore "humanised" horses were also exposed to an obesogenic environment, though of a different kind to the "naturalised" animals.

### 4.3 Chapter Summary

This chapter has examined the horse person at the centre of the model, and how this person uses the constituents of care. I have explored how leisure horse owners initially become a "horseperson", the role which horses play in their lives, and the way in which they care *for* and care *about* their charges(143). These owners used a constant process of tinkering with

their horses' husbandry and governance to improve the horse and their relationship with it. In so doing, common constructions around equine relationships and what it means to be a horse owner have constructed the horse as a pet and companion. Providing for the horse is a leisure activity in itself for these owners, who describe enjoying the caring relationship often more than exercising the horse; exercise is constructed in negative terms as enforced "work". In turn, this has led to horsecare practices which limit exercise and favour the provision of a comfortable, well-fed and low-energy lifestyle for horses, which may contribute substantially to obesity levels in the UK.

## Chapter 5: The wild-docile horse dichotomy and the construction of equines

This chapter focuses on the way in which horse owners construct their horses and the importance of this in understanding obesity in the UK population of horses. Particular attention is given to a fundamental dichotomy in owners' constructions of their horse as malleable and docile, yet potentially wild and difficult to handle. These dual constructions allowed owners to build narratives of transformation around their horses as they describe transforming the animal from "animal-other" into a tamed, controllable companion. Often, such companion-like constructions include assigning identity and aspects of personhood, and as such owners experience dilemmas in how best to relate to and care for their animal; as an animal, or as a friend.

This chapter is divided into three parts; *The Animalised Horse*, and then *The Malleable Horse*, finishing with *The Transformation*.

The *Animalised Horse* discusses how owners construct and perceive their horses as wild-at-heart animals, who may be 'tamed' but nevertheless represent potential danger to the people around them.

The *Malleable Horse* will explore how equestrians also construct horses as biddable animals which can be controlled and transformed depending on the owners' wishes. The combination of an animal simultaneously constructed as both wild and dangerous, yet malleable and docile, is key in the production of transformation narratives presented by owners.

The *Transformation* discusses how horse owners use these dual constructions to mark out narratives which demonstrate their ownership of the horse; this is an important part of horse ownership, but the transformations are often conducted in ways which have obesogenic effects.

## 5.1 The Animalised Horse

A theme which was consistently present across the data was that of the constructed horse being partly *animalised*; the owners referred to the horse as a domesticated wild animal; an animal that is still “wild-at-heart” needing to be handled with caution.

Owners frequently referred to their horses’ animality to illustrate that they understood the distinction between human and animal:

P13 Madeleine: *As much as I adore this lot [meaning her horses], they’re animals*

P17 Sandra: *they’re big animals I suppose, aren’t they?.....unpredictable animals as well.*

P21b Lorraine: *You’ve got to be wary of them as well. You’ve got to be aware of what they’re about to do.*

Central to these views of the horse as an animal was the idea that they were unpredictable and could therefore not be entirely trusted. Humans needed to be vigilant in order to protect themselves. Although all the interviewees in this study had purchased domesticated horses (rather than, for example, semi-feral native ponies), many participants made reference to horses’ undomesticated roots in some way, most commonly in reference to the horse’s behaviour; for example, the horse spooking as a flight animal or wanting to stay with its “herd”, or physiologically; for example, the horse’s ability to withstand poor weather.

### 5.1.1 Animalised behaviours

Generally, the construction of animalised behaviour focussed on behaviours which were viewed negatively. These were behaviours that often posed a risk to humans. While acknowledging these horse behaviours as being located in their status as a wild animal horse owners often applied a human logic to explain this behaviour. Behaviours, such as disobedience, were often discussed with humour and affection.

Animalised behaviours were considered to be innate in the horse and still at the forefront of its actions. Therefore the horse's lifestyle was often carefully engineered to avoid the horse exhibiting behaviours which might be inappropriate in a domesticated setting. Nevertheless, participants felt that the horses sometimes reverted to their undomesticated ancestry:

P12 Dani: *He [Dylan] goes a bit feral. A couple of weeks a year I can't catch him.*

P21a Lorraine: *Strawberry just thinks she's feral and can be in the field and get fat.*

Despite the similarities in wording in the two accounts about becoming "feral", they are constructed differently; Dylan's "feralness" involves avoidance of his human owner and avoidance of the humanised world in which he lives. Strawberry's "feralness" is constructed in a weaker way: Strawberry only "*thinks*" she is feral, because she wants to "*be in a field and get fat*"; a far cry from the real life of a wild pony. However, both behaviours are seen as coming from the horse's innate wildness and ability to revert to this state if the opportunity arises.

Animalised behaviours were predominantly discussed in two ways, with the horse constructed as either a *flight* animal or a *social/herd* animal. A third set of behaviours that straddles the divide between an animalised and potentially dangerous "other", and humanised expectations of behaviour; these behaviours include the horse being wilfully disobedient or uncompliant, and in doing so, often dangerous and destructive to people.

### **The horse as a flight animal**

It was common across the data for horse owners to talk about horses as 'flight' animals; responding to threats by fleeing. In a domesticated setting fleeing was seen by interviewees as illogical but also potentially dangerous. This is shown in the following extract from Carly, discussing her ex-riding school pony, a 19-year-old cob:

P16 Carly: *He'll be worried by things that are totally random. Our best one so far has been, we were hacking round the village and there was this lorry that was carrying a trailer that had a cherry picker on it. I was like, "Oh my God that is scary." To be fair to the drivers, they were brilliant. They stopped and switched off their engine because Digger was spooking. But Digger was spooking at the bird in*

*the tree. He hadn't even noticed the lorry with the cherry picker. He was like, "There's something really scary in the tree." I was like, "Seriously, can we worry about the lorry not the bird in the tree."*

Like Carly, many owners told tales of their horses "spooking" (reacting in fear) at objects:

P13 Madeleine: *Gemini had a hairy fit with Daniel the other day because there was a quad bike, and she was really scared and I was really cross because we have a quad bike and she's used to it.*

P19 Jill: *Down one side of the school was a hedge, and it rustled in the wind. All the horses at the yard used to spook at it, but he actually turned round and ran off.*

However, owners presented mixed feelings about their horse's spooky behaviour. As shown in Madeleine's account, she is frustrated with Gemini's behaviour because she felt her horse should have been habituated to a quad bike. Comparatively Jill accepts that spooking to some degree is consistent; she states that "*all the horses used to spook at it*", hence spooking at a hedge was standard behaviour for horses on this yard (although Jill's horse took the hedge more seriously, in this extract). Other owners describe spooky behaviour as inconvenient (P26 Phil: "*a pain in the bum*"), or potentially dangerous to the owner or the horse itself:

P10 Nadia: *if there are bushes they always spook him and I'm hanging off the saddle.*

P26 Phil: *He'd just spin and rear, it could pirouette better than a blinking ballet dancer. Taught me a lot about riding, that.*

P17 Sandra: *we had one die in a storm, actually ran into a brick wall and broke his neck about five years ago. A freak storm from out of nowhere and she'd just moved him into a different field so I don't think they knew where they were, they were disorientated. Anyway, they obviously freaked and the pair of them ran. He realised he was at a wall, put the brakes on and his friend ran into his backside and smashed him into the wall so most horrific because obviously he'd broken his neck and he couldn't stop.*

Owners attempted to mitigate risk in some instances, for example avoiding potentially stressful stimuli altogether, or spending considerable amounts of time working on desensitising their horses to potential danger:

P13 Madeleine: *Gemini had a hairy fit with Daniel the other day because there was a quad bike, and she was really scared .... So we came back and the next day I took the quad bike in the field and we did round and we tooted the horn and we pulled the chain harrow and just generally made a nuisance of ourselves in the field with it. Umm and then hopefully next time we'll see a quad bike she'll go [shrugs]*

### **The horse as a social herd animal**

Participants understood that, in the wild, horses would live in mixed group herds. This had implications for the day-to-day handling of the domestic horse.

For some owners, the horse's desire to be in a herd could be problematic:

P9 Kayleigh: *on the last yard, all the horses lived out and they had to live out in summer, and it became like a herd thing because there was so many of them, and you'd try and take her [horse, Glam] out of the herd and you couldn't. You'd, you'd clip her on and she'd just turn round and take off.*

Glam's refusal to leave the herd resulted in Kayleigh restricting her horse's time in the field to half a day as a way of dealing with her animalistic herd instincts; a strategy which she felt was successful.

Many participants discussed how equine herds or groups could be manipulated in other ways, in order to minimise risk of injury and ensure compliant behaviour. Many of the yards represented in the interviews separated mares and geldings, and some even kept their horses individually in paddocks. Sue, who endeavoured to keep her horses in as natural a way as possible in terms of feed, training, and behaviour preferred, however, to keep them separate from one another. Some owners considered this quite "unnatural":

P20 Sue: *It's just always made sense. They've always been allowed to interact with one another over the fence, but for ease and for safety reasons we've kept them separate.*

In other instances, horses are separated by sex and not allowed to interact for fear of encouraging hormonally driven social behaviours. Sandra spoke about what she considered to be “*the stupidity*” of someone who put a stallion beside geldings at a past yard. She suggests that “*common sense*” should have meant that this was not acceptable behaviour because of the horse’s natural instincts to fight one another. Similarly, Lorraine describes how they cannot lead their mare “Strawberry” past the geldings’ field when she is in season:

P21a Lorraine: *I walked her in-hand round, that wasn't my best idea...It was like every gelding just went mental. She was throwing herself around. I went to Brian, "I'm not going to be able to hold her. You hold her." He was like "what am I supposed to do?!"; "Hold onto the rope." .... So we don't take her around the farm when she's in...*

The horse’s loss of control as a result of its natural social instincts as described in this extract leads to the owners’ feelings of powerlessness; they felt unable to contain Strawberry in the face of the amorous geldings. As a result, when the mare is in season they restrict what they do with her. In the belief that her behaviour is hormonally driven, they feed their mare a feed supplement to control her hormones. Hormone-driven behaviours were frequently mentioned by participants as problematic, representing situations which made the horses act in uncompliant ways which were difficult for owners to overcome:

P23 Pat: *She was lovely. She was a really nice mare unless she was in season. Then you couldn't get anywhere near her. She nearly killed the farrier...In the end I took her to my vet at the time said, "The only way you're going to deal with this is to get her in foal."*

P6 Cath: *her supplements as well, she has to have [laughs] in spring she has to have Stroppy Mare, because she goes - back, psycho [laughs affectionately]*

Male hormonal behaviour also caused difficulty, though owners seemed to tolerate these more than “mare-ish” behaviours. Male hormonal behaviours were often considered less specific than “mare-ish” behaviours, particularly because “dominance” was considered to be



relevant for both mares and geldings. For example, many owners seemed to ascribe to the view that equine herds have a dominant mare and a dominant gelding, and that this carried over to domesticated life:

P13 Madeleine: *she was the dominant mare in the group, so if ever we were out she had to be in the lead. But my friend's horse Tom, he was the dominant in his, so every time he had a canter, umm she used to try and kick his head off [laughs]*

P7 Leanne: *she is a very dominant mare with the other horses*

These dominance behaviours were often related to horse-horse interactions, as in the examples above, and interpreted as an example of instincts that arise from the horse being a “herd” animal and therefore needing to establish their place within the social structure of the herd. At times owners also interpreted the horse’s behaviour towards a human as misplaced herd behaviour: for example Sandra’s gelding “Caspar” acts possessively towards her:

P17 Sandra: *He used to herd me, he used to keep all the men away - my dad was alive at the time and he used to herd him away from me, kept my husband away from me so he would circle you in the field.....he likes to keep me to himself. I think he sees me as his mare to be honest. He's always a bit like, "Oh no, keep her away from everyone."*

Sandra constructs her horse’s behaviour as a dominant alpha-male, who is protecting his owner/mare from outside influence from other males. Sandra considers herself to have a close reciprocal relationship with this horse because she had been able to remove him from difficult circumstances and retrain him despite difficult behaviour. As a result, Sandra frames Caspar’s behaviour within her knowledge of his history and her relationship with him.

Some owners embraced their horses’ herd behaviour, endeavouring to keep the horses in stable, mixed sex groups and encouraging horses to behave “like a herd” (P1-4, 13, 22, 24); these owners discussed how they felt their horses benefitted emotionally from being allowed to be “in a herd”, though of course the “herd” in this instance is chosen and imposed by the human, and therefore still differs compared to a truly “natural” herd.

### The horse as uncompliant and disobedient

Participants constructed their horses as on occasions being intentionally uncompliant or disobedient. Horses were attributed with a presence of mind that suggested they understood what was expected of them, yet wilfully chose to ignore what was being asked of them. Often, these accounts were constructed as if the horse were a naughty child; the horse was trying to get its own way and overcome the owner. Some of the described behaviours were considered quite mild and related to the horse simply not conforming to what was expected of it. Uncompliant behaviours were described as the horse escaping from its stable, knocking down jumps, breaking through fences, refusing to load or being lazy.

P4 Angela: [the horse had] *learnt the trick, I'll throw a little buck in, she'll get off.*

P11 Alice: *We have a Pilates ball in there that she pretends that she's scared of it, but actually if you... Even if you kick it up to her, the side of her leg, she just kind of goes, I'm not really bothered. If there's another horse in there that's nervous and it's all, ooh no, I can't, I can't go near it, sort of thing. So she plays up to it.*

P12 Dani: *He's so clever and so intelligent. You just see his brain working constantly. He'll look for things to spook at. I'm like, "I can see you looking at it, Dylan. It's not going to work." Searching for trees and things. Just trying it on a bit. If I give him to someone else he'll drag them over to grass. I'm like, "You're so rude." Whenever I put a new rider on him he goes through the same cycle of things to try out with them.*

All three extracts describe what owners perceived as wilful disobedience; Angela's horse has learnt a "*trick*"; Alice considers that her young mare is "*playing up to it*", and Dani's horse is "*trying it on*" by seeking things to spook at, dragging new handlers around, and "*trying out*" new handlers.

However, the concept of these disobedient behaviours was quite complex in its construction. Although the behaviours were presented by the participants as very inconvenient and even dangerous in some instances, they were generally considered with more acceptance and humour than the incidents of uncontrollable flighty or social "animalised" behaviours. With the animalised behaviours, as described in the previous section, the lack of thought and control on behalf of the horse was frequently alluded to, with the incidences constructed as

innate impulses. The disobedient behaviours, on the other hand, were often considered to have been planned in advance by the horse, and were perceived as less frightening to owners than animalised behaviours. They may even bridge the human-animal divide by constructing the horse as having almost human-level logic. Disobedient behaviour often resulted in humorous and affectionate remarks in the owners' accounts:

P12 Dani: *He's generally quite bright and cheerful a lot of the time. If he's being naughty, he's generally happy. You can tell, if he's not feeling great, he's far too quiet and well behaved. That's when you go, "Hang on. Are you okay?"*

P13 Madeleine: *She was my forever horse and she was amazing, beautiful, clever, bitch, could chuck the nastiest buck, broke my back twice [laughs]*

P14 Lilian: *We have great fun, he's very naughty*

Using humour and bravado in the face of danger is a known phenomenon studied in other arenas of leisure studies(184), and as such these comments represent how potential danger can be incorporated into of the owners' constructs of the horse's behaviour. However, a few owners did find disobedient behaviours problematic:

P9 Kayleigh: *why are they doing that because there's no reasoning to it... like one day she'll be fine when I'm riding her, and then the next day she'll be really naughty and I'm like but she was fine yesterday, so why's she acting like that today?... like random times of the year she's really naughty and she just throws herself around and stuff, and it's like well why are you acting like that?*

However, it is the seeming irrationality of Glam's actions that Kayleigh finds difficult, even though the behaviours are what she herself describes as "naughty moments". It is likely, therefore, that while horse owners acknowledged the innate flighty characteristic of horses this did not translate readily into a convincing reason for all their behaviours. So, while some owners considered that flight and herd behaviours were signs of disobedience, others disagreed that horses could be purposefully disobedient at all:

P17 Sandra: *I don't like to use naughty because I don't think horses stand and plot, do they? I don't think they stand in a field and think, "Ah when she comes to get me I'm going to rear at her." They don't plan it, do they?*

Sandra's construction of horse behaviour and capacity for logic suggests that the horse is not capable of being intentionally disobedient, and as a result Sandra does not use language which suggests insubordination in the horse. However, few other owners ascribed to this view and labels such as "naughty" and "disobedient" were commonly used in relation to unwanted behaviours.

### 5.1.2 Human risk from the animalised horse

Being a horse-person was naturally assumed to entail being in dangerous situations which could induce injury, and participants constantly discussed their own fears and vulnerabilities.

Often, humour and bravado were used jointly when discussing the risks posed by horses. For example, two participants had fractured their vertebrae in riding accidents, and both laughed as they discussed how they climbed back on, one to finish her showjumping course (P12, Dani), and the other (P13, Madeleine) to hack home. Madeleine goes as far as to describe the paramedic's reaction as "*hysterical*". Bravery in the face of adversity is inbuilt in equestrian culture, with young riders taught "*seven falls make a horsewoman*" (i.e., it is necessary to fall off in order to learn), and the dangers of handling and riding horses are integral to equestrian teaching:

*P18 Samantha: it [Pony Club teaching] was more about being aware that if you're picking a horse's hoof out, it might kick you, or if you walk around the back of a horse, it might kick you, or the front end might bite you, that kind of thing.*

Human vulnerability in the face of the animalised horse is therefore a recognised part of equestrian culture, and many owners spoke openly about their own fears and concerns - particularly in relation to their own ageing and what they perceived as their own increased fragility.

Therefore, owners often created strategies or used tools which would minimise the risks of injury to both human and horse. For example, they would use physical aids to enhance their safety:

*P8 Jane: [indicating her body protector] I don't even get on now without it, even if I'm just going to sit there for a minute, because they can still spook.*

P13 Madeleine: *Naughty Leo. That's why we have a shit strap for him. You've got, cos again he can put in a nasty – not a nasty, he can buck. When he goes into canter her bucks. Shit strap. He's, he's lovely.* [a “shit strap” is a strap that either goes around the horse's neck, or across the front of the saddle, in order to provide some stability for the rider]

Or they might refrain from hacking on roads or riding at speed, avoid riding alone, or stop performing other activities which they considered high-risk:

P36 Polly: [about making the decision to stop hacking out] *I've got to be realistic. The roads are busier and busier, and where she is the roads are narrow and the traffic is not well behaved. It's just too frightening. The thought of coming off and then her bolting off and hurting a driver or a pedestrian, it's just more than I can cope with.*

Fears of the horse being a horse often resulted in the horse being engaged in less and less intense physical exercise. The lack of balance between the care provided and the exercise required of the horse highlighted the risk of creating an overweight horse.

## 5.2 The malleable horse

Whilst owners constructed their horses as “wild at heart”, they also represented the horses as biddable, honest animals which could provide companionship for their owners. For most owners, horses embodied these twin aspects of being an animal. These conflicting dual constructions of the same horse occurred at the same time points. Bringing the two sides to light allowed the owner to present not only their close relationship with the horse in order to encourage its compliant, biddable side, but also the owner's bravery and prowess in managing the horse's wilder side. The “malleable” side of the horse allowed the animals' traits to be deconstructed into specific desirable traits such as “honesty” which allowed it to be effectively incorporated into lives of humans.

This section explores how individual horses are constructed as docile and biddable, and how this quality sits at the heart of equestrian society.

### 5.2.1 Safety, Docility and Compliance

The concepts of safety and docility in the horse were consistently tied into the construct of the malleable horse. The placidity of the animal was considered directly relevant to the functionality of the horse:

P4 Angela: *He does suit me very well, out of all the horses I've had because he's just, chilled, laid back, you can do anything with him*

P22 Sophie: *So y'know if I kick, he'll trot or canter, but if I stop doing anything, he'll just stop, so I felt quite safe on him.*

Despite Angela and Sophie being among the more adrenaline-loving owners featured in the interviews, the extracts show how they construct their horses as docile enough for them to “do anything”. The horse’s compliance engenders in the owner a feeling of safety.

P18 Samantha: *My mum said because she'd had quite a few bad falls on this old mare, she was like, “I want something sane, sensible, quiet, calm, isn't going to spook, isn't going to do anything.”*

P8 Jane: *I tried about eight. And – she was the, only one I felt safe on. To put into canter. Now most of the others didn't do anything, but I walked them, trotted them, and thought I don't want to canter this horse. I – it's a sort of instinct, a feeling of pent up energy. And she didn't have any. Well she doesn't have any [laughs]. She plants. [laughs] ..... I just felt safe on her and that's why I got her.*

P21b Bill: *Very laid back.....To the point of comatose. (Laughter)*

These horses are valued for their dependable docility. The levels of docility with which an individual was comfortable reflected not just past experiences but the fear or confidence with which an owner approached the riding of their horse.

Interpretation of owners’ descriptions of the levels of danger and docility they considered to be manageable highlighted the presence of a continuum of behaviours that owners felt able

to tolerate: a manageable level of danger, a manageable level of docility. This was often represented through discussions of the horse's manageable but difficult behaviour, juxtaposed to expressions of behaviour which were considered more unmanageable, but which the horse would not do:

P26 Phil: *he'd got issues..... he walked backwards as good as he could walk forwards.... just when he didn't want to do something. It took a little while to cure that but he doesn't buck or rear like some of them do, or anything like that.*

Compliant behaviour from the horse was therefore seen as the ultimate goal for owners across the data, and was constructed as being mainly the result of successful training and handling. Therefore, owners could choose whether to seek a horse who had already been handled and trained in a way that they felt would ensure that the horse was “safe”, or to train their own horse and achieve these constructs by their own hand through a process of transformation.

### 5.2.2 The deconstruction of the horse

The deconstruction of the horse into desirable characteristics, such as docility and compliance, enabled owners to achieve goals such as constructing a relationship, or achieving specific functions, with the animal.

For example, prior to purchase, horses were viewed in terms of a set of desirable or undesirable characteristics. Young horses were commonly seen as providing a “*fresh, clean slate*” (P12) or “*untouched*” (P3). There was an acknowledgement that a horse's previous interactions with human beings may have introduced unwanted characteristics into the horse's behaviour. The only way to avoid this was to start with a young horse and influence its development:

P25 Ellie: *I rang up a couple of breeders .... she said, [imitates well-spoken lady] “If you can't find a readymade pony, why don't you make one yourself?” and I said. “What do you mean?” she went. “Break it in. They're quite biddable.”*

Contrastingly, owners seeking a “readymade” horse adopted a checklist of desirable characteristics:

P9 Leanne: *I found this dealer.... They marketed what they called safe cobs, and I saw his [current horse's] picture, and there were loads of others.*

The horses at this dealer's yard become products based on two traits which are perceived as desirable: “safe” “cobs”; the potential buyer can peruse and test-drive a range of “safe cobs” much in that same manner that one would buy a car, focussing on the model and then making an individual choice between similar items. Some owners even explicitly stated that they were “model” focussed:

P9 Leanne: *I would look for another one of the same*

P24 Ruth: *I thought I'd have a faster model, a 7/8 thoroughbred*

While horse purchasers often focussed on achieving a set of characteristics in the horse, participants often talked about how their feelings for the animal had overridden the list of attributes they were seeking. These participants talked about having “fallen in love” with their horses or purchased them through fate.

The list of desirable horse characteristics ranged from physical and behavioural characteristics through to a particular skill set. The discourse around equine functionality was heavily focussed on the metaphors of work and productivity. Horses were said to have “jobs” (P19, 20); their exercise was commonly referred to as “work”; a privately owned horse used in a riding school was said to be on “working livery”, and; horses were said to “earn” their keep or their “retirement” (p20). Horses were also defined in terms of their “career” with some participants suggesting that a horse's “CV” could be developed by improving its skillset and functionality (field notes, 05/17).

The careers available to the horses were all defined by how owners chose to put their horse to work. Careers included being a racehorse, Riding for the Disabled Association (RDA) pony, riding school pony, event horse, show horse, dressage horse, pet, friend, broodmare, hunting horse, driving pony, stud, companion to other horses, endurance horse, western riding horse, therapy horse, agility horse, or riding club/pony club horse. The alternative to any of these careers was that the horse could be retired at the owners' expense (during which



time it had the potential to become a pet, therapy animal or companion animal) or else euthanised or sold for meat. Because of the expense and time-commitment of horse-keeping, at the point of purchase the suitability of the horse for its intended role was reported to be extremely important for owners.

There was a suspicion that people selling horses were not always honest or accurate when describing the horse's characteristics. Sellers might act in ways that would conceal a horse's true nature or history, in order to increase its perceived functionality for a role, and hence economic value:

*P22 Sophie: he had been drugging the horses. They'd exercise them for an hour or so before the person came to view them, so that they were completely placid. These horses might have injuries. They had a load of bute stuck in them, or were just not very well, mentally*

The idea of horses being sedated was mentioned by several participants, in order for a seller (particularly a horse dealer) to make a horse appear more docile and biddable so as to suit the purposes of the intended buyer, causing the horse to misrepresent itself to the buyer. As P22 also notes, medical issues might also be hidden, for example by giving the horse anti-inflammatory or pain-killing drugs.

While the majority of people interviewed in this study were using their horse in a leisure capacity, their interactions with their horse often entailed activity which was badged as work. As a result, the horse's ability to fulfil the requirements of the designated "job" has important implications for the value of the animal. Horses which do not meet the needs of the current owner or designated "career" may be sold and repurposed for a different role, or retired or killed.

Some interviewees discussed the potential disposability of horses which did not meet the needs of their owners. For example, Ruth discusses a highland mare which she'd initially bought with a friend; she and the friend planned to invest time and skill in the mare, increasing the horse's value in order to sell it on later:

*P24 Ruth: I think that we thought that we might sell her on, having put the schooling in.*

The input of the owner (skill-depending) can be converted into financial investment by improving the functionality, and subsequent worth and saleability, of a horse. In this scenario, the horse becomes a commodity or financial investment.

Alternatively, some horses were disposed of because they had failed at the task which the owners had bought them for, as was the case with the young ex-racehorse “Buzz” bought by Liam:

P27 Liam: *He's quite steady going, you know, he likes just to go and have a pootle around and I think that was probably the problem, just wasn't quick enough. He was owned by a syndicate, so, clearly, they want their money. They want their money back, so they just sold him off.*

In this instance, the horse had been acting as a financial investment for the syndicate's money, but was not proving its worth and was sold at auction. The horse could end up in any sort of capacity, from being sold for its meat, to trying an alternative “career”, as with Liam's horse turning his hand to eventing. The repurposing of race horses for eventing, dressage and endurance has become a way in which owners can provide a new purpose for a horse.

The threat of negative outcomes such as death or re-selling horses which can no longer fulfil their designated roles was frequently discussed by owners, and is a contested part of equestrian society, even if owners personally disagreed with the ethos. Many owners perceived the re-selling or killing of horses which do not meet the needs of the owners as a very common activity, and therefore felt that they had in some way rescued their horse from potential threats of other humans, or from continuous re-selling:

P21a Lorraine: *I think she would be at the meat man, wouldn't she, with her eye?*

P17 Sandra: *I'm the only person in his life he's stayed with for more than 18 months really. So sad though isn't it when you think about that.*

Owners also found other ways to remove their horses from equestrian society and its commodification of horses:

P20 Sue: *I've moved on from the - a horse must have a job. They don't have to earn their keep, being in their presence is enough for me.*

In her interview, Sue discussed how her ideologies around horses had changed over time; she now used only reward-based training mainly performed at liberty, so that her horses could choose whether or not to engage in any activity. This is starkly different to the usual training of a horse. For this participant the function of the horses in her life has changed from task-based (ridden “work”) to a more therapeutic lifestyle for her – she describes this as a “*radical change*”. Similarly, Kayleigh felt that she had bonded with her mare “Glam” because she had removed this mare from the need to work. When asked how she had improved her mare’s trust issues, she replied:

P9 Kayleigh: *Just one-to-one, with, with her. The fact I didn't use her. Like, you know the first year she didn't, she got worked probably once a week, if that, so.*

This mare had previously been on a riding school, so her “work” had involved carrying people who were being taught to ride. In this sense the horse was seen as being “used” by Kayleigh. This idea of “use” was carried further by Nadia:

P10 Nadia: *not treating your horse as a slave. He's not a slave, he's my friend, so why would I treat him like that.*

Nadia’s direct juxtaposition of the construct of the horse as a friend rather than a slave suggests that her relationship with her horse is what has liberated him from previously being a functional animal. She had initially bought “Seamus” to take part in general riding club activities, before questioning her relationship with the horse and subsequently rebuilding their “friendship” on what she felt was a more equal footing.

Both Kayleigh and Nadia construct more intensive and regular physical exercise as a negative experience for the horse, as compared with the light exercise to which the horses are now subject. They, and other owners, suggested that they were able to liberate the horse from types of governance which it might previously have experienced. These ideas served to further reinforce the idea of the horse as a passive recipient of care and minimise the importance of exercise, thereby contributing to the low workload of the horses described across this study.

### 5.3 The Transformation

The construction of the horse as simultaneously wild at heart and biddable enabled owners to construct narratives around the transformations they had brought about in their horses. For example, the consolidation of the owner-horse relationship, as represented by the horse's obedience to its owner and suppression of "wild" behaviours.

Transformation narratives were present across the data types. The purpose of these narratives seemed to serve to clarify the owner's "mark" on the horse; for example, they enabled the owner to display values which were important to them, such as their ideologies about horse-keeping and horsemanship. Often, these transformations involved removing the horse from perceived negatives, such as being "worked" and "used", and instead enveloping them in secure environments.

Transformations fell into three categories, which sometimes overlapped: *behavioural* (difficult or non-compliant behaviour to compliance or to a relationship), *physical* (for example, moving from a poor physical state to health), and *functional* (changing "career" or improved abilities to perform human-oriented tasks), with some horses showing changes in more than one area. Owners used the "Processes of Ownership" (husbandry, governance, and their relationship with the horse; discussed in Chapter 4) to achieve and maintain these transformations throughout their time with the horse.

#### **Behavioural**

Behavioural transformations often involved the expenditure of considerable effort by the horse owner and for this reason owners spoke most passionately about transformations around their horse's behaviour. For example Cath, the owner of "psycho" thoroughbred mare Star, describes her feelings about the changes in Star's behaviour:

*P6 Cath: I don't know whether half of the bond that I've got with her is because of all the problems. You know if I would have got her and she would have been*

*perfectly behaved and that, because I feel like, like super proud of her, y'know [laughs].*

Similarly, Kayleigh's cob mare "Glam" had become more trusting and less aggressive during her two years of ownership, although she did not yet feel that her transformation is complete:

*P9 Kayleigh: in a few years' time, when I've had the time to get her to the way I want, I can say I made her like that. I didn't buy her like that. And I can show people pictures of when I first bought her, and there will be a transformation, where there won't be a transformation if you buy an expensive horse, because they're already like that. And that's what I like, because there'll be a transformation, and I'll be, I'll have done that.*

### **Physical transformations**

While physical transformations were often easier to achieve, owners expressed satisfaction in the change in the physical appearance of the horse.

*P21a Lorraine: There was like a nice little pony under all that fuzz....When we got her she had a saggy abdomen obviously. I don't know how many foals she had had. But I was like, "Whoa. I wish mine would." Like proper up. And her chest was saggy and that lifted with the exercise.*

*P21b Bill: She looks like a different pony.*

*P17 Sandra: I had my, first horse actually Phoenix... he had six months to live. He was just a hat rack, he was abused, he was everything you can think shouldn't happen to a horse really had happened to him. Anyway, I had him for 10 years. I lost him when he was 35. So, he taught me a world of... If you get a broke horse I think it teaches you how to fix them which is kind of where it all came from.....I fixed him from literally start to finish - from weight, to teeth, to back, to feet, to everything*

*P16 Carly: He's lost a lot of weight since he's been mine. He was very fat. Very, very fat.*

For each of these transformations, and others described in the interviews, the physical transformation of the horse was symbolic of the wider changes to its life made by the interviewee's stamp of ownership.

### **Functional transformation**

Finally, some owners discussed the functional transformation of the horse:

P10 Nadia: *People praise how much he's developed now, I can even jump him bridle-less, he just does it on his own really.*

P22 Sophie: *she has really come out of her shell. She's much more affectionate. She's easy to catch now, whereas she didn't used to be. She just comes up from the field at the time she knows it's time to come in. She's good with the farrier now. We didn't have to sedate her for the dentist. So she's really calmed down and knows her place in the yard.*

These owners had increased the functionality of their horses by improving their compliance with the tasks they required them to undertake. Other owners described similar functional changes, which either enabled the horse to be better to ride or easier to handle from the ground; however, all changes were aimed at the horse being more compliant and docile in the hands of the human.

This section has shown how the horse is a malleable, flexible construction both individually to its owner, and in a broader sense to equestrian society; horses are deconstructed into qualities and abilities to conform with the human's view of the task they are required to undertake. Horse owners' narratives frequently explained the transformations they had made to their horses.

The way in which owners discussed their horses' transformations were a reflection of the owners' values around equine care. Many of the owners considered that their transformations involved liberating their horses from their histories – for example from past “work” (even if that work is simply another form of being a leisure horse), or from neglectful or irresponsible care. Thus the transformation of the horse often reinforced the

concept of the transformed horse being cosseted as a recipient of care, often included shielding from the need to conduct “work”. Physical exercise was commonly constructed as a negative aspect of the horses’ life. For some horses which had been through a transformation leading to them being pets and companions, minimal or no exercise was seen as owed to them as a result of their past; low amounts of exercise is likely to increase the likelihood of potential weight problems.

#### 5.4 Chapter Summary

This chapter has examined the construction of the horse from the point of view of horse owners, considering how horses are deconstructed by society and transformed by owners. Horses are considered to be both docile beings and potentially wild animal others, which some owners struggled to navigate. Owners use the processes of ownership to create their horse’s transformation, which commonly results in the horse being shielded from the need for physical exercise and provided with an optimised environment in which it can flourish. Such a construction was frequently potentially obesogenic, as the animal is protected from its own innate animality and from any need to expend energy.

## Chapter 6: Influences around the Horse Owner

Horse owners in this study discussed the range of external influences which affected their decision making around the care of their horse. Understanding these influences is important in order to fully comprehend how horse owners make decisions about horse care within their day-to-day environments. These influencing factors may have directly obesogenic effects by shaping the environment within which the owner operates, in ways that promote obesity.

This chapter is split into three sections: firstly I will consider the *advisors*; people at the closest level to the horse owner who provide the owner with information, advice and support; secondly I will discuss *the yard* itself and the way the yard and its manager frame the horse's environment and decisions the owner can make; and thirdly the wider *social* factors, such as changing horse care norms, which shape the horse owner's choices, but also the choices of the yard manager and support networks.

### 6.1 Advisors

The advisors who support the horse owner can be categorised into two overlapping types: formal advice from specialist experts who lay claim to some sort of professional expertise, and informal advice from people such as friends, yard-peers, tack shops and the internet. All owners discussed employing both formal and informal types of information and advice in making their horse care decisions, but owners laid claim to the right to make the final decisions for their horse, ensuring the horse's best interests.

“Formal” advice came from individuals whose expertise was requested in a professional capacity, often in exchange for remuneration (though not always; for example a vets’ opinion could be bought, but a show judge’s opinion is not).

Formalised advice came from various types of professionals mentioned in the data, including (in no particular order): vet, physiotherapist, chiropractor/massage therapist/osteo/other “back person”, farrier, barefoot hoof trimmer, riding instructor, trainer, professional sheath cleaner, groom/yard staff, equine communicator, equine dental technician, nutritionist,



saddler, behaviourist, yard manager, biting specialist, and show judge. All the interviewees in the study consulted vets and had a hoofcare professional, and most discussed having dentists, riding lessons with an instructor, and a “back person”, at a minimum. Many owners reported professional relationships with vets, farriers, instructors and others, which could be sustained for decades at a time.

However, in this study formal advice did not automatically denote formal training or qualification. It was common that owners did not know whether the experts they employed had received any formal training or had qualifications. On one DIY livery yard in the field notes where an instructor, saddler, equine dentist, and sports massage therapist were all commonly recommended and used on the yard, only the massage therapist had any qualification at all - a five-day course. None of the owners seemed aware or concerned over the individuals’ qualifications, instead relying on their own assessment and/or others’ endorsement of their work. Owners formed their own assessments of the work of the people they used for their horses.

“Informal” advice came from individuals in a non-professional capacity, including friends, yard peers, internet fora and tack shops. Friends and yard peers were considered one of the main ports of call for owners, and many individuals discussed asking their friends for advice about various aspects such as feed, bits, etc. In some cases, yards acted as supportive environments; numerous individuals commented about the yard being a first port of call in case of horse care queries:

*P4 Angela: I’d probably start by asking on the yard if anyone’s got any good ideas.*

*P7 Leanne: I would say have you ever seen this in a horse or have you ever known anything, yeh, we haven’t – we bounce id-, things off each other as well, riding problems if we’ve got or, y’know or bits, or advice on bits, tack equip, tack equipment or, yeh we’d generally do that*

Informal advice also came in the form of online discussions with other horse owners and carers. Most owners and professionals discussed the internet as a potential source of information, usually specifically referring to discussion fora and equine-related Facebook groups.

The boundary between “formal” and “informal” advice was not always clear-cut; for example Anna (P2) took advice from a vet who shared advice informally on Facebook, where advice is more usually considered informal. Contrastingly the perceived high levels of experience of Alice’s friend (P13) meant that she sought advice from this friend as if she were a professional. Neither formal nor informal advice were always trusted by horse owners, but were constructed as options which the owner might, or might not, make use of (discussed further in the next section).

Participants acknowledged particular problems with online advice compared with face-to-face informal support, suggesting that discussion group members could present themselves as being knowledgeable, whilst actually giving poor advice. Comparatively, owners implied that this was not a problem with in-person advisors, because they would be able to judge for themselves whether the person was knowledgeable. Professionals also frequently commented on their concerns about horse owners receiving misleading information from internet discussions. However, despite many participants making disparaging remarks about the use of online discussion groups, later in their interviews many of the same individuals gave specific examples of times when they had found information on these groups useful, or examples of groups which they felt had particularly ‘knowledgeable’ individuals and could therefore be trusted, at least to some degree.

### 6.1.1 Sifting Evidence

Wherever advice came from, it was clear throughout the data that the role horse owners constructed for themselves was to sift advice and apply it to the horse in question. Owners generally felt strongly that they knew their horse better than anyone, and that generic advice might not necessarily be applicable to their horse, their yard or their personal circumstances; this sometimes led them to go directly against advice:

P7 Leanne: *she [Leanne’s horse, on box rest] was getting a bit angry, and I, I made a judgment against the vets. The vet said she couldn’t go out in her own field, and I did, I put her back out in her own field because I knew she wasn’t going to go mad*

*and I knew what she was going to do, and she did what I thought she'd do, she went back, just calm*

P10 Nadia: *I stopped having the lessons because the instructor, she was just getting upset about- because I think she thought the same, I don't know, I've- she probably thought the same, that he knows but he's just, he's naughty, that he's not behaving, he doesn't want to do something. And then he was coming to the point that she would ask me to smack him because he's just naughty, whatever, and I'm like, "No, no, no"*

In both instances, the owners used their in-depth knowledge of the horse in question to make judgements which are different from the professional's suggestion, in order to protect the horse from a potential problem. The horse's feedback was therefore integrated into the horse owner's decision about whether the advice should be taken up or not, giving the horse a degree of agency in decision making. For example, Liam (P27) took informal advice from a discussion forum about trying a new noseband on his horse Buzz, and Buzz's apparent "approval" through altered behaviour encouraged Liam to feel that he had made the right choice.

Many horse owners suggested that generic information, as might be gained from a book or formal course or even from some professionals, would not provide them with the specific information to deal with the variety of horses that exist in reality; for example, Ruth suggests:

P24 Ruth: *"they [vet at endurance ride] explained that the book might say you can get a horse fit in six weeks, but that you'll never get a highland pony fit in six weeks"*.

As a result of this chasm between generic knowledge and the individual horse, a great deal of importance was placed on learning from people who had been in a similar position to the owner. Many owners suggested throughout the data types that they relied on advice from other owners who they considered to have knowledge gained through experience:

P12 Dani: *If it's someone that I know knows a lot about that particular subject, I'm far more likely to listen. If it's a showing rider and I'm asking them for an opinion about showing related, then I'm more likely to be like, "Okay. You know your stuff."*

P11 Alice: *Daisy's horse is in really good nick, so it was, I don't know what, this horse is a hat rack, I rang Daisy saying, "I don't know what to feed it", "Ah, well, we use this, this and this", "Okay, well I'll buy that and see how that goes".*

P9 Kayleigh: *I prefer to take the advice on, people that have used something and it's worked. So, I had a bit, I had her in a Waterford because she was leaning on the bit, so I needed a bit that would stop her doing that, so I tried her in a Waterford because it was all wobbly, and it did, it did.... That was a recommendation from a friend and it worked on her horse, so she leant me the, leant me the bit, and I used it, and it worked so she doesn't lean on the bit now*

Perhaps as a result of the horse owner's role in individualising advice about suggested care of their horse, many owners reported appreciating professionals who acted in ways that suggested they saw their clients as individuals, rather than just as customers. For example, positive comments were made about professionals who took extra time for the client, remembered to follow up on cases informally, or 'went the extra mile' - for example, dropping in free-of-charge to check ongoing issues, or dropping off medicines.

Those individuals who developed a good relationship with their vet, had cultivated that relationship over time, and the professional became an integral part of their horse care team, respecting the owner's contributions and devising individual care:

P19 Jill: *My vets are really very, very good, and one guy in particular is kind of Thunder's minder, so I always try to get him when Thunder needs attention. He's very willing to chat to me and listen to what I've got to say, and give me more instructions.*

P18 Samantha: *He's [vet] always been very good at being at the end of the phone, so I can text him and ask him a question, or he'll drop off some medication for us. He'd do us favours, you know, and has been as reliable as you can be, I think.*

### 6.1.2 Advice for the overweight horse

The interviews elicited many examples of advice being given from both formal and informal advisors about the appropriate weight of the horse and how to manage excess weight. While awareness of obesity will be discussed at length in chapter 7, here I will consider how owners' sifting of evidence causes them to combine information sources and challenge advice about weight.

Professionals reported feeling that it was their duty to inform owners about overweight horses. This sometimes led to owners' increased awareness of their horse's weight; however owners did not necessarily agree with professional opinion, and as a result sometimes sought peer opinion to corroborate, or refute, professional opinion. Professional opinion was considered refutable if the professional could be said to lack understanding of the specific animal. For example, an extremely extensive discussion across two internet fora (Forum A thread 10, and Forum B thread 2) centred on the scepticism of many forum users about a specific vet being able to correctly condition score a Clydesdale crossbreed horse; the contributors considered that the vet was unlikely to have adequate knowledge about heavy horse breeds in comparison to their own knowledge, and therefore the vet would be unable to accurately assess the horse's body fat.

In relation to managing weight, formal advice was often complemented by informal peer support; there were numerous examples in the data in which an owner had been told to perform a specific action such as soaking hay, and the owner sought advice from peers (either online or in person) about the specifics of managing the process, and alternative options for weight management. As a result, entire communities of practice have been formed online for the management of specific obesity related diseases such as EMS. There were also two examples in which yard peer support enabled weight management in the horses, particularly two cases in which particularly supportive yards formed "weight watchers" clubs with weekly weigh-taping and group activities such as hacks, which would assist in managing their horse's weight.

Therefore, in relation to obesity, formal and informal advice played a role in contributing to owners' understanding of their horse's weight, and how to manage it. As with other aspects of horse care, owners felt it was their role to combine information sources and sift evidence

in order to ascertain an appropriate understanding of what was right for their specific horse. Formal advice sometimes instigated the initial “awakening” to weight, but owners consulted informal opinion to corroborate or refute the professional. Around weight management, informal advice was commonly requested from other owners.

## 6.2 Both customer and commodity: the horse owner in the constructed yard

The circumstances in which horses were kept exerted considerable pressure on the way in which the owner could manage their horse. Livery yard owners shaped the owners’ ability to care for their horse through the imposition of rules and regulations and through the nature of the service they offered horse owners. In this section I explore the way in which the horse owner’s choices and decisions are circumscribed by the environment in which they keep their horse, and highlight the ways in which these environments may themselves be obesogenic and assist in tandem with the horse owner practices, in co-producing an obese horse.

Of the 28 horse owners interviewed individually, only two had their horses on their own land, with the majority at DIY (Do-It-Yourself) livery, and several on part or fully livery (in which case the yard provides services such as managing the processes of caring for the horse). However, each situation varied considerably; for example, several participants kept their horse in DIY livery but were allowed complete control over how they used the land, whereas others on other DIY yards had little control. Some DIY yards were run by farmers who knew little about horses, while others were managed by horse-aware yard managers. The focus groups provided similar diversity in set-ups, with some keeping their horses at home, and others mainly on DIY livery.

### 6.2.1 Variations in yards

A yard is a bounded environment with various, sometimes divergent aims, and may be run as a business for profit, as well as being the home of the yard owner or manager. In this study the organisational frameworks of yards varied considerably, which in turn provided different types of management options for horse owners. Three specific yards are presented

below as case studies, in order to show the diversity in yard types, and highlight the framework within which horse owners care for their horses. Two of these yards were run by people who identified as horse people, and aimed to create a horse-friendly environment, though within the limits of their own ideologies about horsemanship; both were very specific about their clientele and undertook at least some of the horses' care themselves. Thirdly, a farmer-livery owner was also interviewed, representing DIY (do-it-yourself livery, in which the clients pay for the space and facilities, but care for their horse fully themselves).

Although the 'horse-person owned' livery yards were extremely different from one another, both managers suggested that they had drawn inspiration from the negatives they had witnessed on other yards, whilst designing what they felt to be the ideal set-up for horses.

### **Yard 1: Anna's Track System**

Anna (P3) was interviewed both as a horse owner and yard owner. She ran a small, bespoke livery for six horses, utilising a track system. She started this after spending many years on "traditional" yards with her two horses, who between them suffered from COPD, arthritis, serious stable stereotypies, weight problems and laminitis. She describes finding it impossible to manage their health effectively on a "traditional" yard because of impositions, such as limited turnout and limited grass choice, which were unsuitable for her horses. As a result, Anna's livery fulfilled her mantra of "the three Fs, Forage, Friends and Freedom":

*P3 Anna: they will go back onto the tracks, and they will have lots of hay feeders around the track, so that everywhere they go they can stand and eat, we've got loads of hawthorn hedges as well and blackberry and raspberry bushes so they do sort of browse.... for me it was about the most movement, which is why the water's on the yard, so there's no water in the fields, so when they're out on the track and they're eating, they want a drink, they've got to go all the way back to the yard and then go all the way back to the food source."*

None of the horses on Anna's yard were shut in stables and none were rugged; Anna used a thermal camera at night to monitor their warmth, and provided numerous enrichment options such as scratch-mats and placing the hay in the bushes to encourage foraging.

Given Anna's ethos the yard was only suitable for likeminded people; it was exclusively for horses who were barefoot, and kept unrugged, trained using classical dressage methods and with positive reinforcement such as clicker training. Anna chose only to offer livery to those people whose beliefs fitted her own.

### **Yard 2: Helen's purpose-built full livery yard**

Contrastingly, Helen (P4) had purpose-built a very different type of yard, for people who wanted to keep their horse on full livery, which means that its full care needs were undertaken by yard staff. Helen built the yard as a high-end establishment with human and horse luxuries. For humans there was a clean kitchen and toilet, CCTV in stables which owners could log in to 24/7 to check their horse from home, security cameras at the gates, Monarch stables with excellent lighting to enable indoor clipping, heated rug dryers, and individual tack rooms. For horses, there were hot-horse showers, hard-standing field areas and concrete around the water troughs in the fields to minimise mud, special dust-free bedding, and safe metal hay-bars.

Like Anna, the service Helen offered required owners to accept Helen's way of managing horses; in particular owners had to accept Helen's choice of bedding and feed. As Helen describes, keeping horses on full-livery entailed her making choices around their care, and as such her liveries had to relinquish control over their horse care choices:

*P5 Helen: it's not just the horse care bit, it's the customer service bit I think as well that's important. You've got to get on with them and be helpful but in a – it's a, I think it's a fine line isn't it between being too much in people's faces, and sort of being helpful [laughs]. It's quite a fine balance really between telling them all what do and, and letting them feel like, well it's their horse and they have some say in the matter [laughs].*

While Helen's liveries were clearly seen as paying customers, she recognised the need to balance the control she exerted over the horse's care with allowing the owners to "feel like it's their horse and they have some say". By operating the livery yard according her own to standards and beliefs Helen effectively ensured that her yard was peopled by owners with a



similar view of horse care.

### **Yard 3: John's farmer-owned DIY yard**

John is a sheep-farmer turned livery-owner. He runs a livery yard in the southwest of England, catering for around 40 horses on DIY livery, alongside a small remaining sheep flock. John highlights the issues which arise for him through the livery yard being a diversification of his farming business; the land and his home had been intertwined for generations. The insertion of a livery yard onto the farm altered his relationship with his land, with horse care potentially disrupting the attractiveness of the surroundings.

*P33 John: it's my home here, as well. It's my business and home and, also, actually, a lot of people do, they get so infatuated with their horses and whatever, they love it all so much and they- And they half-think it's a bloody charity.....*

*I mean, I just don't like electric tape on my- It's my farm and whatever, so I like it looking right.*

In John's view horse owners traverse the boundaries of his business with unrealistic expectations:

*P33 John: people do expect more and more because the grass is always greener and people want more and more and more.*

John's account of running his livery yard reflects a balance between what he thinks horse owners want and need and what he is comfortable providing within the frame of farming:

*P33 John: I'm careful with- It doesn't get obliterated in the winter, and do you know why it doesn't get-? For one thing, I don't like to see it obliterated. Two, we claim the single farm payment, the subsidies. If we over-grazed on an inspection, they could fine us.*

While John's view of the world is framed by his farming background, he also reports an obligation to the welfare of the horses that are managed on his land:

P33 John: *at the end of the day, if animals are on this farm and let's say there was an RSPCA case and whatever, the landowner would be responsible. Ultimately, the landowner would be responsible.*

In relation to this pressure, John discusses a case of an acutely laminitic horse, where he felt that the owner was not making enough changes in order to manage the condition; this led to an argument resulting in the owner moving her horse elsewhere. Here the owner's actions challenged both John's moral sensibilities and his professional obligations as a landowner.

### 6.2.2 The yard environment

As shown in each case study, yard owners weigh up multiple conflicting factors when creating and maintaining their yards, and all put in place specific rules and boundaries which best suit the factors important to them, balancing their personal situation with the business model, land management, equine welfare and client demand.

One of the positive aspects for clients of the horse-person owned yards was that the equestrian-minded yard managers appeared to have more of an interest in equine welfare, and could therefore tailor their horse care packages accordingly. Farmer-owned yards were often reported to be characterised by the farmer's lack of knowledge about horses; for example, participants suggested that farmers preferred to fertilise their grass, something that the owners, particularly those battling weight or with other laminitis risk-factors, found problematic.

However, as seen in the case studies above, yard managers with equine knowledge also placed more stringent rules on the types of horse care choices that could be made within their yards, which restricted owners to behave in certain ways. Comparatively, owners suggested that farmers usually wanted to keep out of the day-to-day trials and tribulations of horse owning, and as long as the place was left tidy, were happy for the owners to manage a limited designated area themselves, which gave the owners more freedom than on the horse-person owned yards.

Owners and professionals alike spoke about the difficulties for horse owners of choosing

appropriate yards which were affordable, an accessible distance from home, and had the relevant resources sought by the owner. When choosing yards, owners sought a resource package which would best suit their needs, with the understanding that they would not usually receive individualised arrangements. Many participants had moved their horses across various different yards in order to find the most appropriate set-up for their situation, but finding a yard to suit their needs was considered to be a case of compromise:

P28 Lottie (nutritionist): *...owners saying, "I'm at livery yard, I've tried others in the area, it's by no means perfect but it's the best for me. I can't do this, this and this I'm going to have to work around it." I get that quite a bit.*

P32 Nicola (behaviourist): *I've also had quite a lot of clients who would have loved to have moved yards but there was nowhere to move to.*

### 6.2.3 The compliant owner-customer

No matter the yard set-up, within the livery yard the horse owner is a customer and the owner or manager a supplier. In a standard provider-customer relationship, it's a common maxim that the "customer is always right"; the customer holds the power, and may shape the services which they wish to consume, ultimately "voting with their feet" if they are not happy. However, the client-customer relationship of a livery yard is constructed quite differently. Within the equestrian world, the demand often exceeds provision, and the more desirable yards (for example those with facilities which are seen as optimal, such as large arenas or good turnout) operate waiting lists. Where demand outstrips supply the power relations of the normal client-customer relationship are reversed, with the client/yard manager operating a "like it or lump it" approach to provision.

As a result, yards are operated as fixed frameworks within which there is little opportunity for flexibility, and yard managers created and governed these frameworks through complex sets of rules which were developed for each location. Yard rules and restrictions varied considerably, but were treated by horse owners as an accepted part of being at a yard. Yards

could dictate a great many aspects of the horse and human life, for example how grazing was managed:

Interviewer: *when you say restricted turnout do you mean time or space?*

P8 Jane: *Time, you can't do anything about space here [laughs].*

The times and seasons the horse would be stabled and turned out:

P19 Jill: *from 1st April, they're allowed to stay out 24/7. Then, from 1st October, they have to be stabled at night time. The grazing is divided up into individual paddocks, so you get your field allocated to you*

The people who visited the yard:

P7 Leanne: *there's no kids allowed on the yard, you're only allowed on the yard if you're with an over 18*

P25 Ellie: *The owner of the yard says, "We don't have sharers here"*

The people who assisted in horse care:

P7 Leanne: *you're not allowed to help with anyone else's horses*

The times the yard was visited:

P7 Leanne: *you're not allowed on until 9 o'clock*

The type of exercise performed with the horse:

P31 Evie: *Anything where your horse goes around you in a circle counts as lunging in their book, so we've been banned from long-reining and using the 22 or the 45 foot line.*

The feeds fed to the horse:

P5 Helen (yard manager): *having had the experience of changing to that horse food and finding the horses are much better on it.... if people don't want to do that then that's fine, that's their choice, they don't have to be here.*

And the professionals who visited the horse:

P7 Leanne: *they have [preferred farrier] erm – if you don't like him you have to go off the yard to get your feet done basically, yeh you're not allowed any other farrier on except him*

Some yards imposed further rules such as weekly cleaning and chores rotas for liveries.

The authority of the livery yard manager or owner was perceived as so strong (described as “draconian” by Alice, P11) that owners were generally very reluctant to challenge such rules, for fear of causing friction; the delivery of the service was therefore fraught with interpersonal issues:

P4 Angela: *I think if I started saying I want more turnout or - this that or the other I don't think I'd get it, I'd probably make myself unpopular*

P10 Nadia: *if you want to change the food or I wanted to swap from straw to shavings, then she reacts a bit childish.*

FG 12 Lily: *my yard manager goes round at the end of every day and gives everything on that side of the yard a treat. Carrots, apples, pony nuts, things like that and you can't tell her not to. It just doesn't... I did have to end up telling her to stop doing that, and I don't think she spoke to me for a good six weeks.*

So strong was this effect, that the behaviourist interviewed even suggested to her clients that she herself should discuss potential changes with the yard manager, so that her clients were not “victimised” or seen as causing trouble:

P32 Nicola (behaviourist): *I will offer to talk to the yard owner because I know that it can be very difficult for the individual to do...it's worth a try if it's going to be more successful than the horse owner talking to them. That doesn't necessarily mean that I'm going to be more successful, but I think I'm cushioning the horse owner from having problems at the yard. If they ask themselves, they may end up being victimised or getting a different treatment or falling out with the yard owner. I think there are a lot of problems in yards.*

These quotes show how the horse owner needs to negotiate any individual deviations from the standard package provided, and is therefore rendered powerless by the yard owner; not

only must they abide by strict rules, but they are also not allowed to even question those rules for fear of recrimination.

As such, yard rules were tolerated and navigated by horse owners, who often made allowances for the reasoning behind these rules and made comments alluding to their own compliance, for example their ways of “working around” the yard’s rules, or ways in which they had engineered one or more rule being bent because of their personal circumstances. However, the restrictions imposed by the yard frameworks were extremely important in terms of the decisions made about horse care.

#### 6.2.4 Disempowerment of owners and the obesogenic environment

The perceived authority of the yard manager and the social norms around “if you don’t like it, leave” policies, encouraged owners’ compliance and subordination with yard governing frameworks. Within this environment, owners’ descriptions of their equine care options showed that they were on a spectrum of empowerment to disempowerment with regard to whether they felt they could implement changes when necessary. This had particular implications for addressing obesity because of the lifestyle changes needed to manage this condition.

At times, yard owners and liveries worked together, creating a sense of empowerment and team work; this was the case for Sally (P1), whose horse resided at Anna’s track livery yard mentioned in case study 1. In this yard, decisions about field set-up were made in discussion with Anna and her liveries, as Sally describes:

*P1 Sally: Anna will say things like right I’m just thinking about that, what do you think? Nothing ever happens without a conversation. I’m just thinking about this, I’m just thinking about that, what do you think. Which is lovely.*

Although Sally’s horse care has to work within the framework provided by Anna in relation to her horse keeping ethos, within this framework changes are negotiated collaboratively.

In other instances, owners who were empowered might have the confidence to make changes which flout rules:

P31 Evie: *he gets hay. That's a bone of contention. Everybody else at the yard has to use haylage and I refuse.*

Less confident or empowered owners might seek care options which allowed them to fulfil their horse care aims within the constraints of the yard. For example, Nadia's horse was on full livery when Nadia realised he was overweight. Because the horse's turnout was designated by the yard and she could not exercise him effectively, Nadia had to find other options to help with his weight management but which would not interfere with the yards' care for him; for example she did not rug him in order to allow him to use his own calories to keep warm. This, however, entailed an agreement with the yard owner that yard staff would not have to groom him, because he'd be more dirty if un-rugged and would therefore represent extra work for staff:

P10 Nadia: *the yard owner because she decides and when she decides they have to do it. So, yes, again, if it's something that goes in their way, you know, like I said, you don't have to brush him and so, obviously, it's a less job for them. So they don't have to brush him and they don't have to rug him, so it's less job for them. So, yes, and mainly I'm quite happy, I can't really complain because they start soaking hay when I ask them to do it. Well, in fact, I didn't even ask because I felt a bit guilty because it's an extra job, isn't it, so I start soaking myself and they said, "Oh, do you want us to do it as well?".....so they do, yes, and they put on a muzzle without a problem ...*

For Nadia, muzzling was a quick and acceptable thing to ask of the staff, and the lack of rugs and subsequent lack of grooming were actually beneficial for the yard staff in minimising their workload. Her weight management regime was designed to fit exactly within the remit of what she was allowed to do on the yard, though she was still empowered enough to seek changes which would suit her situation.

Other owners were more hampered in their ability to create changes on yards, and professionals readily spoke about disempowered clients who could not find changes which worked within a yards' framework:

P40 Nutritionist Natalie: *grazing management may be difficult, especially if they're on livery yards. Again it's quite disappointing at times that you'll hear, "I'm not*

*allowed to do that,” or, “I can’t turn my horse out with a muzzle,” or, “I can’t strip some grazing.”*

With such clients, professionals sometimes described their own role as being the one to find strategies which could be implemented by a disempowered client in this environment.

When describing previous yards, participants commonly discussed increasing disempowerment over their horse care being the reason for leaving and seeking a yard on which would allow them to provide better care for the horse.

#### 6.2.5 Service provision on yards and the obesogenic environment

While the service package provided by yards varied dramatically, the overall effect of these restricted environments frequently led to obesogenic effects, when coupled with the disempowerment of leisure horse owners. For example, yards which preferred to keep horses stabled for a predominant amount of the day were often also the yards which had smaller or individual turnout areas. As a result, the horse’s voluntary movement is very restricted, and the horse’s daily energy output relies on the owner instigating exercise in the horse; yet owners often view this exercise as “work” and the stable as a “bedroom” where the purpose is sleep and rest. Owners suggest that the horse may have a “pyjama day”, thus constructing induced exercise as a potentially negative and optional activity for the horse. Further, it was common for owners to understand and prioritise the importance of constant access to forage for their stabled horses; a positive finding for equine health and wellbeing, but one which is of course problematic for the overweight horse. The construction of the stable as a place of encapsulated comfort meant that the horse owner was keen to provide accoutrements which furthered the construction of a warm, comfortable environment, such as rugs, further limiting the horse’s energy outputs, as noted by a forum user:

Forum A thread 6, Comment 11: *The horse ends up being the equivalent of a human couch potato. All that's needed is some sort of iPad or Playstation for the horse and their transferral to a sedentary lifestyle is complete!*



When weight was highlighted as an issue to owners on this type of yard, the strong management frameworks often appeared to prevent them from being able to conceptualise weight management systems which would work in their setting – despite the fact that managing weight of a stabled horse should, in fact, be quite straightforward, because the owner is fully in control of calorie intake. Owners in this situation found it hard to balance factors that they perceived as being important to the stabled horse’s welfare, such as comfort and constant forage, with the strategies which would be needed to manage weight.

Contrastingly, yards which favoured more turnout may create an environment which cultivates obesity because of an excess of grass. Turnout at grass was constructed by owners as “leisure time” for the horse, and grass a natural part of the horses diet. However, at the same time excess of grass was considered responsible for a range of problems, including obesity, colic, hoof abscesses, behaviour problems, and photosensitivity. Often, the specific problem was considered by owners and professionals alike, to arise from the types of grass being grazed, as being inappropriate for horses:

P41 Nutritionist Lorna: *If I had it within my power to destroy off the planet forever rye grass, I would. (Laughter) I apologise laughing. Because an awful lot of livery yards.....The horses are grazing on former dairy grass. They're high production rye grasses that need fertiliser every year to keep them going. I think they're a major contribution..... I think the farm diversification schemes, the farmers just don't realise how bad fertilised rye grass is for horses*

These grasses are considered as the equivalent of “*rocket fuel*” or “*mars bars*” [Field notes BEVA conference Sept 2018]. In this setting, owners were disempowered in a different way to stabled horse owner; these owners found it very difficult to find ways to restrict their horse’s grass intake. Available options include stabling the horse part-time (if a stable were available), reducing the size of the turnout area with electric fencing (if electric fencing was allowed), increase the amount of animals on the land and therefore decrease the amount of available grass (if allowed) making use of non-grass paddocks (although these were rarely available), or using a grazing muzzle. However, owners were disempowered because many of these options were often unavailable to them due to livery yard restricted, and the horse’s ability to gorge when allowed grass meant that stabling the horse or using a grazing muzzle

part-time were often unhelpful in managing weight. The lack of control over grazing was understood by professionals:

P29a Farrier Shaun: *They can't fence it off, can they? If you've got something that looks a bit bad, they can't fence it. All these things are out of people's control to a degree.*

As noted by Shaun, the field area is often outside of the owners' control, which limits management options.

One of the options left for owners is to increase energy output. However, owners perceive the horse as able to move around in this environment, and hence the data showed that “work” is viewed as more optional than for a stabled horse. Further, the horse is often protected from both hot and cold weather through rugs and shelters, meaning it does not have to use its own energy or move around to keep warm in winter or avoid flies in summer. As a result, the horse at grass may be largely sedentary, able to move around in the field but all the time surrounded by rich grass, and hence become obese.

#### 6.2.6 Livery yard dynamics and obesogenic effects

Livery yards constitute a bounded community of horse-owners, and as such each yard represents a microcosm of personal views and empowered/disempowered individuals, each framed within the organisational structure imposed by the livery yard owner. Yards were therefore considered to provide complex social pressures, both positively and negatively, arising from the other livery owners.

In some instances, owners considered that the yard environment provided inspiration and cooperation; two owners who seemed particularly empowered discussed their yards having started collaborative equine “Weight Watchers” club for their horses, jointly measuring their horses regularly and encouraging group hacks, and so on.

However, the pressures of other horse owners could also act negatively, with peer pressure and unwanted advice further adding to the disempowerment experienced by many owners on livery yards:

*P20 Sue: We were very ostracised. We weren't on the main yard, we were on an offshoot further up on the yard. We didn't really get to mingle with anybody else, not that it really bothered us. We were just seen to be the weirdos who did things differently.*

Within the microcosm of the yard environment personal conflicts were therefore common, and many participants discussed personal disagreements as part of the status-quo of being on a yard.

Yard peer groups may also set localised “norms” which might be quite different from yard to yard. For example, forum poster Georgia was challenged by an online community about how little she exercised her overweight, fully stable kept pony (three times per week);

*Forum A Thread 3 Georgia (OP): most of the horses at the yard where I'm at are only ridden once a week and just left for the rest of it.*

Georgia considered that her own pony was adequately exercised because others were exercised less, while the online community were responding to different social norms. Similarly, it was suggested that these localised norms also altered owners' ideas about what constituted an overweight horse; for example, farrier Keith (P29b) described that some of his clients found it difficult to identify overweight horses because all the horses on their yards were overweight, skewing their perception.

It was noted several times throughout the interviews and focus groups, that the peer pressure on yards tended to favour horses that were rugged, fed, or overweight, with an absence of these things seen as lack of care:

*P29a Farrier Shaun: No one wants to be seen as the one with the skinny horse or the underweight horse, the one who's not looking after it and then they start feeding more.*

The pressure on yards from other horse owners assisted in cultivating an obesogenic environment, with liveryes creating localised social norms within the curated frameworks provided by the yard owner. Often, these frameworks further acted to disempower owners, and prevent them from managing weight effectively. Therefore, the yard environment provided considerable pressures on horse owners, no matter what type of yard was chosen to

manage their horse; yard owners created numerous different types of rules which emasculated owners, rendering them powerless. However, yard managers themselves were also subject to numerous conflicting pressures. Within the yard environment, liveries sometimes functioned as supportive units, but personal conflicts and peer pressure were also rife, further limiting the way in which the horse owner could care for their horse. The combination of a restrictive and emasculating set of rules, a local environment rife with peer pressure, and a favouring of inappropriately rich dairy grasses create a potent obesogenic local environment for the horse.

### 6.3 Societal Change – the death of the workhorse

For all horse owners, the shifting equine societal norms and environment provided an important contextual backdrop to their behaviours and management decisions. Horse keeping has changed significantly in the past decades, and owners readily discussed the ways in which they kept abreast of, and reacted to, changing social norms.

The changes to equine society over the past few decades were discussed by many participants, with individuals showing a great awareness for the changing world in which they found themselves. As a result, they suggested that knowledge could quickly become outdated:

P1 Sally: *I've been surprised over the years when I got my horse eleven years ago how many things have changed.*

P19 Jill: *she's got her BHS Stage 3, but I think that was done at least 20 years ago, so things have changed a lot since then.*

Change was generally referred to in relation to changing horse care as a result of keeping horses as leisure animals. This change in construction of the horse has led owners to an increasing interest in their emotional connection to their animal, and the performance of horse care being a hobby in its own right, aside from any form of equine physical sport such as riding. As a result of this increasing interest, which I have dubbed the “leisurising” of horses, horse care has subsequently been scientised and commercialised, with myriad

options available for owners who want to learn about the intricacies of equine care, or to lavish money on their animals.

### 6.3.1 Leisurisation of horse care

Many participants alluded to ongoing changes in horse keeping practices being related to the changes in recent decades of the role of the horse itself, from a working animal to a companion or leisure animal. Participants considered that this cultural shift has led to a change in status for the horse, and associated changes in equine management. This was highlighted in extracts from two farriers:

P15 farrier Sam: *we've turned them from horses to pets, haven't we?..... I think they had to be tougher creatures and the food wasn't around. They were worked a lot more. I think that's the biggest thing from when they were there to now, being our pets.*

P34 farrier Alex: *Horse management has completely changed. The people who own horses these days and the type of horses they own, has completely changed. They used to have a job – now they're just pets.*

For these professional participants, the language used suggests that the role of the leisure horse is to be cosseted (“*they had to be tougher creatures*”) and is somewhat inconsequential (“*just pets*”) in comparison to the physical labour which horses were originally intended for.

However, this altered status is constructed rather differently by owners, with horses being *elevated* to the status of companion animal through their interactions with the owner, rather than reduced to it. As shown in the section around horse owner identities, the “work” of the pet is often emotional rather than physical; being the best friend, the family member, the escape. For owners, being a companion animal meant that the horse was freed from treatment as a tool which had to “work” for its living (for example being “used” or “worked” as a riding school pony or racehorse), and elevated to a status as an individual, with its own personality, likes and dislikes.

Alongside this changing status of the horse was a clear interest in building a relationship with the horse as an individual, as shown through owners' lengthy descriptions of their horse's idiosyncrasies and their own journey to managing them. Having a relationship with the horse and providing its care was, for many, a leisure activity in itself, without the need for riding or physical equine sports which are often associated with horse owning:

*P20 Sue: We don't ask a huge amount of ours at all, they don't have to earn their keep.... They don't have to have a job. For me, it's enough to just be in their presence, watch them, interact with them and for them to want to be with me.*

This changing norm about building a relationship with the individual and appreciation of the horse in its own right is reflected in other changes in equine society, from an increase in "equine therapies" to the increased interest in "Natural Horsemanship" which purports to facilitate a better relationship with the horse.

### 6.3.2 Scientisation of the Horse

Many owners described a strong interest in scientific advances about equine care, which may reflect wider societal attitudes which increasingly prioritise evidence-based science. Numerous participants spoke about their respect for science, and discussed their efforts to make evidence-based decisions for their horse's care:

*P18 Samantha: it's not scientific based, so I'd probably try and find something that was a bit more science based and from a reliable source that I know and trust.*

*P20 Sue: I do a lot of reading and I do a lot of research. Y'know I'm a strong believer in science, although science can be questioned. Science is continually evolving so - and we modify things accordingly really.*

When asked about where they go to find their horse care advice, many owners again emphasised that they considered evidence-based advice to be top of the hierarchy:

P3 Katie: *if it's come from a veterinary background or a nutritional – veterinary sort of background and you can sort of probably - and it's supported by other evidence and what have you -*

P24 Ruth: *buying really expensive supplements... There's no actual evidence that that particular chemical can be absorbed rather than just broken down.*

Scientific information and veterinary information appeared to be equated to “evidence based” for these owners, allowing them to trust the information and thus make informed decisions about the care of their horses. However, as noted in Ruth’s extract, veterinary and scientific information can be lacking for many of the decisions they are making, and hence information sifting was also used (as discussed in previous section).

Utilising scientific information allowed owners to present themselves as acting as knowledgeable, sensible agents against this shifting landscape of improving knowledge, and aimed to continue to learn and make the best decisions possible for their horses.

### 6.3.2 Commercialism of horse care

As horses have become leisure animals subject to better care, an industry has been created to provide for them; this was evident throughout the data, as owners discussed their own or others’ overconsumption:

Dani P12: *I've got seven saddles for one horse.*

Interviewer: *Seven?*

Dani P12: *Yes. I need to sell about six of them.*

FG1 Daisy: *There are lots of people who have collections of rugs for their horses, collections of them.*

Participants readily laughed at the amount of paraphernalia they owned, or about the amount of money spent on their horses. Commercialism around horses was therefore rife, and some owners tried to avoid it:

P18 Samantha: *we've never been big on spending lots and lots of money on things for horses. We tend to cope with what we've got and buy things if we need them*

However, areas where commercialism was almost unavoidable for owners included the rug and feed industries, which will be discussed separately below.

Most owners in the study provided rugs for their horse, and as such it was considered a standard social norm to rug ones' horse in winter, and to use a fly rug in summer. This has become so embedded in equestrian society that a horse which is not wearing a rug is commonly referred to as "unrugged" or "naked", suggesting that this is the exception rather than the norm. As mentioned in the quotes above, some owners had numerous different rugs for their horses. Rugs have been specially developed in the past years, from heavyweight materials to expensive lightweight, breathable ones:

P21a Lorraine: *I was saying to you, wasn't I, about the New Zealands? I was like, "All the new fabrics there are, like new techniques." .....Breathable raincoat. Not a New Zealand bloody canvas thing that used to get wet anyway.*

Rugs therefore provide a clear visual indicator of the care the owner is providing, particularly when new versions, new fabrics, and new fashions are consistently available. As such, the use of rugs was subject to extreme peer pressure; owners felt pressured by others if they had not applied rugs in the same way as others around them on the yard:

FG1 Issie: *I don't like rugging, but I was under a lot of pressure....you know, [other people saying] "It was really cold last night, and she didn't have a rug on." I've got a friend who's got a 27-year-old Arab and that's not got a rug on, but they didn't see it like that so then you're bowing to pressure and feel mean, don't you, and guilty?*

Forum B Thread 2 Melissa (OP): *The vet said to turn him out in a rainsheet (but said that this was to stop people telling me I'm cruel!)*

As the discussion thread comment shows, the extent of peer pressure around rugging was so common that the vet felt it necessary to use a lightweight rug on the horse in order to protect the owner from the effect of that pressure, and thus ensure the owners' compliance in allowing her horse to feel the cold in order to lose weight.



Rugging the horse at least some of the year was a social norm and potentially symbolic for the care the horse is receiving, since rugs provided a clear visual symbol for the horse's care, though there did seem to be an understanding among owners that it was not *always* necessary.

Rugs also covered the horses' body, meaning that health (or lack of health) could be easily hidden, whether on purpose or by accident; the field notes detailed an owner who placed a fly rug on her Shetland in order to hide its overweight status from the vet, and several owners in the study mentioned having not realised their horse had become overweight because its body had been covered by a rug throughout the winter.

However, some owners flouted the norm, choosing not to rug their horses at all, choosing to allow them to be "natural", keeping themselves warm:

P1 Sally: *this is Danny here....[indicates grazing horse].....With his wonderful wonderful coat, look – and please notice how he's naked.....not a single rug, none of these horses have been rugged yet*

For Sally, keeping her thoroughbred Danny "naked" was part of her awakening around giving him a more "natural" life, which also involved removing his shoes and giving him free choice about being indoors or out, rather than stabled. Similarly, Sally's yard manager, Anna, found the same with the horse she imported from Spain:

P2 Anna: *he's basically lived in a rug, in a stable, for four years. I brought him here, I took his rug off. He came in November. And I put him out there and he's not had a rug on since. He's never cold....Yeh, he's adapted amazingly.....I did a couple of experiments, brought him in, fed him, and then I went to the stable with his rug, I opened the door and he literally shot past me into the field. And I know that sounds crazy, but if he wanted the rug on he would have stopped and let me put the rug on, but he's never cold and he's adapted really well.*

For Anna, not rugging the horse is part of her "freeing" him from his previously cooped up lifestyle, and the gelding's behaviour affirms her choice.

However, commercialism is such that there is a product even for those individuals who would prefer not to rug their horse. The *Coolheat* rug, used by Sue, has strips which keep it

off the horse's back, meaning the horse can move its coat to keep itself warm, but still be protected from the wind and rain:

P21 Sue: *when it comes to rugs, again this is down to research, I don't believe in rugging unnecessarily, but we've invested in something called a Coolheat rug*

As such, rugging, not rugging, or rugging without really rugging was often utilised as a statement of the owners' attitude to horsecare, and very much subject to the commodification of the rug industry.

The commodification around the feed industry was even more extensive, with commercial feeds constructed as being an easy way to transform the horse, or maintain its transformation. This was achieved through the use of product names and information which suggested specific feeds for specific types of horses or problems, rather than for taste or nutritive content. For example, feeds were named *Happy Hoof; conditioning mix; veteran vitality; top line conditioning cubes, Endurance* etc, to name a few varied examples.

Several owners discussed feeding horses prior to the take-off of the feed industry, when feeding was based around feeding "straights" – one-ingredient at a time; oats, chaff, sugar-beet, barley – and therefore adjusting the content of a feed bucket, depending on the animal.

P13 Madeleine: *I'd had ten years out so everything had changed. When we first started we used to feed [brand] calf mix, cos you didn't get coarse mix, or you fed straights – umm, and so, when I came back into it, you went into a feed merchant and it was like holy mother of Jesus [laughs] all this stuff.*

*.....you fed every one of them different, and you had bins of feed that y'know, yknow Billybob needs, he's a bit skinny this month so we'll top him up with – y'know that's a fat pig she gets bran.*

P41 Nutritionist Lorna: *When I was a wee, young thing, we fed straights. We thought we were being generous to the hunters if we dissolved one or two tablespoons of molasses in a jug of hot water and used that to dampen down the feed*

While all owners in the study discussed their choices around feeding their horse, the interviews showed a great deal of variation, with owners choosing feeds for many reasons. Some ascribed feed choices to heuristics they'd learnt in the past, such as Leanne who fed

“something dry, something wet, and some kind of mix” (e.g. a chaff, a sugarbeet and a mix) to her cob type mare. Others chose feeds based on what their friends with similar horses fed, some by brand trust, and others chose based on cost:

P14 Dani: *I Googled everything looking for stuff that was laminitis approved, looking for what had the lowest sugar, what wasn't heating. I was just like, it's all going to be essentially the same, isn't it? I went for one of the hoof-based ones and went from there. Yes. It's just basically whatever is cheapest, but still fits what I'm after, is the general. Just random.*

The result of Dani's researching was the decision that there was no clear informed opinion to be reached, but that all the feeds would be “essentially the same”, meaning she could choose based on cost and “at random”.

The result of the extensive industry of pre-mixed feeds is the construction that decisions around feed are so complex, that many owners are completely emasculated by them. The feed industry furthers this emasculation by promoting the idea that owners could be inappropriately feeding, and potentially harming their horse. As a result, the role of the commercial nutritionist has become necessitated so that owners can check they are feeding appropriately, and many of the owners interviewed discussed having consulted many commercial nutritionists before making decisions about feed:

P17 Sandra: *I ring everybody. I must be like a pain in the backside for these companies but if I think he maybe needs something different, I'll ring up NAF or Topspec or whoever.... Most of them they've got a qualified nutritionist on the end of the phone these days so you've really... and they're not - most of them would say we can't help you but so and so can. So I do think it's kind of a... It's a lot more of an open thing now when you ring them, you're not just going to get the Topspec recommendations. Some of them will say, "Oh you want to feed the Dengie with that or a Spillers of this." So they do, they are a bit more open to the whole diet I think as opposed to just flogging them your feed which I think years ago it was just about how much of our feed can you sell.*

P18 Samantha: *I spoke to quite a few people. I spoke to Spillers and Dodson & Horrell and generally, my mum and I like to go to Badminton Horse Trials, or*

*Burghley or whatever, and they always have stalls, there are hundreds of feed stalls and we generally do go and just gather information from a lot of those people. So we have spoken to quite a few feed suppliers about what they would recommend*

Seeking the advice of multiple nutritionists was commonplace, and feed companies encouraged this, providing free advice “carelines” and ensuring trust by being careful, as in the extracts above, to not appear commercially driven by recommending only their own brands of feed.

However, multiple companies competing for customer funds meant that there were also multiple messages about feeding, which could confuse owners, and this was strongly felt by independent nutritionist Lottie:

Interviewer: *so you said you feel that more people have got this integral anxiety now about just doing the right thing for no apparent reason?*

Nutritionist P28 Lottie: *Yes, I do actually.*

Interviewer: *Do you have any sense of- you mentioned social media, but do you have any sense of what's changed in the horse world to cause that?*

Nutritionist P28 Lottie: *It's a good question. I guess, again, this isn't very scientific, but my instinct would be, one, the number of products and the power of marketing. I mean I worked with commercial companies, so I know that marketing, that way is done to get people to feel uncomfortable so that they'll buy their product instead. I think the fact that there's more- I think I'd be right in saying there's more choice of products and there's more marketing done than before, feed supplements. That's probably one part, but the other one is I definitely think this social media explosion.*

Owner confusion about how to choose a feed was so evident that Lottie suggested people frequently paid for her advice without any sort of nutritional problem, but just to check that they were feeding appropriately:

Nutritionist P28 Lottie: *what prompts people and what they will always write in emails, generally 98% of the time, is that they're confused, they've heard this,*

*they've heard that. They don't feel like they're doing the best for the horse and they want some good quality independent advice.*

Commercial equine companies and the equestrian media have therefore constructed the concept that there are correct and incorrect feeds, which thereby created a concern among horse owners about whether they have been feeding the “right” things. Possibly as a result, some owners often tried to create a perfectly balanced diet for their horse, aiming to exactly balance the nutrient intake, as suggested by P1 and 19:

P1 Sally: *when I was at the other yard because of course the iron content was urr four times – well, over four times what you'd want, so yes I then had to compensate to get the 10:4:4 ratio for copper and zinc.*

P19 Jill: *The thing is with him, because he's having Ventilate, there's quite a lot of selenium in the Ventilate. On the side of the Ventilate tub, they do tell you to be very, very careful about how much additional selenium the horse has in its diet. A lot of these balancers have got quite a bit of selenium in them, but Light + Lean has got the least.*

Some owners chose to have their forage analysed so as to choose feeds and supplements appropriately; Sally's use of “*the 10:4:4 ratio*” suggests that she considers this tacit knowledge; balancing the diet around iron, copper and zinc was standard practice for her, as with selenium for Jill.

However, even when they went to considerable effort to do so, they found it extremely difficult to untangle the information provided by feed companies, as described by Sue:

P20 Sue (Toby and Merlin): *this is going to sound really as if I haven't got a life. I came across something that said something about how vitamins and minerals can be really, really imbalanced in a horse, so in the end I sat down with a spreadsheet and worked out exactly how much in terms of quantity and weight they were being fed, what the sugar content was and the ratio for the vitamins and min.....It was just impossible, absolutely impossible to make it - to balance it so it was right. Because you're either always going to be deficient in something or top heavy in something. Iron especially because we're in a very iron-rich part of the country. There's a lot of iron in the grass, a lot of iron in the hay and a lot of iron in the for – y'know in the*

*alfalfa as well. No matter what we did we could just never balance it. That's how pedantic I got about it. [laughs]*

Sue instead relied on a commercial feed now, but did still aim to analyse her forage to determine the exact nutrients within it. Similarly, Jill attempted to work out her horses' diet:

*P19 Jill: even though I'm reasonably clued up about calculating the concentrations of all these things, it is quite difficult to compare things, because they express them in different units. I was sitting there thinking, "Oh, God, it's quite tricky to work this out."*

These extracts demonstrate the strength of the construct of the “right” feed which has led these owners to go to such lengths to try and balance a diet in a way which would be very unusual for a human diet, and secondly the complexity of information provided by the feed companies, which challenges and confuses owners, emasculating them in their quest to feed appropriately, and enduring that they have to rely on commercial balancers and other feeds.

As a result of the need of the perfectly “balanced diet”, in the past decade the feed companies have released feed balancers; condensed commercial mixes which aim to provide the complete nutritive requirements in vitamins, minerals and protein, each day. Many owners chose to feed balancers to their horses to ensure that they were feeding appropriately, nutritionally speaking:

*P16 Carly: I'm not really sure how much he needs feeding at all. He does need to get a balanced diet, so I wanted to give him some form of broad vitamin and mineral supplement. I looked into various things, and the Balancer seemed to be the best way to do that. If you start trying to mix things, you don't know whether you're getting the quantities right.*

But other owners were unsure by the necessity of feeding balancers:

*FG1 Lily: I do worry about that because I don't give her anything, so she doesn't have a balancer. You read all the magazines and it's all, "You must have a balancer," and I did try that, and they said, "It's very low calorie," and I think, "But it's still got energy in it, even if it's just a small amount."*

For owners suspicious of commercial mixes, other products were available which catered to these owners' concerns, moralising feeding by encouraging owners to feed what was *natural, simple and pure*:

P20 Sue: *I had a look at the Agrobs and I liked the fact that it's natural and there's no nasties in it. The chopped chaff is simple chaff without having caustic soda put all over it.....*

P5 yard owner Helen: on changing her horses' diets from commercial mixes to alfalfa-based: *it's like going from McDonald's to health eating, and the horses are like oooh no [laughs]. But after they've been on it for a little while they go ooh yeh I quite like that now.*

P21 Jill: *Half a scoop of Agrobs, which is just a chaff, which is completely natural, no sugar, not covered in caustic soda and what have you.*

Moralised constructs around horse feed are present on the packaging of feeds marketed at those horses owners, as noted in the feed descriptions detailed from the field notes:

Company 1..... *made up of a unique mixture of over 60 different grasses and herbs of the Bavarian foothills of the Alps. The fields are under constant supervision and are harvested at the right time of maturation. This ensures low protein and a high fiber content for optimum horse nutrition.*

Company 2: *We use NO waste by-products, no cheap alternative ingredients, no fillers, no binders, no pelleting agents, no preservatives or synthetic micronutrients... We use ingredients that have undergone minimal processing to bring you active functional foods, with fewer toxic by-products. Wherever possible organic, or as close to organic, ingredients are used.*

Company 3: *Our range of equine feeds has been developed to meet the special needs of the horse's unique digestive system. You will find all of the products are FREE from: cereals and their by-products, pulses, molasses, preservatives and additives.*

The language used in the three examples here highlight the aspects of purity constructed in their feed; Bavarian herbs and grasses, organic, unprocessed ingredients, and therefore

suggests that ingredients such as by products, preservatives and additives are impure and should be avoided.

#### 6.4 Chapter Summary

This chapter has explored the external influences on the horse owner, shown in the concentric circles on the conceptual model. Horses and their owners are surrounded by a myriad of influences which may impact the owners' perceptions of horse care. Each influencer may act in a different way; for example yard managers and owners may restrict the specific acts of care that an individual is able to undertake, while advisors such as equine professionals may suggest what they consider to be "best practices" and offer advice. Against these influences, the horse owners' construction of their role is to determine the best course of action for their horse as an individual, and as such they showed numerous examples of times when they sifted and combined information sources in order to make decisions which they considered to be in the best interest of their horse.



## Results Chapter 7: Life in the obesogenic environment

This chapter considers the experiences of the horse owner within the obesogenic equestrian environment. In this study, many owners retrospectively described a “journey of awareness” from an initial lack of recognition through to an understanding of their horse’s weight, and their attempts at addressing this problem. This chapter will follow this journey in detail, considering how owners conceptualise body condition in their horses, how obesity is conceptualised differently from other health concerns in horses and the triggers which might lead to its recognition, as well as the ways in which owners might try to moderate the environment in order to attempt to alter the horse’s shape.

### 7.1 Invisible fat

Throughout the data, equine fat was retrospectively considered to have been “invisible” to owners, with many participants describing their own inability to identify whether their horse was overweight. Owners and professionals discussed their acceptance of overweight horses as the norm. Fat on horses was indiscernible to owners; hidden in plain sight. Owners appeared unable to imagine that their horses might be a different shape underneath their fat, as shown by Ellie, whose horse lost 100kg following an episode of acute laminitis:

P25 Ellie: *I thought that was just her build, thought she was just a big chunky cob.... A new slim horse emerged. When the vet said “she would have withers [if she lost weight]” I thought, “really? Surely that’s just how she is.... It was very, very obvious when it had gone and we found her withers, which was a nice surprise”*  
(middleweight cob)

A similar experience occurred for a forum user:

Forum A Thread 9 Post, Comment 24: *I bought one for my daughter which had a huge crest. Everyone used to comment on it, including the vet but I naively, thought*

*that was how cobs were. We owned him for a few years but, not surprisingly, he got laminitus [sic]*

Owners found it particularly difficult to assess the weight of heavier-built breeds such as cobs, native ponies and draught horses. As such, overweight horses appeared to be considered the norm by many owners. Professionals readily commented on this issue, for example describing owners as being “blind” to their horse’s fat:

P35 vet Susanna: *Particularly with all the pictures they see in the Internet and in the media, they genuinely don’t realise that their horse is overweight.*

Owners accounted for their lack of awareness of weight by suggesting that they had a lack of knowledge, as in the examples above, or by suggesting that their familiarity with the horse due to their involvement in its daily care meaning that they could not make an objective assessment:

P18 Samantha: *I suppose when you see them every day, you don’t notice it creeping on*

P39 Vet Bryony: *I think some people have had the horse for so long that they just think of it as that shape, and they don’t even realise that it is overweight.*

P29b Farrier Keith: *the owners see them every day so it's sometimes harder, isn't it, to pick up on that.*

P29a Farrier Sean: *You don't realise. I fall into this trap myself with my horse.*

## 7.2 Fat as a symbol of health and a sign of a disease

While owners considered themselves unaware of fat, the interviews showed that awareness was actually a complex issue, with fat acknowledged on some levels, but simultaneously overlooked, or even considered a sign of good health.

Equine fat in some circumstances was perceived as desirable; professionals and owners alike commented on how some people preferred their horse to appear plump, considering this a sign of good health. Field notes of some online discussion groups included comments such as “*I prefer a horse to be overweight than underweight*” [02/05/2017] and it was also commonly apparent in such discussions, as well as in numerous examples across the data collected, that horses which were thin or losing weight were conceptualised as unhealthy or ill. This is reflected in equine culture and language, for example the descriptors of fat as “looking well”, “show condition”, and “butter spots” (these refer to the “dappled” appearance some horses get on their coats, particularly in summer, which are considered a marker of good health). Interestingly, there were comparatively few words to describe a horse in a healthy body condition, with them usually described simply as “fit” or “trim”. As with cultures where food resources are scarce and fat may be a symbol of wealth(185), this construction in equine culture could potentially be a leftover construct from a time when a fat horse would have been a sign of wealth. Recognition of obesity therefore necessitates an owner understanding that a transition has occurred, meaning that the weight of the horse has changed from what they might consider a symbol of health to a sign of a disease.

Furthermore, areas of common fat deposits in horses are also those where muscles built in the same area would be very desirable in many/some circumstances, for example neck crests, “apple bottoms”, and fat over the topline, particularly the wither areas. Although these are included in condition scoring systems as clear indicators of fatty deposits, numerous examples arose in the interviews of individual’s confusion over whether that was “just the horse’s shape”, whether it was muscle, or fat – but whatever the consistency, the overall appearance was favourable. Neck crests and wither fat in particular are considered desirable, possibly because they mimic the appearance of muscle in these places. For example, the field notes recorded an example of a Facebook discussion in which the author had posted a picture of an overweight cob stallion with an extremely exaggerated crest. Of over 100 posts remarking on the horse’s beautiful shape, only two questioned whether the horse was overweight.

Therefore, many owners expressed confusion about whether their horse's shape was, in fact, healthy. For example, Lorraine's narrative about her gypsy cob, Strawberry, constantly referred to her own confusion about whether Strawberry was overweight:

P21a Lorraine: *"Obviously she's a cob, and they're supposed to have a bit of an apple bum, but....."*

P21b Bill *"....not an orchard!"*

P21a Lorraine: *"I go 'oh she's got a bit of a crest', then I'm like 'I know that the bigger cobs are supposed to have that crest shape, but is that fat or is that just the shape?' so I have these overthinking internal dialogues with myself"*

Lorraine's case provides an interesting example of the internal confusion an owner might face, and the use of humour, rejection of others' opinions, and contradicting thoughts. A somewhat similar example is shown through the example of Pat, again discussing confusion over the weight of a gypsy cob:

P23 Pat: *"She's not ridiculously obese for her sort of cob but she's not slim at the moment. Here is definitely fat [indicates shoulder fat pad] .... If you're using the one to five [condition score scale] I would reckon they're probably a four, on their way to a five"*

Pat's confusion emphasises how the very fact of being a cob is confusing when condition scoring her mare; on the one hand she considers her horse is 'not too fat for a cob', suggesting that a cob *should* be somewhat fat, yet on the other hand her own condition scoring bases the cob at overweight, nearing obese. Some owners, therefore, understood that some fat was present, but considered that it was integral to the type of animal they owned.

Often, humour and euphemistic language were employed by owners and professionals alike, in order to talk about fat. Overweight horses were described as "chunky", "beefy", "blubber", "podgy", "waddling", "porky", "like a brachiosaurus", "like a thelwell", "like a limousine bull", "like they were in foal", "like sitting on a table". Words which were not meant to be humorous, but nevertheless provided well-used euphemisms around fat included

phrases such as “looking well”, “wintering well”, “in show condition”, and having “been on the grass”. Furthermore, numerous “memes” were collected over the data collection period depicting overweight horses in humorous ways. It is notable that no examples of such language were evident for thin, underweight, or diseased horses, thus highlighting the divergence of the construction of obesity from other health problems.

Despite these complex constructions of fat as positive, funny or ambiguous, owners did understand that too much fat was associated with the potential for other diseases. For example, owners spoke about the link between laminitis and obesity as tacit knowledge, considering obesity as the main cause of laminitis:

P16 Carly: *I was so worried about him getting laminitis when I first realised how fat he was*

However, despite this link and their constructs of laminitis as a serious disease, many owners were not vigilant about obesity and excess weight in their own horse until a comorbidity occurred:

Farrier 5 Keith: *they say, "It had an attack [of laminitis]" like a ninja came in and then it went. It's not an attack. It's something that's built up. Really, you could have seen it coming three months ago because your horse has been getting fatter and fatter and fatter. The amount of people that are like, "It just had an attack. It came out of nowhere. One minute it was alright."*

Therefore, the constructions of fat in the horse meant that obesity was not necessarily identified by owners in their horses, although in the abstract they understood that it could pose a health risk.

### 7.3 Realisation of fat

Understanding that a horse is too fat means that the owner needs to be aware of the point at which fat becomes potentially damaging. Awareness demands that owners are able to distinguish fatty deposits from other soft tissues such as muscle. This was problematic for owners, with awareness of excess fat usually occurring only when the horse had already begun to suffer with a fat-related problem.

Most commonly, participants described this realisation about the horse being overweight dawning when the horse became ill, for example with an episode of laminitis, when an item of horse tack such as a girth no longer fitted, when a rug which had been on for a while in the dark of winter was removed, or when a respected professional drew the owner's attention to their horse's weight:

Forum A thread 5 OP: *Today for the first time in ages I managed to get to my horse and give him a good brush in the daylight (just!) .....Oh god, he's absolutely massive!*

Interviewer: *When did you first monitoring her weight?*

Respondent 24 Ruth: *When she got laminitis*

P18 Samantha: *it was really Tom telling me that, "Look, that is a fat pad right there," and me going, "Oh, gosh, yes, it is," for me to actually then look back and think, "Oh, God, they have actually been creeping on."*

Such an episode therefore represented a disruption to normality, which caused the owner to re-evaluate the condition of their horse and view its body in a different way; instead of being at optimum health, the horse had a problem which the owner might need to address.

Endocrine associated laminitis prompted weight reassessment, and recovery from a laminitic

episode frequently required weight loss.

However, it was relatively uncommon for owners to come to the conclusion that their horse was overweight on their own; more commonly, weight as an issue was suggested to them by another person, usually a professional. Professionals described that they felt strongly that it was their duty to communicate weight problems to owners in order to encourage the owner to make the necessary management changes, but felt that messages about weight were often ignored by owners, because of owners' lack of awareness, as previously described. Professionals, therefore, described that they had to use their own judgement about how to adjust their communication differently for each owner and horse in order to provide these awakenings:

Vet 38 Sarah: *People keep horses in different situations and different ways for different purposes. What strikes a chord with one person isn't going to strike a chord with another one. You're going to have to find a way that's going to make the lightbulb come on.*

Farrier 15 Sam: *I say, "You've got to look like Usain Bolt next time I come. It looks like me at the minute." As long as you have a laugh. It's the elephant in the room, isn't it? No, that's only my sensitive customers. Most of them I just say, "Look. You're going to have to be realistic."*

In order to get across their message about the horses' weight, professionals described using a range of strategies, applying them to the client depending on their view of how they might best communicate with that person. As a result of owners' fear about laminitis, professionals sometimes used the risk of laminitis as a scare tactic in order to try to encourage owners to make management changes to overweight horses. They considered that the acute and potentially life-threatening nature of laminitic episodes would ensure that owners made management changes promptly, in comparison with more chronic obesity-related diseases such as arthritis:

P29a Farrier Shaun: *It's frighteningly fat. Well I've actually told them. I said to them, "If he gets laminitis," and I've said this to all the ones who have been- because the*

*bigger horses, if they get laminitis, they've obviously got less chance. I said, "If this does get laminitis, if I don't tell you this I'm not doing my job," that's how I tell them, "The chances of him surviving it is pretty slim."*

Some professionals described using a comparison of the horse's fat with their own weight, as a way of making fat an accessible topic and effectively extinguishing the possibility of causing offense: if the professional is able to point to their own fat, owners' potential concerns about blame for causing a disease are already allayed. For this reason, Vet P35 calls it her "trump card":

*P35 Vet Susanna: I have the trump card of also being overweight myself, so I tend to put a bit of jokey spin on it.... I usually say "like myself, he could do with not putting any more weight on"*

Other professionals used strategies such as empathising with the owner:

*P34 Farrier Alex: ....I sent her this big long message - I might have it on my phone, I'm not too sure - basically saying, "I'm not being mean, I'm not picking on him." You have to put a positive slant on it*

*P38 Vet Sarah: I usually try to soften the observation a bit by linking it into, "Clearly, much effort is devoted to this horse and perhaps a little too much of it is going into the feeding," sort of approach to things rather than just flying straight in and being quite aggressive with it. A lot of my clients I'm seeing as repeat business, so I've usually got a previous visit to refer back. I can ask, have they been less able to work the horse since I last saw it or has anything changed in the management since I last saw it. I'd just note, perhaps, "I just thought he was looking a bit heavier than last time round." ....try and minimise a feeling of criticising them to try and make it an observation rather than a criticism of how things are working for them.*

Once the subject of weight had been brought up, many professionals discussed extending the discussion to point to specific areas of fat on the horse, for example the crest, wither area, and hind quarters, and sometimes encouraging owners to feel these areas themselves in front of the professionals. Correspondingly, when owners described becoming aware of their horses' weight resulting from a professional's intervention, they often described the



professional having highlighted the areas of fat which were present on the horse. It is possible that specific information about basic condition scoring or areas of in which fat has been deposited may provide a positive and well-received communication strategy:

P25 Ellie: *She measured him in lots of different places and checked him for fat glutes. She was very thorough....She showed the fat parts, either side of his tail, and a little bit of fat just behind his shoulder. Bit of a breast, he's got a bit more of a breast now.*' (Dales pony)

The thoroughness of Ellie's nutritionist in this instance meant that the owner could comment on her pony's current weight in comparison with its weight at the time of the nutritionist condition scoring, thus leaving her with a usable reference. This nutritionist had also used other means of engaging the owner in the discussion about weight, such as asking the owner to estimate the weight of the horse before beginning the session.

#### 7.4 Fat as an adversary

Once owners acknowledged their horse's weight as excessive, fat was often conceptualised quite differently from the previous light-hearted humour. In line with human discourses about fat, efforts to overcome fat were described as a "war", "minefield", "struggle" or "battle".

P12 Dani: *Obviously, I just have to watch his weight being native. It's a constant battle with keeping him not too fat.*

As with humans, the language which suggests an ongoing "battle" is indicative of the obesogenic environment around the individual. Owners repeatedly described that keeping a horse at an appropriate weight, particularly if the horse is a native pony or cob, was intensely problematic, and required constant intervention on the part of the owner. Unlike human weight, equine fat had an additional concern in relation to seasonality, and fat was considered to be an annual, seasonal problem, with many comments suggesting that owners "dread spring".

Such discussions often related to the difficulty of owning a “good doer”, with such horses problematized in relation to obesity:

P24 Ruth: *having read up on metabolic syndrome, if anybody asked me what it is, I'd say, "It's Native Pony Syndrome." [laughs] “good doer syndrome”!*

Forum A Thread 10 Comment 21: *puts weight on just by looking at grass.....able to maintain his weight on fresh air*

P21a Lorraine: *with the cobs the fact that they're buggers, aren't they? Prone to be fat. Prone to laminitis. Don't want them getting anything.*

Many professionals commented on how owners appeared to have run out of ideas with how to manage the battle with their horses' weight, and hence sometimes simply gave up and allowed the horse to remain fat. Owners spoke of their feelings of futility:

P21a Lorraine: *you hit a point and you're like, “I don't know what else I can do here.”*

P31 Evie: *it was between the devil and the deep*

Such comments go some way to highlighting how the insidious, creeping, annually repetitious nature of equine fat causes the owner to feel disempowered in relation to their ability to manage this aspect of their horse's health.

## 7.5 Fighting fat

When owners made the choice to address a horse's weight problem, they did not find it easy. Veterinary and farriery advice described by owners often appeared to focus on three main areas; increasing exercise, limiting grazing, and soaking hay (in order to reduce its calorie burden). These weight management practices involved activities that were deemed in another context detrimental to the horse:

Forum A Thread 8 Comment 18: *he has to hunt for grass*

Forum A Thread 8 Comment 13:.....*they'll be scavanging twigs*

Forum A Thread 9 Comment 8: *She had to be given a very hard winter*

Forum C Thread 4 Comment 6: *If he isn't sweating, he isn't working - this is my motto.*

“Rebalancing the scales” involved doing less of the things that owners enjoyed and doing more of the things that worried many owners – providing horses with less food, and giving them more exercise. While the horse’s health might be improved, the horse’s *welfare* might be considered to be compromised. Weight management measures that might cause horses to feel frustrated had the potential to generate unwanted behaviours such as biting people, jumping out of fields, misbehaving when ridden, etc. Furthermore, owners talked about their fear that restricted grazing might cause sand colic; that increased exercise might be painful for those with arthritis; and above all, owners worried that their horses required a constant intake of forage in order to avoid gastric ulcers:

Vet 39 Bryony: *people are worried about stomach ulcers. I think people are more worried about stomach ulcers, and the fact that from a welfare- that they should be eating something most of the time, than they are about... Yes, the stereotypes that come with not having enough food. I think people are, actually, much more worried about that than laminitis and things like that.*

In one notable case, behaviourist Nicola (P32) described the behaviour of a horse which deteriorated to the extent that he became dangerous to handle in the stable, as a result of his food restriction and the frustration of using a “trickle net” (a haynet with holes which are very small, meaning that the horses’ intake is restricted and it must eat slowly over a long period of time). For this horse, alternative weight management strategies needed to be implemented to prevent him from harming someone.

As well as managing the horse’s welfare and health, owners also described how they needed to find solutions which worked within the environment where their horse was kept; for example, solutions which fitted within the allowances of their livery yard. Livery yard rules, or the more general need to manage the available land as well as managing the horse, had

profound effects on the strategies that horse owners considered when managing weight (see chapter 6).

Professionals, in this study suggested that it was important to provide tailored advice and assistance to owners in order to help them consider how to manage the weight of their particular horse:

P28 Nutritionist Lottie: *I find the best outcome is when it's completely tailored to that situation in terms of the owner's personality and what they like me to do, the practical environment of where they keep the horse.*

P35 Vet Susanna: *make it personalised for them. It's very easy for a vet to stand there and say, "Right you need to be soaking the hay. Putting a grass muzzle on, doing all this and exercising for half an hour five times a week." The owner might smile and nod at you, and then go away and think, "Like hell." Then you're just wasting your breath and you're not accomplishing anything. I try and work with the owner and say, "Right, how much can you do? Tell me, how much time have you got?"*

Interviewer: *So is it quite a flexible approach you have to take, then, when you're going on a case by case basis?*

P44 Nutritionist Lucy: *Absolutely, yes. It varies so much. It really is very, very specific to whatever case and the facilities the owner would have available.*

In this study, owners reported extremely creative and resourceful strategies to manage a horse's weight; for example, turning the horse out with youngsters who might encourage it to play, or working with other horse owners via online communities of practice to find solutions to manage weight while having minimal negative impact on welfare:

P16 Carly: *there's a EMS group that's really, really useful with people having ideas, if your horse is only allowed six kilos of hay a day, how to make sure that it lasts as long as possible..... It does seem quite a nice Facebook group. I think because everyone is struggling with their horse's weight and the fact their horse might get*

*laminitis. If you're in that situation, no one is keeping their horse on a diet just for the fun of it.*

Across the data collected, around 40 strategies were identified for weight management. Although owners and professionals did not distinguish between the types of change made, strategies could be split into four categories:

- **Reducing grazing** (for example, strip grazing, stabling the horse, use of a grazing muzzle)
- **Increasing exercise** (for example, riding, lunging, use of a horse walker)
- **Reducing supplementary feed** (for example altering bucket feed, soaking hay)
- **Using the horse's metabolism** (for example rugging the horse less in order to cause it to use its calories to keep warm)

Some changes, such as the use of a track system (a system in which the horse has access to a circular or shapes track rather than a traditional paddock; desirable items such as shelter, hay and water are placed at different areas on the track in order to maximise movement) might cover two categories at once, for example a track system might increase exercise by encouraging the horse to move around the perimeter of the track, as well as reducing grazing because grass is more limited on the track.

A full list of the strategies collected is be available in appendix K.

It was clear across the data that there was no single solution to weight management which would work for all. Instead, owners were using multiple criteria in choosing weight loss strategies; to fit in with their lifestyle, their yard environment, their horse-keeping ethos, and their horse's health and personality. For example, strip grazing was a successful management strategy for many, because it allowed the horse to be turned out and was not labour-intensive for the owner. However, for others strip grazing was problematic; it might be disallowed on the yard, might mean the horse had to be kept alone and away from its companions, or the horse might dislike being strip grazed and simply jump out of its enclosure.

Therefore, making decisions about weight was a complex process, which several described as being a “compromise” rather than there being an ideal solution:

FG 1 Behaviourist Nicola: *I think different horses respond to different things, some cope with some things and some don't. It's very difficult, very difficult to manage it. It almost seems, or I think it seems like you just can't get everything right for each horse. It always seems to be a compromise.*

P24 Ruth: *We've got some that are better doers than others. [pause] So trying to manage it is a bit like the fox chasing the corn. But we seem to be doing all right at the moment.*

Therefore, rather than focussing on the three “standard” weight management processes suggested by many professionals of soaking hay, reducing grazing and increasing exercise, owners found it was important to find tailored specific means of managing weight which took into account the difficulties individual owners might find in their situation.

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## 7.6 Chapter Summary

This chapter has explored the way in which horse owners' constructions of equine weight play out in relation to the obesogenic environment previously described. In order to alter excess weight, owners must not only recognise that their horse is overweight but also understand that this could lead to negative impacts to health, and subsequently find practical means of altering their management. Each of these three steps is wrought with complications, as a result of the environment surrounding UK leisure horses and our changing relationships with them.

Investigation of the way in which owners talk about weight management showed that this is considered to negatively impact the immediate welfare of the horse, for example by leaving the horse hungry, bored or isolated. Managing weight was often problematic for owners, who had to weigh up the immediate implications of weight management strategies on their horses and their own resources (such as time), with the longer term, less tangible potential benefits of such strategies.

However, across the data owners showed creativity in finding strategies to manage weight which fitted within their own resource availability, and within their construction of appropriate welfare for the horse; for example they might prefer a track system to strip grazing, suggesting that the horse has better enrichment in a track system and additional movement. Weight management was therefore not a case of following a specific regime or instruction from professionals, but a personal and tailored approach which suited the horse, the owner and the physical environment surrounding them.

## Chapter 8: Discussion and conclusion

### Discussion and conclusion

This project has identified the complex interactions between the multiple influences which contribute to obesity in the UK leisure horse population. I have drawn upon data from different sources and of different types to provide an understanding of how horse owners look after their horses. In doing so I have explored the owner's own priorities and experiences, the care of the horse, and the external pressures from peers, support networks, professionals, the wider social and physical environment, and yard owners. I have created a novel conceptual framework which illustrates how these aspects link together. The ways in which these factors combine has been shown to create a previously unrecognised obesogenic environment for UK equines, explaining the UK's "equine obesity epidemic".

Existing efforts to reduce obesity in horses have been aimed at owners (10,11,186), following neoliberal discourses in human health. These discourses are common in the biomedical model of public health(187) as described in the literature review, and they place health in the hands of the individual, who is considered an agent in their health choices; someone who has the ability to make and act upon responsible decisions to optimise their health. In this context, horse owners are seen as making poor choices for their animals, and need educating about the potential harm to their animal's health. However, such discourses do not take into account social, structural and environmental contributors to health, such as the social influences, built environment, and complex power relations which have been shown in this study to be of vital importance to horse owner's decisions and behaviours. Exploring the complexity and interrelationships of these influences is important, in order to be able to find ways of altering the levels of obesity in the UK's leisure horses.

The conceptual model presented in this thesis illustrates the interplay between the owner, their horse, and the influences that can act on both. The model places the owner at the centre of a network of intertwined influences. These range from the yard owner who can set rules which shape the way in which the owner and any visiting professionals are required to manage the horse, to the feed companies which bombard individuals with a huge range of products which claim to enhance the horse's health and performance through the provision



of ‘essential’ ingredients or modes of care. To tackle equine obesity in any real sense, it is vital to understand and work with these multiple levels of influence.

The data also demonstrates that horse owners respond very differently to these influences even when they are in apparently similar situations: on the same yard, one owner might recognise their horse’s obesity and find creative ways to manage it, while others might not. The model does not explain individual differences between horse owners but suggests that these variances result from the different ways in which individuals are affected by the influences identified in the model. Interesting parallels can be drawn between the findings of this work and Bourdieu’s Theory of Practice(188–190) which proposes that people’s actions (practice) are a result of three elements; habitus, field and capital, as summarised by Maton:

*‘practice results from relations between one’s disposition (habitus) and one’s position in a field (capital), within the current state of play of that social arena (field)’(188) P.50*

“Habitus” relates to the body of knowledge which we all carry round as a result of our past experiences, and this habitus helps to shape our reactions to our environment, and the things we choose to do (our “practice”)(190). Because everyone’s life experience is unique, individuals do not have identical habitus, though their habitus may be more similar if they come from similar backgrounds, locations and economic backgrounds(191).

In relation to the model presented in this thesis, ‘habitus’ reflects the history, knowledge and attitudes located within the horse owner; the types of care that the owner performs on the horse; the relationship that they wish to have with the horse, and the way in which owners choose to govern it. For example, some owners prioritised care which humanised the horse, cocooning it in safety and comfort, where others described practices based on their individual values and knowledge which instead animalised their horse, prioritising their perception of its needs “as an animal” such as turnout and access to a social group. Owners’ preferences over how to care for their horses can be considered closely linked to their experiences, education and attitudes.

Individuals in any setting rarely practice alone, and in common with my model Bourdieu identifies the “fields”; social groups and environments within which individuals exist. In this study these fields would include riding clubs, discussion forum, yard, or friendship groups

within which owners interact to consolidate, maintain or adopt social norms. Fields are navigated by gaining and losing “capital” such as signifiers of knowledge, rank, and class, which are gained through our experiences and are built over time(190,191). In this study capital could include economic capital (such as a horse itself, or specific merchandise which signifies economic value), whereas other types of capital, such as cultural capital, might relate to specific types of experience or qualifications prized by the community.

This concept of capital in relation to human-animal studies has been furthered by Irvine, who suggests that “animal capital” describes owners’ knowledge and skills about animal-keeping, and their desire for increased knowledge about, and a relationship with, the animal(130). Horses themselves provide an intriguing model of capital for horse owners. As well as clearly being “economic capital” in that they have an economic value depending on breed, ability and education(192), horses also provided a means for owners to display their skills and knowledge. For example owners were keen to discuss the transformations they had wrought in their horses; these transformations were constructed in order to symbolise the owners’ equestrianism, determination, skills, integrity, patience and knowledge.

Bourdieu’s theories highlight the importance of the interplay between the individual’s knowledge, attitudes and values, and the networks of individuals and structures surrounding that person. This dovetails with the conceptual model provided in this thesis, showing how horse owners might practice as individuals, but that their practice is a result of a heavily influenced social world.

### **Obesity and the equestrian world**

The model also illustrates the way in which the multiple influences combine to produce what I have called an obesogenic environment. This obesogenic environment is underpinned by factors which reduce the horse’s need to expend energy. The existence of the obesogenic environments for leisure horses has not been previously recognised, though the term is well recognised in relation to human health. Human obesogenic environments are those where the built environment is structured in such a way that obesity becomes a likely outcome because the environment promotes energy imbalance (182,193). In an obesogenic environment physical exercise is minimised; for example the lack of pavements/sidewalks in the United

States, and the loss of green spaces and leisure areas which facilitate physical exercise. Furthermore, “unhealthy” eating might be promoted, with an excess of cheap fast-food options and a lack of supermarkets; even within supermarkets, healthier foods such as fresh vegetables might cost more than processed foods.

This project has shown that the built environment in which humans and horses coexist is fundamentally obesogenic, with factors which promote excessive calorie intake (for example rich rye grasses intended for dairy cattle), while reducing the demand for energy. Many factors combine to reduce the need for energy including fears over the safety of hacking on roads, the loss of bridlepaths, increase in riding in “safe spaces” such as enclosed arenas, small turnout areas, rugging and easily accessible food. The model I have developed provides a clear understanding of the way in which our UK society makes the production of obese horses more likely than not.

However, this environment is largely a result of our changing relationship with this species, which has resulted in them being leisured. This leisuration involves keeping horses compartmentalised within physical, temporal and logistical boundaries which are suited to the convenience of the owners’ lifestyle; the horses must fit within a space which is separate to the owners’ “real life” (their life outside of the horses; for example their work and family time). This space is owned by people who have the resources to sell this space back to horse owners. In this way the provision of livery encapsulates, for most horse owners, the experience of their horse ownership. Unlike most other human-animal relationships, the owner and their horse share a common space with other owners and horses, provided by someone else. These settings then begin to ‘perform’ by creating, shaping and managing the identities of the leisure horse owner.

Interestingly, discussions with international colleagues and researchers highlighted the extent to which equine obesity is a localised UK-specific problem, not thought to be occurring to the same extent in other locations with a similar leisure-horse population, such as some areas of Europe, the US or Australia. The UK’s equine obesogenic environment therefore incorporates both Britain’s built equine environment, and is also inextricably linked with our constructed relationships with horses. I consider the equine environment to be obesogenic beyond the physical environment, but also in relation to our relationships with

leisure horses, and the organisational and social structures which surround UK horses. Obesity is essentially a feature of the creation of the leisure horse.

### **Application of model with behaviour change science**

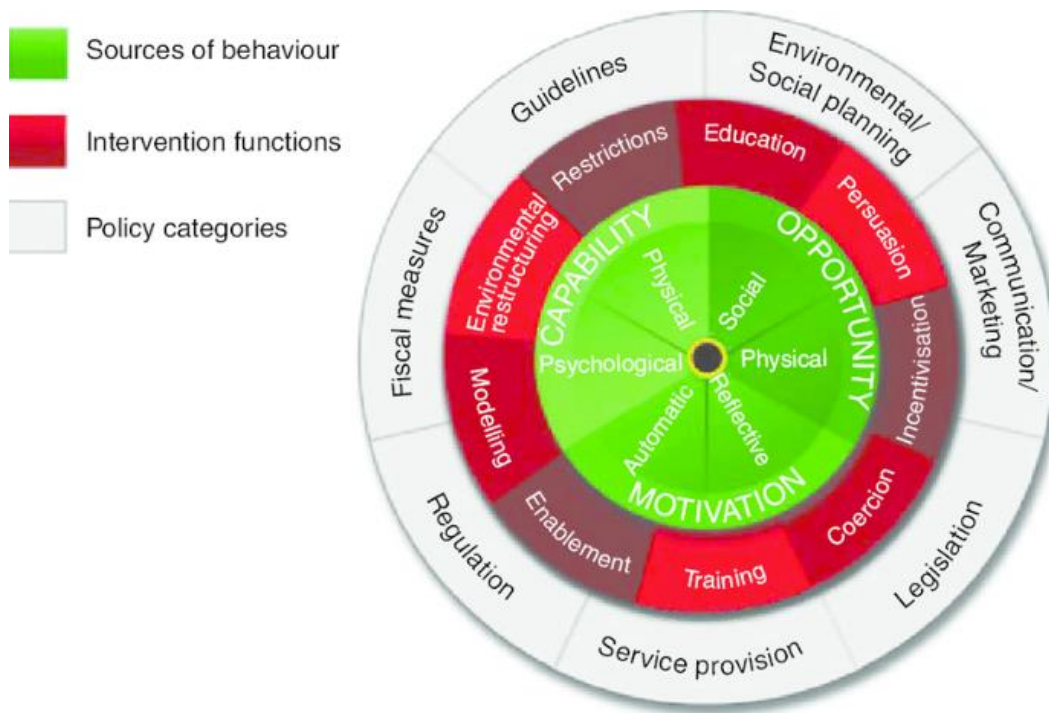
Current equine obesity awareness discourses assume that new information can not only be retained within the individuals' embedded ideas about health and wellness, but also that changes can be successfully enacted in the obesogenic arenas of social groups and influences within which the horse owner functions. The model highlights the importance of the structures and influences surrounding the individual, and help us to understand the complexity of potential behaviour change, and why current obesity awareness discourses may be limited in instigating change.

Current understandings of public health and behaviour change suggest that awareness of a problem does not necessarily help people to alter their behaviour(93,187,194). Behaviour change science suggests that we consider the environmental and ecological effects of structures and influences surrounding individuals, and encourage a holistic view of the factors surrounding behaviour.

The conceptual model developed from this project and supported by Bourdieu's theory of practice explains the intricacies of the world in which owners act. The application of behaviour change models can help to take this further, by assisting in highlighting *specific* factors which need to be addressed in order to bring about change. In the following analysis, I have chosen to employ the use of the COM-B system(104,108) which was described in the literature review, because I consider it to be an all-encompassing behaviour change model which has been well-used in numerous fields(109,111,195). The COM-B system gives insight to the individual agency and ability, as well as the structural, environmental and social factors.

The COM-B encourages us to split behaviour change into three categories; *capability, opportunity and motivation* – each with two sub-categories, which explore the physical and social environment. These are surrounded by the “Behaviour Change Wheel”; suggestions for intervention as a result of better understanding of the COM-B elements. Exploration of

these categories in relation to the data in the previous chapters will assist in clarifying the types of changes that could be applied to the individual, environment, or influences which are relevant to the horse owner.



**Figure 8: the COM-B system of behaviour change (in the centre of the model) surrounded by intervention and policy functions (together forming the “Behaviour Change Wheel”) (105)**

### **Capability: psychological**

This aspect of the model explores whether individuals know how to perform the required behaviour; for example in this case, whether owners are able to understand and assess their horse’s body fat and the need to make a change in order to improve health and wellbeing; the knowledge of how weight management strategies might impact weight and how to apply these strategies; the capacity to weigh up the potential harm to health from obesity, with the time, effort, and physical/psychological effects on the horse from the weight management itself; the psychological resilience to understand that the weight management strategies must be continued and applied flexibly over time; and the logical ability to find ways to

implement these strategies within the constraints imposed by the yard environment and other factors.

The analysis has shown that many of these factors are inhibited by social influences on the horse owner; for example; fat is normalised and often viewed as a symbol of health which causes owners to be unable to identify its presence, and minimise their perception of its damaging effect.

While owners in this study understood that a range of weight management strategies were available, they also found it hard to identify strategies that would work within the environment in which they kept their horse, while keeping their horse's physical and mental health, protecting the land, as well as being manageable within the owners' resources.

### **Capability: physical**

This facet considers whether the subject has the actual physical ability to perform the behaviour in question. For example, when managing weight the heaviness of soaked hay is often mentioned as heavy and ungainly, and problematic for owners who have limited physical abilities – even if soaked in small quantities.

For equine weight management, an additional physical capability restriction is present in the body of the horse; physical restriction of the horse due to old age or chronic illness was an often-cited reason for the horse not being exercised, for example.

### **Opportunity: social**

The social opportunity to perform the desired behaviours relates to the social environment and social norms surrounding an individual, and the consideration of how these might shape behaviour. Social opportunity plays a major role in all aspects of behaviour change around equine weight management; for example, many participants commented on the social acceptability of overweight horses, in comparison to the lack of acceptability of horses that are even slightly underweight. Furthermore, social norms abound which centre on providing comfort to the horse; feeds as “meals”, rugs, and limited but comfortable environments constructed as “bedrooms”.

On two of the yards participating in the study, social opportunities were created to promote weight management, through weight management “clubs” which encouraged active weight monitoring and management as a social opportunity with social benefit.

**Opportunity: physical**

Physical opportunity relates to the environmental factors which might limit, or encourage, the individual to perform a behaviour. This category was extremely important in considering weight management strategies, with many restrictions to physical opportunity present across the data. For example, physical opportunity to manage weight might occur because of inability to use electric fencing in order to restrict the horse, or inability to exercise the horse because of a lack of hacking. The UK’s grass itself was considered by many to limit physical opportunity to manage weight, because of the prevalence of rye grasses intended for high-production dairy cows, which created an inappropriate environment for horses.

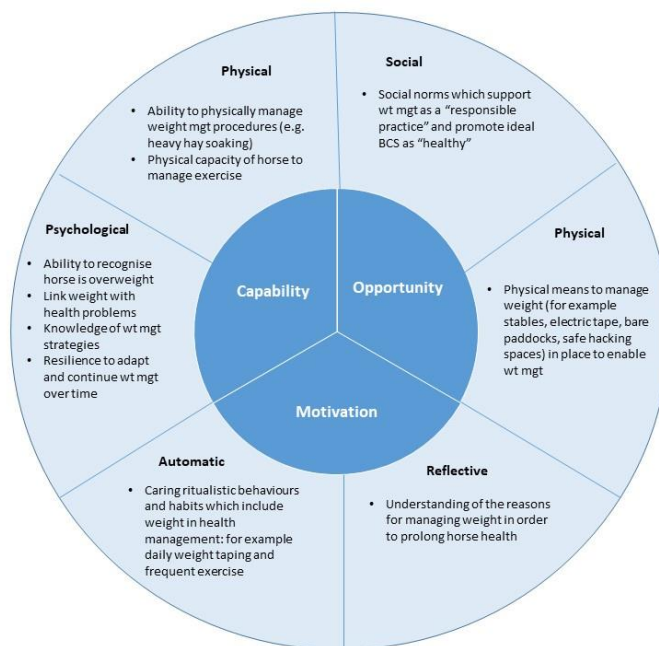
**Motivation: automatic**

Automatic motivation refers to the automatic behaviours which might encourage or inhibit a behaviour; for example habits and ritualistic behaviours, which are of extreme importance in our everyday activities(95,196,197). For horse owners, habits and ritualistic behaviours were commonly seen around caring activities, such as creating feeds and ensuring the horse was rugged in order to keep warm. Some owners incorporated automatic activities into their weight management regime, for example by measuring their horse’s weight daily. However, few other automated behaviours were associated with weight management strategies; for example owners did not usually exercise their horses habitually every single day, but instead did so only if/when they felt it was needed.

**Motivation: reflective**

Reflective motivation refers to enthusiasm and drive to perform an action as a result of being able to reflect on the reasons for performing it. For example, owners who understand that their horse will be healthier if it is an appropriate weight, and have a clear plan about how to achieve that weight, may be motivated to make a change. For many owners, the data showed that reflective motivation only occurred once the horse had already experienced a weight-related illness, such as laminitis; after this point, the owner was often intensely motivated to monitor and manage its weight.

Reflective motivation often appears at first sight to be the factor which should be focussed on for behaviour change campaigns, but this is not necessarily so: for example environmental triggers and barriers might cause us to make a change more effectively than reflective motivation, as in the case of smoking reducing more due to the environmental alteration of not smoking inside, in comparison to educational campaigns which explain the dangers of smoking.



**Figure 9: The factors and competencies identified from COM-B analysis that need to be in place in some combination in order for owners to manage weight**

Traditionally, most efforts at encouraging horse owners to change their behaviour have focussed on the more individualist items in the model: reflective motivation and psychological capability, and have ignored the other aspects, which this project has shown to create significant barriers to horse owner behaviour around weight management. Behaviour change science, and indeed Bourdieusian analyses(41), suggest that approaches to behaviour change are more likely to be successful if they take a more holistic approach to change, “showing rather than telling”(194), and creating environments where change is enabled



(114,198). Some examples of the aspects which the model suggests would be conducive to change are shown in the figure above.

### **Recommended initiatives arising from this analysis**

As a result of this project and the analysis using the COM-B model, several initiatives have been designed or suggested which aim to tackle obesity more holistically.

Firstly, a guide has been produced which is aimed at the individual owner, but differs from existing discourses by “showing” rather than “telling”, and using the *enablement* category of behaviour change on the Behaviour Change Wheel alongside *education*. The guide involves the use of a decision making tool which helps the owner to tailoring solutions that can work for their individual horse, whilst acknowledging the limitations from the physical and social environment. The guide is based on promoting the human-horse bond and their horse’s physical and psychological wellbeing, as well as encouraging the owners’ sense of themselves as advocate for the horse. Tailoring has been shown to be a successful strategy in assisting dog owners in managing canine obesity(88). The guide breaks down weight management into the four facets discussed in Chapter 7, and asks owners “what could you change?” in each setting. This allows owners to consider their own set-up; those who cannot alter their field or grazing configuration might be able, for example, to add sheep or additional horses into a grazing area in order to keep the grass low. If no options for grazing management are available at all, they might use a grazing muzzle (if they feel their horse would cope with this), and if not then they can consider the other three facets of weight management – for example increasing exercise. Positive language and messaging is used throughout in order to encourage and support change(116,194,198). The guide has received excellent feedback, and can be found in Appendix L.

However, due to the importance shown in this project of wider social and structural factors, it is important that obesity is also considered and tackled through wider means. In order to encourage social opportunity around managing weight by making appropriate weight more “normal” and encouraging owners to perceive one another’s weight management as an essential part of responsible horse-keeping, several initiatives are encouraged. For example, the project team are trialling vet-judged “Healthiest Body Condition” rosettes at shows, in

order to highlight to competitors what the ideal body condition should be. This initiative is taking place at local shows as well as a major national event, with significant support from national showing bodies. This initiative works with the *incentivisation* aspect of the Behaviour Change Wheel by providing the incentives of an award for appropriate weight, as well as *persuasion* by re-framing less overweight body condition as positive.

Social opportunity to manage weight can also be supported through encouraging yard environments; for example equine “fit clubs” as described in the data. Where owners do not have supportive yard environments, the data showed that online environments can provide additional support. Some online groups already exist in which owners support one another in tackling weight problems (for example on Facebook there are groups for owners of horses with EMS which regularly discuss management and share “before and after” photos of their horses). Such initiatives could be encouraged, making use of the *modelling* and *environmental restructuring* elements of the Behaviour Change Wheel by highlighting and appropriate behaviours performed across the yard, and creating an environment to encourage them.

Social opportunity to exercise horses can be encouraged through initiatives such as Your Horse’s #hack1000miles campaign (which encourages users to hack 1000 miles over a year, and combines with a lively social media page), and online competitions such as eDressage’s video ridden/in-hand dressage classes, or HorseAgility’s video competitions, may foster equestrian skills which encourage the owner to interact with the horse in ways which owners may find practical and inspiring.

Equine professionals can also facilitate social opportunity around weight management by supporting owners in their efforts (some are already using the guide described above to have “guided discussions” about tailored weight management). Equine professionals could also ensure that they comment approvingly on all **appropriate** weight horses they see (particularly native ponies and cobs) in order to help to re-adjust social norms around weight, and ideally adopt a “see ribs in spring” campaign in order to normalise weight loss at this time of year.

In order to address the physical environment around weight, and in line with the Behaviour Change Wheel influences, livery yard owners could be encouraged to set aside areas on yards specifically designed to manage weight pro-actively. Whether through areas for hay

soaking, creation of tracks or non-grassy areas this would enable horse owners to proactively manage, and avoid obesity in their horses. Again, good practice can be shared in order to provide a social environment to promote weight management through the creation of physical environments which assist owners. Despite the increased leisurisation of horses, they continue to be kept mainly in environments created for horses being intensively exercised each day. Livery yards need to adapt and change in order to provide more suitable accommodation for the ways in which horses are currently being owned and managed.

Beyond the physical environment of the livery yard is the countryside, which on the face of it offers the leisure rider a space within which undemanding time could be spent with their horse. However, hacking out was problematic to owners because of the way in which these spaces were accessed and in particular as a result of the way in which the space was shared by motorists and dog walkers. Campaigns are currently being run by the BHS to improve driver awareness of the way in which horses respond to the space which they share.

However, riders can also be encouraged to improve their horse's abilities to cope with hazards that might be met whilst hacking, for example through agility training, in-hand work and group hacking. There has been a proliferation in organised "fun rides" (off-road hacks, usually of around 10 miles and with optional jumps, which owners enjoy in small groups), and such initiatives could be encouraged further to create opportunities for owners to exercise their horses in safe, enjoyable spaces.

The unregulated environment of the UK means that there has been no legislation around commercialism of livery yards, rugs and feed, which are all major contributors to the UK's leisure horse obesity status. Exploration of the role of legislation for livery yards may yield useful results; for example yards could be required to have non-grass areas for overweight or laminitic horses, or yards could be encouraged to create initiatives which support weight management such as "fit clubs". Further, companies which sell rugs and feeds could also be addressed by encouraging clarification of the suitability of products for different horses; for example many feeds suggest that they are "complete" (offer a complete nutritional profile) if the owner feeds a large quantity per day. Better regulation of the advertising and marketing around such products could help owners choose products which are suitable for their horses.

### **Study limitations**

As with all studies, this project had some limitations. Diversity was sought in terms of the types of participants, with a range of ages, geographical locations, horse types, yard set-ups, and equestrian knowledge. One area in which further diversity could have been sought was in horse owner gender; only two male horse owners were interviewed individually, and one co-owner was interviewed alongside his wife. This low level of male involvement does reflect the number of males involved in horse owning and riding as a whole(199), but further study could explore the potential differences between male and female horse owners in relation to body image and attitudes to health and exercise in their horses. Men's relationships with leisure horses have received no attention from researchers so far, with women's relationships with horses taking precedence. However, investigation into this area could potentially yield interesting and important insights into the changing construction of leisure horses.

Another area which requires further study is that of the livery yard; the role of livery yards in moderating and restricting horse owner behaviours was clearly shown in this study to have major implications for facilitating levels of equine obesity through the production of inappropriate equine environments. However, the types of rules and regulations identified in this study are likely to affect horse health and welfare on a much more extensive basis than simply obesity, with potential implications for biosecurity, stress and welfare, helminth control, and many other areas. Smart's in depth study of livery yards suggests that yards are microcosms of society where new social norms can develop(142). In terms of behaviour change it is possible that livery yards develop particular approaches to equine health which would be worthy of further investigation.

This study interviewed three livery yard owners, whose diverse experiences showed the multiple conflicting pressures that livery yard owners face, including legislative, financial, ethical, business, family and environmental pressures. We consider that more in depth study in this area is necessary in order to understand the experience of livery yard owners, and highlight means to facilitate decision making for this group in a way that promotes equine welfare alongside their other interests.

### 8.1 Conclusion: Implications of this research

This research has revealed valuable information about the complexities of managing equine obesity. It has emphasised the importance of tailored approaches which empower owners within the intricacies of their social and physical environments. For example, approaches which promote the human-horse relationship (for example, controlled exercise such as hacking or agility, if that is what is enjoyed by the horse and owner) may be more likely to succeed than approaches which encourage the owner to prioritise their horses' physical wellbeing over their psychological wellbeing (such as stabling or use of a grazing muzzle). It is important that equine professionals or those encouraging owners to take up weight management strategies with their horses, help owners to adopt targeted, empowering approaches.

In order to address the issues around obesity and the human-horse bond, I consider that it is imperative that professionals recognise that horse-keeping is changing. The study has shown that, for many owners, equestrianism is less about riding, and more about caring. If horses are no longer likely to receive physical exercise from ridden work, their needs around physical activities need to be taken care of in other ways – for example through the creation and promotion of management systems offering enriched environments such as tracks, equicentral or woodland turnout; these may encourage movement and herd behaviours, and also avoid allowing horses access to excess grass.

For owners who are still keen to engage in their horse's exercise in some way, alternative exercise forms which are constructed as strengthening the human-horse bond should be encouraged, because these will inspire exercise in a way that empowers the owner, working alongside their sense of identity. This could range from encouraging confidence-building group hacking at yards, to the promotion of equine agility and ground handling.

This project has also identified the importance of the livery yard to horse welfare. It is both a place where the care of the horse is enacted as well as a place in which owners are constrained in their actions. Livery yards provide opportunities for communities of practice in which positive equine care and management can be promoted.

Equine obesity is the result of an intricate combination of factors: a result of our changing lifestyles and our desires to have meaningful relationships with horses. Horses are variously described in the data as providing their owners with therapy, purpose, escape, and love, and the care and attention lavished upon them is testament to the deep affection felt by their owners. This relationship is integral to the study of obesity. One of the most important findings from this thesis is that we need to find a way to provide environments for our horses which reflect the importance of this relationship but which optimise horse health while also promoting the owner-horse bond.

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## Appendices

Appendix A: Participant information sheet (horse owners)

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## **Appendix A: Participant information sheet (horse owners)**

### ***Understanding how horse owners make decisions in relation to equine management, health and wellbeing***

#### ***Horse Owner Information Sheet***

We would like to invite you to take part in a research study. Before you decide, you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish.

#### ***What is the purpose of this study?***

Effective horse care and management can be achieved in many different ways, and the reasons people choose their horse's specific care is affected by many factors such as the livery set up, the activities the horse will be doing, the type of horse, the owner's own personal views, the horse's personality, and so on. We are researching the types of choices horse owners or carers make for their horse's care, why they make these choices, and how this influences their horse's health and wellbeing.

The purpose of this research is to increase the understanding of horse care and management strategies which provide optimum health and wellbeing for the horse, and to understand the difficulties owners face in terms of practicalities about caring for their horse. This will enable future educative strategies for horse owners/carers (hereafter referred to as "owners") who are facing specific problems.

The objectives of this research are to

1. Understand horse owners' perceptions of health and wellbeing in domestic horses, and how they recognise problems
2. Understand horse owners' practices, beliefs and choices surrounding the practicalities of day to day care of their horses, and in dealing with problems that arise (whether behavioural or physical).
3. Understand where horse owners go to seek advice
4. Understand horse owners' relationships with professionals such as vets, nutritionists and farriers
5. To understand the relationship horse owners have with their horse and how this impacts the choices owners make over their horse's care.

#### ***Why have I been invited to take part?***

We would like to obtain information on the practices, attitudes and beliefs of as a wide range of horse owners as possible. It is anticipated that, in total, we will talk to



about 30 horse owners (as well as about 15 professionals such as vets, nutritionists and farriers).

Taking part in this research is entirely voluntary. If you have any queries or concerns that are not covered by this information sheet please do not hesitate to get in touch (see contact details below).

### ***Summary of responses to key questions***

- i) Q: What are the potential risks/disadvantages of taking part?  
A: We do not envisage any risks or disadvantages to you of taking part.
- ii) Q: What are the potential advantages/benefits of taking part?  
A: There are unlikely to be any direct benefits to you of taking part, but your input will help to increase understanding of horse care. This increased understanding will help researchers to create initiatives in future which may assist in finding innovative means of overcoming common problems faced by horse owners.
- iii) Q: Will my taking part be confidential?  
A: Your participation is completely confidential. Your name, your horse's name, your yard name, and any other identifying features that you might mention in your interview, will all be anonymised in the data analysis and in any publications.
- iv) Q: What will happen to the results of this research?  
A: Study updates will be published on the study website ([https://www.liverpool.ac.uk/infection-and-global-health/research/pet-health/equine\\_management/](https://www.liverpool.ac.uk/infection-and-global-health/research/pet-health/equine_management/)). Full results will be included in a PhD thesis and it is also intended to disseminate key results through conference presentations and published articles, both within academic journals and the wider equine media (for example, horse magazines and websites). Data will be kept for up to 10 years.
- v) Q: What will happen to me if I don't want to carry on with this study?  
A: You don't have to take part in the study, and you can withdraw from it at any time, without explanation. Up until two weeks after your interview, you may also request that the information related to you (for example your interview recording) is destroyed and no further use is made of it.

### ***What will happen if I take part?***

If you agree to take part you will be contacted via telephone or email to find out when it would be convenient to talk to you. Your interview will either be carried out face-to-face in a location convenient to you, or via telephone. Most interviews will take place at the horse's yard, though it is up to you whether you are happy to be interviewed at the yard. The interview will be audio taped so that all the points you

make can be fully captured, and the interviewer may also make notes during their interview. Interviews are anticipated to last between 45 minutes and an hour, but this depends on how much or little you would like to say about your horse. The areas to be covered during the interview are:

- Background details about you and your horses
- Reason(s) why you decided to keep your horse at the current yard, on the current routine, and how you decide to make changes to these factors
- What you think of your horse's health, quality of life and wellbeing generally
- Where you turn for advice about horse care, and the relationship that you have with vets and other professionals who visit or know your horse
- The relationship you have with your horse and whether you think this impacts the choices you make about his/her care and wellbeing
- Any other points you wish to make

Any information you provide will be treated in strictest confidence. Your views and experiences form an important part of this research.

It may be useful for the researcher to take photos of inanimate objects that are discussed during the interview (such as feed preparation area, turnout area, stables) and of your horse, which will act as a memory aid and be included in the analysis. You are under no obligation to allow the researcher to take photos, and this is entirely voluntary. A small number of photos may be used in publications or presentations, but if this is the case then the researcher will obscure anything that is considered identifiable information (for example, if there was text relating to the place of the interview, or if your horse had any very distinguishing markings then these would be obscured).

### ***What if I am unhappy or if there is a problem?***

If you are unhappy, or if there is a problem, please feel free to let us know by contacting Tamzin Furtado by email (tfurtado@liverpool.ac.uk) or telephone (07845089438) , or Dr Rob Christley (email: robc@liverpool.ac.uk or phone: 0151 794 6170). If you remain unhappy or have a complaint which you feel she cannot resolve then you should contact the Research Governance Officer on 0151 794 8290 (ethics@liv.ac.uk). When contacting the Research Governance Officer, please provide details of the name or description of the study (so that it can be identified), the researchers involved, and the details of the complaint you wish to make.

### ***Who has reviewed the study?***

To ensure that your safety, rights, wellbeing and dignity are protected the methods for this research have been looked at by an independent group of people called a Research Ethics Committee. This study has been reviewed by University of Liverpool Veterinary School Research Ethics Committee.

***Next steps***

Please take time to consider whether you want to be included in this research. The decision to participate is your own and you should feel under no pressure to do so. If you are happy to be involved please complete the accompanying consent form and return it to [tfurtado@liverpool.ac.uk](mailto:tfurtado@liverpool.ac.uk) within a month of receiving this request.

Thank you very much for considering this information.

Tamzin Furtado  
PhD student, University of Liverpool

## **Appendix B: Participant information sheet (equine professionals)**

### ***Understanding how horse owners make decisions in relation to equine management, health and wellbeing around the issue of equine obesity***

#### ***Information Sheet for equine professionals***

We would like to invite you to take part in a research study. Before you decide, you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish.

#### ***What is the purpose of this study?***

This study is aiming to look at how the different ways that individuals manage their horses influences health and wellbeing, with particular emphasis on weight management, nutrition, and the challenges owners face making decisions about their horse's management. We are interested in the way horse owners seek advice from professionals such as yourself, and your views on the issues owners face. This will enable future educative strategies for horse owners/carers (hereafter referred to as "owners") who are facing specific problems.

The objectives of this research are to

6. Understand horse owners' perceptions of health and wellbeing in domestic horses, and how they recognise problems, particularly in terms of nutrition and weight management
7. Understand the experiences, perceptions and behaviours of equine care professionals (for example vets, farriers and nutritionists) towards equine health and wellbeing, particularly in terms of nutrition and weight management
8. Understand the relationship horse owners have with professionals such as vets, nutritionists and farriers
9. Understand where horse owners go to seek advice on horse care, and what sorts of conflicts arise, if any, between such advice and that of professionals
10. To understand the relationship horse owners have with their horse and how this impacts the choices owners make over their horse's care.

#### ***Why have I been invited to take part?***

We would like to obtain information on the practices, attitudes and beliefs of as a wide range of people as possible. It is anticipated that, in total, we will talk to around 15 professionals such as vets, nutritionists and farriers, and around 30 horse owners.

Taking part in this research is entirely voluntary. If you have any queries or concerns that are not covered by this information sheet please do not hesitate to get in touch (see contact details below).

***Summary of responses to key questions***

- i) Q: What are the potential risks/disadvantages of taking part?  
A: We do not envisage any risks or disadvantages to you of taking part.
- ii) Q: What are the potential advantages/benefits of taking part?  
A: There are unlikely to be any direct benefits to you of taking part, but your input will help to increase understanding of horse care in relation to nutrition and weight management. This increased understanding will help researchers to create initiatives in future which may assist in finding innovative means of overcoming common problems faced by horse owners.
- iii) Q: Will my taking part be confidential?  
A: Your participation is completely confidential. Your name, your company name, and the names of any owners, horses, yards or any other identifying features that you might mention in your interview, will all be anonymised in the data analysis and in any publications.
- iv) Q: What will happen to the results of this research?  
A: Study updates will be published on the study website ([https://www.liverpool.ac.uk/infection-and-global-health/research/pet-health/equine\\_management/](https://www.liverpool.ac.uk/infection-and-global-health/research/pet-health/equine_management/)). Full results will be included in a PhD thesis and it is also intended to disseminate key results through conference presentations and published articles, both within academic journals and the wider equine media (for example, horse magazines and websites). Data will be kept for up to 10 years.
- v) Q: What will happen to me if I don't want to carry on with this study?  
A: You don't have to take part in the study, and you can withdraw from it at any time, without explanation. Up until two weeks after your interview, you may also request that the information related to you (for example your interview recording) is destroyed and no further use is made of it.

***What will happen if I take part?***

If you agree to take part you will be contacted via telephone or email to find out when it would be convenient to talk to you. Your interview will either be carried out face-to-face in a location convenient to you, or via telephone. The interview will be audio taped so that all the points you make can be fully captured, and the interviewer may also make notes during their interview. Interviews are anticipated to last between 45 minutes and an hour, but this depends on how much or little you would like to say. It is anticipated that some professionals may allow the researcher

to attend visits alongside them, with the verbal consent of the horse owners; in this case, field notes would be made of the interview.

The areas to be covered during the interview are:

- Background details about you and your role
- The levels of awareness that you think horse owners have regarding nutrition, ideal weight, and weight management in their horses
- The factors that you think are important with regard to the increasing number of obese horses seen in the UK
- The relationship between horse care professionals and horse owners
- The places that you think horse owners turn to for advice about horse care, and your opinions on the information about nutrition and weight management given in the equine media
- The types of advice that you commonly give regarding weight management and nutrition, and the successful/unsuccessful strategies that you have seen applied by owners
- Any other points you wish to make

Any information you provide will be treated in strictest confidence. Your views and experiences form an important part of this research.

It may be useful for the researcher to take photos of inanimate objects which are discussed during the interview (such as feed charts, feed areas, etc), or any horses that are discussed as part of the interview (if any). You are under no obligation to allow the researcher to take photos, and this is entirely voluntary. A small number of photos may be used in publications or presentations, but if this is the case then the researcher will obscure anything that is considered identifiable information (for example, if there was text relating to the place of the interview, or if the horse had any very distinguishing markings then these would be obscured).

### ***What if I am unhappy or if there is a problem?***

If you are unhappy, or if there is a problem, please feel free to let us know by contacting Tamzin Furtado by email (tfurtado@liverpool.ac.uk) or telephone (07845089438) or Dr Rob Christley (email: robc@liverpool.ac.uk or phone: 0151 794 6170). If you remain unhappy or have a complaint which you feel she cannot resolve then you should contact the Research Governance Officer on 0151 794 8290 (ethics@liv.ac.uk). When contacting the Research Governance Officer, please provide details of the name or description of the study (so that it can be identified), the researchers involved, and the details of the complaint you wish to make.

### ***Who has reviewed the study?***

To ensure that your safety, rights, wellbeing and dignity are protected the methods for this research have been looked at by an independent group of people called a

Research Ethics Committee. This study has been reviewed by University of Liverpool Veterinary School Research Ethics Committee.

***Next steps***

Please take time to consider whether you want to be included in this research. The decision to participate is your own and you should feel under no pressure to do so. If you are happy to be involved please complete the accompanying consent form and return it to [tfurtado@liverpool.ac.uk](mailto:tfurtado@liverpool.ac.uk) within a month of receiving this request.

Thank you very much for considering this information.

Tamzin Furtado  
PhD student, University of Liverpool

## **Appendix C: Participant information sheet (focus groups)**

### ***Understanding how horse owners make decisions in relation to equine management, health and wellbeing around the issue of equine obesity***

#### ***Horse Owner Information Sheet***

We would like to invite you to take part in a research study. Before you decide, you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish.

#### ***What is the purpose of this study?***

Effective horse care and management can be achieved in many different ways, and the reasons people choose their horse's specific care is affected by many factors such as the livery set up, the activities the horse will be doing, the type of horse, the owner's own personal views, the horse's personality, and so on. We are researching the types of choices horse owners or carers make for their horse's care, why they make these choices, and how this influences their horse's health and wellbeing, with particular emphasis on weight management, nutrition, and the challenges owners face making decisions about their horse's management.

The purpose of this research is to increase the understanding of horse care and management strategies which provide optimum health and wellbeing for the horse, and to understand the difficulties owners face in terms of practicalities about caring for their horse, particularly when managing weight. This will enable future educative strategies for horse owners/carers (hereafter referred to as "owners") who are facing specific problems.

The objectives of this research are to

11. Understand horse owners' perceptions of health and wellbeing in domestic horses, and how they recognise problems, particularly in terms of nutrition and weight management
12. Understand horse owners' practices, beliefs and choices surrounding the practicalities of day to day care of their horses, and in dealing with problems that arise; for example weight management
13. Understand where horse owners go to seek advice
14. Understand horse owners' relationships with professionals such as vets, nutritionists and farriers



15. To understand the relationship horse owners have with their horse and how this impacts the choices owners make over their horse's care.

***Why have I been invited to take part?***

We would like to obtain information on the practices, attitudes and beliefs of as a wide range of horse owners as possible. It is anticipated that, in total, we will talk to about 30 horse owners to take part in individual interviews (as well as about 15 professionals such as vets, nutritionists and farriers). We are also conducting several focus groups, in which owners will share their experiences with one another in a group setting.

Taking part in this research is entirely voluntary. If you have any queries or concerns that are not covered by this information sheet please do not hesitate to get in touch (see contact details below).

***Summary of responses to key questions***

- i) Q: What are the potential risks/disadvantages of taking part?  
A: We do not envisage any risks or disadvantages to you of taking part.
- ii) Q: What are the potential advantages/benefits of taking part?  
A: There are unlikely to be any direct benefits to you of taking part, but your input will help to increase understanding of horse care. This increased understanding will help researchers to create initiatives in future which may assist in finding innovative means of overcoming common problems faced by horse owners.
- iii) Q: Will my taking part be confidential?  
A: Your participation is completely confidential. Your name, your horse's name, your yard name, and any other identifying features that you might mention in your interview, will all be anonymised in the data analysis and in any publications. Of course, during the focus group, other group members will know who you are, but they will also be discussing horse care and weight management and likely facing similar issues to you. If you would like to take part in the research but are uncomfortable with the group set-up, please let the lead researcher know – you may be able to take part in an individual interview instead.
- iv) Q: What will happen to the results of this research?  
A: Study updates will be published on the study website ([https://www.liverpool.ac.uk/infection-and-global-health/research/pet-health/equine\\_management/](https://www.liverpool.ac.uk/infection-and-global-health/research/pet-health/equine_management/)). Full results will be included in a PhD thesis and it is also intended to disseminate key results through conference presentations and published articles, both within academic journals and the wider equine

media (for example, horse magazines and websites). Data will be kept for up to 10 years.

v) Q: What will happen to me if I don't want to carry on with this study?

A: You don't have to take part in the study, and you can withdraw from it at any time, without explanation. Up until two weeks after your interview, you may also request that the information related to you (for example your interview recording) is destroyed and no further use is made of it.

***What will happen if I take part?***

If you agree to take part you will be invited to take part in a focus group with other horse owners. You will all sit together in one room, and the facilitator will encourage you all to discuss specific issues, such as weight management barriers. The group will involve group discussion as well as some workshop activities.

The discussion will be audio taped so that all the points you make can be fully captured, and the interviewer may also make notes during their interview. Focus groups are anticipated to last around an hour to 1.5 hours. The areas to be covered during the interview are:

- Icebreaker exercise and introductions, telling us about you and your horse
- Discussion around health, wellbeing and management generally
- Discussion around weight identification (e.g. use of visuals, weight-tape, weighbridge etc)
- Discussion around weight management techniques

Any information you provide will be treated in strictest confidence. Your views and experiences form an important part of this research.

Participants will be asked to share a current photo of their horse, if they wish to do so (this is entirely optional), and if you wish you are also welcome to share pictures of the yard environment around your horse. You are under no obligation take or share photos, and this is entirely voluntary. If you agree, a small number of photos may be used in publications or presentations, but if this is the case then the researcher will obscure anything that is considered identifiable information (for example, if there was text relating to the place of the interview, or if your horse had any very distinguishing markings then these would be obscured).

***What if I am unhappy or if there is a problem?***

If you are unhappy, or if there is a problem, please feel free to let us know by contacting Tamzin Furtado by email (tfurtado@liverpool.ac.uk) or telephone (07845089438) , or Dr Rob Christley (email: robc@liverpool.ac.uk or phone: 0151 794 6170). If you remain unhappy or have a complaint which you feel she cannot

resolve then you should contact the Research Governance Officer on 0151 794 8290 (ethics@liv.ac.uk). When contacting the Research Governance Officer, please provide details of the name or description of the study (so that it can be identified), the researchers involved, and the details of the complaint you wish to make.

***Who has reviewed the study?***

To ensure that your safety, rights, wellbeing and dignity are protected the methods for this research have been looked at by an independent group of people called a Research Ethics Committee. This study has been reviewed by University of Liverpool Veterinary School Research Ethics Committee.

***Next steps***

Please take time to consider whether you want to be included in this research. The decision to participate is your own and you should feel under no pressure to do so. If you are happy to be involved please complete the accompanying consent form and return it to [tfurtado@liverpool.ac.uk](mailto:tfurtado@liverpool.ac.uk) within a month of receiving this request.

Thank you very much for considering this information.

Tamzin Furtado  
PhD student, University of Liverpool

**Appendix D: Consent form (owners and professionals)**

**CONSENT FORM**

<b>Title of Research Project:</b>	<b>Understanding how horse owners make decisions in relation to equine management, health and wellbeing</b>	
<b>Researcher(s):</b>	<b>Dr Robert Christley, Tamzin Furtado, Professor Elizabeth Perkins, Professor Cathy McGowan, Dr Francine Watkins, Dr Gina Pinchbeck</b>	<b>Please initial box</b>

1. I confirm that I have read and have understood the information sheet dated Sept 2016 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	<input type="checkbox"/>
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my rights being affected.	<input type="checkbox"/>
3. I understand that, under the Data Protection Act, I can at any time ask for access to the information I provide. I can withdraw my participation from the study and request that the data I provided is destroyed, up to two weeks after my interview.	<input type="checkbox"/>
4. I consent to being audio-recorded, and understand that the audio recording will be transcribed as part of the study.	<input type="checkbox"/>
5. I agree for the data collected from me to be used in future research and understand that any such use of identifiable data would be reviewed and approved by a research ethics committee	<input type="checkbox"/>
6. I consent to photographs being taken of inanimate objects discussed during the interview, and/or of my horse, and understand that these may be used during analysis and presentations/publications, once anonymised	<input type="checkbox"/>
7. I agree to take part in the above study.	<input type="checkbox"/>

Participant Name	Date	Signature

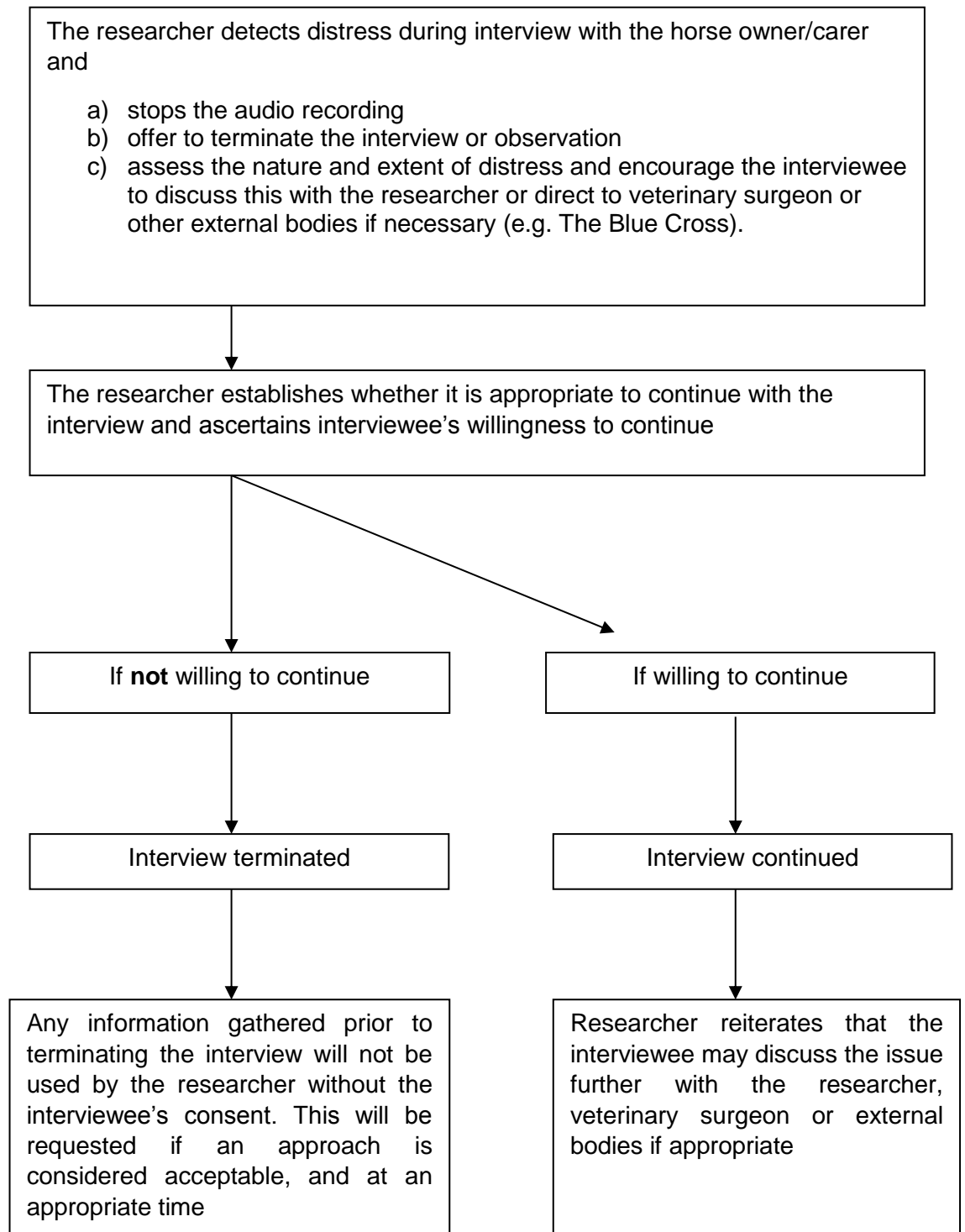
Researcher Name	Date	Signature

**Supervisor contact details:** Dr Robert Christley, Dept. of Epidemiology & Population Health, Leahurst Campus, University of Liverpool, Neston, Wirral, CH64 7TE; telephone: 0151 794 6170; email: robc@liverpool.ac.uk

## Appendix E: Dealing with distress

### Dealing with distress flowchart

This flow chart shows the proposed procedure for dealing with any distress arising during the interviews.



## Appendix F: Interview guide

### Interview Guide

#### Understanding horse owners' decision making about equine health, welfare and wellbeing around the issue of obesity

The interviews are semi-structured and questions included below are considered prompts; questions may be skipped if, for example, the interviewee has covered the topic themselves in previous questions.

#### Introduction:

*Thank you for taking the time to speak to me today. This conversation should take about an hour, but may take more or less time depending on how much you want to say. During our conversation, I may take a few notes but I will be recording the session on a digital voice recorder so I don't miss anything important.*

*All your responses will be kept confidential. This means that any information you provide will only be shared within the research team, and we will ensure information is anonymised so you cannot be identified. You don't have to talk about anything you don't want to, and if you feel uncomfortable at any point and wish to take a break or end the interview, please let me know. If you have any questions before we start, please let me know.*

#### Horse owners:

#### Introduction

*[intended to set the scene and initiate conversation, and establish rapport]. As you probably know, there are many different ways of managing horses, from 24/7 group turnout to individual turnout or full-time stabling, and with different diets, exercise regimes and so on. With this research, we are aiming to try to understand the choices horse owners make, how owners understand their horse's health and wellbeing, and the different challenges that owners face. We are interviewing a wide variety of owners who keep horses in many different ways.*

#### Scene setting:

- How did you first become involved with horses? Is this your first horse, or have you had others before him/her?

- Can you tell me about your current horse(s)? [prompts: how long have you had him/her? What breed is he/she and how old etc; can you tell me about his/her personality?]

**Practicalities:**

- Does your horse have a usual routine? Can you tell me about it (for example, turnout group or individual, field size, work routine stabling, etc) – how did you decide on this routine?
- Can you tell me how you think he/she is doing weight wise? Have you ever had to monitor his/her weight, or have you ever been concerned about his/her weight?

If owner considers horse to be overweight or mentions concern over weight –

- Can you tell me how you initially realised that your horse was overweight? How did you feel about it?
- Have you ever had to change something about your horse's management because you were concerned about their weight? If yes, what/when/why?
- How do you feel about weight management with your horse? Is it quite straightforward or more of a challenge? Why?

**Quality of Life:**

- Do you feel that your horse is happy with its current lifestyle? [Prompts: can you explain what sorts of things indicate that he/she is happy? What do you think would be the perfect life for your horse?]
- How do you decide whether to change something for your horse – for example whether it's best to move yards, change their management, etc?

**Advice**

- Do you ever ask other people for advice about your horse? How do you decide who to ask? (prompts: Do you ever use online forums? Why/when? what is your relationship like with your vet?)

**Horse-human relationship:**

- Can you tell me about your relationship with this horse? Do you think of your horse as a family member?

**Concluding discussion:**

- *Participants will be asked if there is anything else that they wanted to talk about in relation to their horse's health and wellbeing*



- *Ask if participant is interested in being contacted for any relevant follow up studies.*
- *Reiterate confidentiality and confirm study contact details for any further questions.*

### **Professional Interview (vets, nutritionists, feed shop owners, farriers etc)**

#### **Introduction**

[intended to set the scene and initiate conversation, and establish rapport]. *This study is aiming to look at how the different ways that individuals manage their horses influences health and wellbeing, with particular emphasis on weight management, nutrition, and the challenges owners face making decisions about their horse's management.*

#### **Scene setting**

- Can you tell me about your role? How did you come to be a vet/nutritionist/etc
- What are the most common health-related problems that you see in your role?
- What do you think are the biggest threats to equine welfare in the UK?

#### **Advice:**

- Where do you think owners generally go first to seek advice (for example, if they are not sure about nutrition)?
- Do you find that owners consult the internet, for example forums and facebook groups, and does this sometimes conflict with your advice? Can you tell me about it?

#### **Horse-Human Relationship**

- Can you tell me how you think an individuals' relationship with their horse influences the decisions they make about the way they manage that horse? (please give examples if possible)

#### **Weight and nutrition:**

- Can you tell me about the general level of awareness you feel that horse owners have regarding the weight of their horses? Can you give some examples?
- Do owners associate any health risks with their horse being overweight (if any?) Or are owners aware of any?

#### **Practicalities:**

- How do you approach the topic of an overweight horse or pony with the owner?  
Can you give examples? What sorts of advice do you usually give?
- Can you give me some examples of the management strategies you've seen which have been most effective/ least effective?
- Do you think that there are quality of life issues with regards to some of the management strategies for overweight horses? If so, what?

**Appendix G: Ethics application confirmation**

Veterinary Research Ethics Committee

Committee Chairman

Dr David Killick

BVetMed PhD DipECVIM-CA (onc) MRCVS

Institute of Veterinary Science

Leahurst Campus

Neston

Dear Rob

I am pleased to inform you that the Veterinary Research Ethics Committee has approved your application for ethical approval. Details of the approval can be found below.

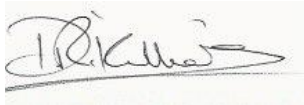
Ref:	VREC457
PI:	Dr Rob Christley
Title:	Understanding how horse owners make decisions in relation to equine management, health and wellbeing in relation to obesity in horses
Institute:	Veterinary Science
Department:	
First Reviewer:	A Coates
Second Reviewer:	E Comerford
Date of initial review:	9.9.16
Date of Approval:	12.10.16

**This approval applies for the duration of the research.** If it is proposed to extend the duration of the study as specified in the application form, the Veterinary Research Ethics Committee should be notified. If it is proposed to make an amendment to the research, you should notify the Veterinary Research Ethics Committee by following the Notice of Amendment procedure outlined at [http://www.liv.ac.uk/researchethics/application/forms\\_and\\_templates/](http://www.liv.ac.uk/researchethics/application/forms_and_templates/).

If the named PI/Supervisor leaves the employment of the University during the course of this approval, the approval will lapse. Therefore please contact the RGO at [ethics@liverpool.ac.uk](mailto:ethics@liverpool.ac.uk) in order to notify them of a change in PI / Supervisor.

**All serious adverse events** must be reported to the Committee within 24 hours of their occurrence, via the Research Governance Office ([ethics@liv.ac.uk](mailto:ethics@liv.ac.uk))

With best wishes

A handwritten signature in black ink, appearing to read 'D. Killick', written over a horizontal line.

David Killick

Chair, Veterinary Research Ethics Committee

## Appendix H: Advertisements for horse owner interviews and focus groups

# WANTED!

HORSE OWNERS AND LOANERS...

to talk to us about their horses or ponies





*We need horse owners to help with a new research project about **UK horse management**, simply by talking to us about their horses in an informal interview with a researcher. The University of Liverpool are studying the types of choices horse owners make for their horse's care, why they make these choices, and how this influences their horse's health and wellbeing.*

*We would like to hear about all types of horses – big or small, competitive or not, old or young, and regardless of whether they are in work.*



Please email [tfurtado@liverpool.ac.uk](mailto:tfurtado@liverpool.ac.uk) for more information,

or visit the study website <http://bit.ly/2gnVCHC>



**UNIVERSITY OF LIVERPOOL**

## Invitation: Equine Weight Management Evening





*If you're a horse owner or carer who has to manage your horse's weight, we'd love you to join us! The University of Liverpool are studying how horse owners manage their horse's weight, whether your horse is big or small, competitive or not, old or young, and regardless of whether they are in work.*

*We would love you to come along to our weight management focus group at the Leahurst Campus, University of Liverpool, on Thursday, June 7<sup>th</sup> at 7:30pm. Attendance is free and refreshments will be provided, but booking is essential.*

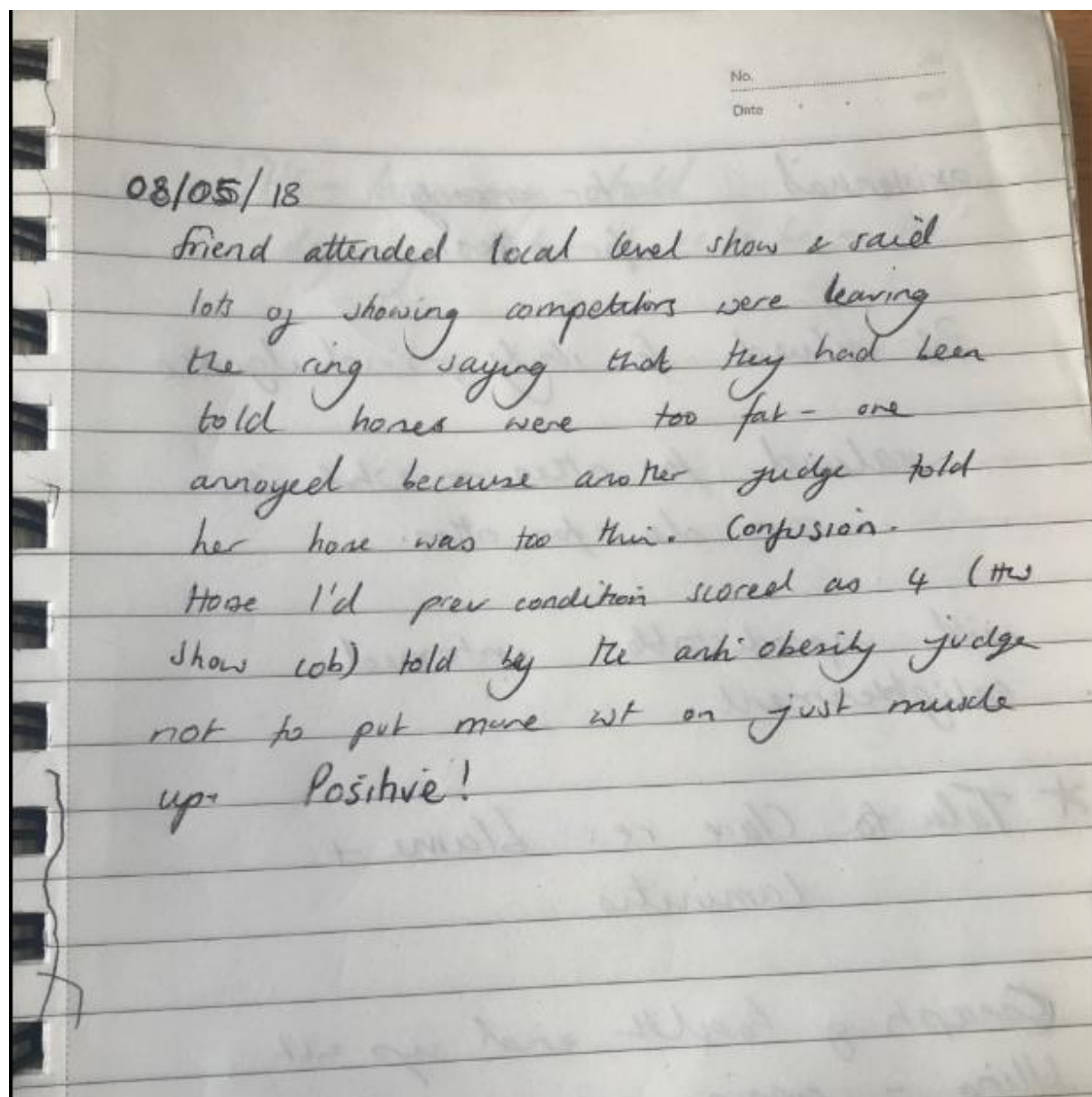


Please email [tfurtado@liverpool.ac.uk](mailto:tfurtado@liverpool.ac.uk) for more information



**UNIVERSITY OF LIVERPOOL**

## Appendix I: Example of field notes





Appendix J: Example of initial open coding on paper

Respondent: He went lame, and I guess I was always frightened of laminitis, because my previous horse had got it as a consequence of Cushings. Thunder is a chunky build, as you probably could see, and also, he's very, very greedy. He's just completely food motivated, so we always try to restrict him. The yard I was on at the time, the person that owned it really heavily fertilised the fields. The grass was way too rich. So it was quite challenging keeping him in trim. As I say, I thought, "Oh God, yes, he's got laminitis." Anyway, I called my vets and they said, "Keep him in for three days and put him on bute," and it didn't resolve. We spent a couple more weeks fiddling about with it. Then, eventually, one of the more seniors came out, and he said, "I think you need to bring him to the clinic. To be honest, we don't know what's the matter with him." They were pretty sure he hadn't got laminitis, because they'd done all the testing and stuff.

It's quite difficult to examine his hooves, because of all the hair. They feel warm all the time, because they're covered up with hair, and you could never find a pulse through all that hair. So anyway, I don't have my own transport, but a friend took me to the clinic, and they did all the blocking. Then they scanned him, and called me in and showed me. They said, "Look, you can see these plaques on his near fore." They said there was a touch of it, possibly, in his off fore, but it was the near fore that was the worst.

So they discharged him with an instruction for my farrier to change his shoeing and give him a rolled toe to change his gait. And they suggested that he might have his joint medicated. So that's what happened, and it was okay for two or three years. He was sound enough to do what I wanted to do.

I used to even go over little low jumps. Well, obviously, that all stopped. I'm very, very careful about where I- At that time, the

*laminitis + fear*  
*dominant response*  
*prev. experience leads to fear*  
*owner feels these are factors for laminitis.*  
*Cols: good does-greedy, low unto themselves-danger to self, gluttony, need restricting & caring*  
*Duality & contradiction*  
*caring, trying diff alternatives. uncertainty*  
*again essential col-ness represents difficulty managing*  
*discovery, vets demonstrating meaning*  
*vets instructions followed automatically*  
*Compromise*  
*restricting activities is protective*  
*lack of control of conditions*  
*owner responsible*  
*vet as first source of advice*  
*needs higher intervention*  
*further source of support*  
*hierarchy of team*  
*team caring for diff aspects of horse*  
*can be manipulated mechanically*  
*fit for purpose - horse is functional enough*  
*restricting activities caring & managing*

# Appendix K: Examples of weight management strategies discussed across the data, divided by type

Type of change	Action
Reduce grazing	Strip graze
	Starvation/bare paddock/yard turnout
	Woodland turnout (low grass/grass free)
	Track system
	Rotate grazing based on BCS (e.g. thinner horses eat grass down first before fatter ones are allowed in)
	Equicentral system (grass management system)
	Co-graze with sheep/cattle
	Co-graze with more horses
	Grazing muzzle
	Graze in a bit
	Stable horse for some of the time
Alter supplementary feed	Reduce bucket feed
	Reduce volume of supplementary forage (hay/haylage)
	Change type of supplementary forage (e.g. hay instead of haylage, hay replacer)
	Oat straw as supplementary forage
	Soak supplementary forage
	Slow intake of forage (hayball, trickle net)
	Slow intake of bucket feed (e.g. treat ball)
Increase exercise	Ride
	Lunge
	Horsewalker
	Long rein
	Drive
	“pony” from another horse (ride and lead)
	Agility training
	In-hand schooling
	Track system in paddock
	Turnout with youngsters/bossy horses in paddock
	Sharer to help with exercise
	Join events such as #hack1000miles, organise group hacks on yard
	Track exercise with app
	Pay someone to ride the horse
	Pay someone to do chores so owner has more time to ride horse
	Send horse to trainer
	In-hand hacking or jogging with horse
Use metabolism	Don't rug in winter/rug less frequently
	Don't use fly rugs/allow horses to move to get flies off them
	Clip the horse in winter
	Allow for weight loss in winter/ribs in spring
	Split forage into multiple portions and spread across paddock to encourage foraging



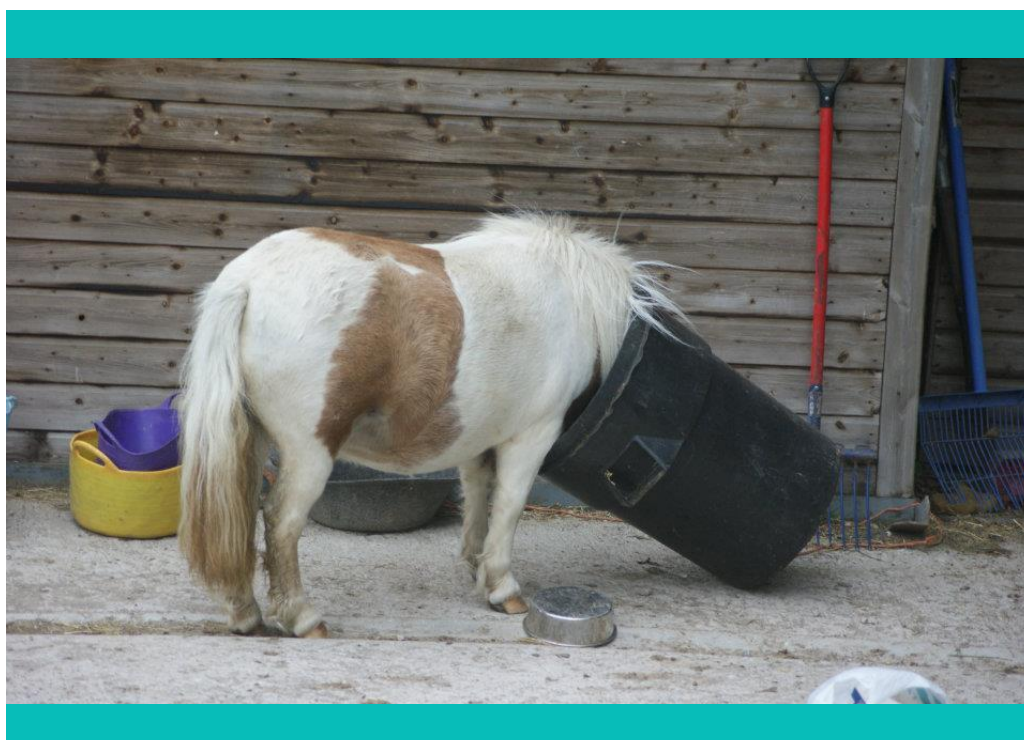
**Appendix L: Example pages from When the Grass Is Greener: The Equine Weight Management Guide for Every Horse, Every Yard, and Every Owner**

Full guide available at:

<https://www.liverpool.ac.uk/media/livacuk/equine/documents/Equine,Weight,Management.pdf>

# When the grass is greener:

The Equine Weight Management  
guide for every horse, every yard, and every owner



# Equine Weight Management



Every horse is different, and every livery yard and every owner differ too. Because of this, there's no magic weight management strategy that will work for everyone – you need a tailor-made solution that works for you and your horse. You're the expert on your horse, your yard and your life, so you're the best person to create a weight management strategy which suits you, and this guide will help you to do so.

This guide is designed to help you to plan a weight management that works for your horse, by helping you to think about what **changes** you can make to help your horse lose weight.

By picking up this guide, you've already taken the first few steps. Many owners don't recognise that their horses are overweight, but you've already started thinking about making changes.

This guide will help you to make weight management easier. We want to help you to manage your horse's weight in a way that benefits you both – planning fun activities together, ensuring your horse does not get bored, and so on.



## The latest research:

Research has shown that people who **buddy up** with others are 45% more successful at achieving weight loss. Buddy-up with a friend whose horse needs to lose weight; you can discuss weight management strategies together and help one another condition score your horses, and also work together to track exercise, work towards goals (planning fun activities – agility? Trips to the beach?).



Recent research showed that there is a higher risk of laminitis for horses that are on weight management programmes which allow the horse to eat significant quantities in a short period; e.g. horses that wear a grazing muzzle and have it removed for a few hours on long grass, or horses allowed only a few hours' turnout – as compared with horses constantly on little grass. Horses can **eat 24 hours' worth of grass in just 4 hours** if they really want to! Therefore, strategies which do not allow your horse to binge may help to limit the risk of laminitis.

**Never** reduce your horse's feed intake to below **1.5% of current bodyweight without veterinary advice**; and if you're reducing it to this level, we strongly recommend veterinary assistance. Horses on restricted diets still need adequate nutrition, so we also recommend discussing with a vet or nutritionist and using a good quality vitamin and mineral supplement.

### Ask for help

Ensure adequate amounts of forage to avoid the horse developing ulcers or colic. If your soil is sandy, you may need to take additional care and use a supplement such as psyllium to ensure that you avoid sand colic; again ask your vet for advice.

### Enrichment fun!

To ensure your horse isn't bored while on a weight management programme, there are hundreds of ways you can add "enrichment" into its environment, which will be fun for both of you. See page 13 for ideas.



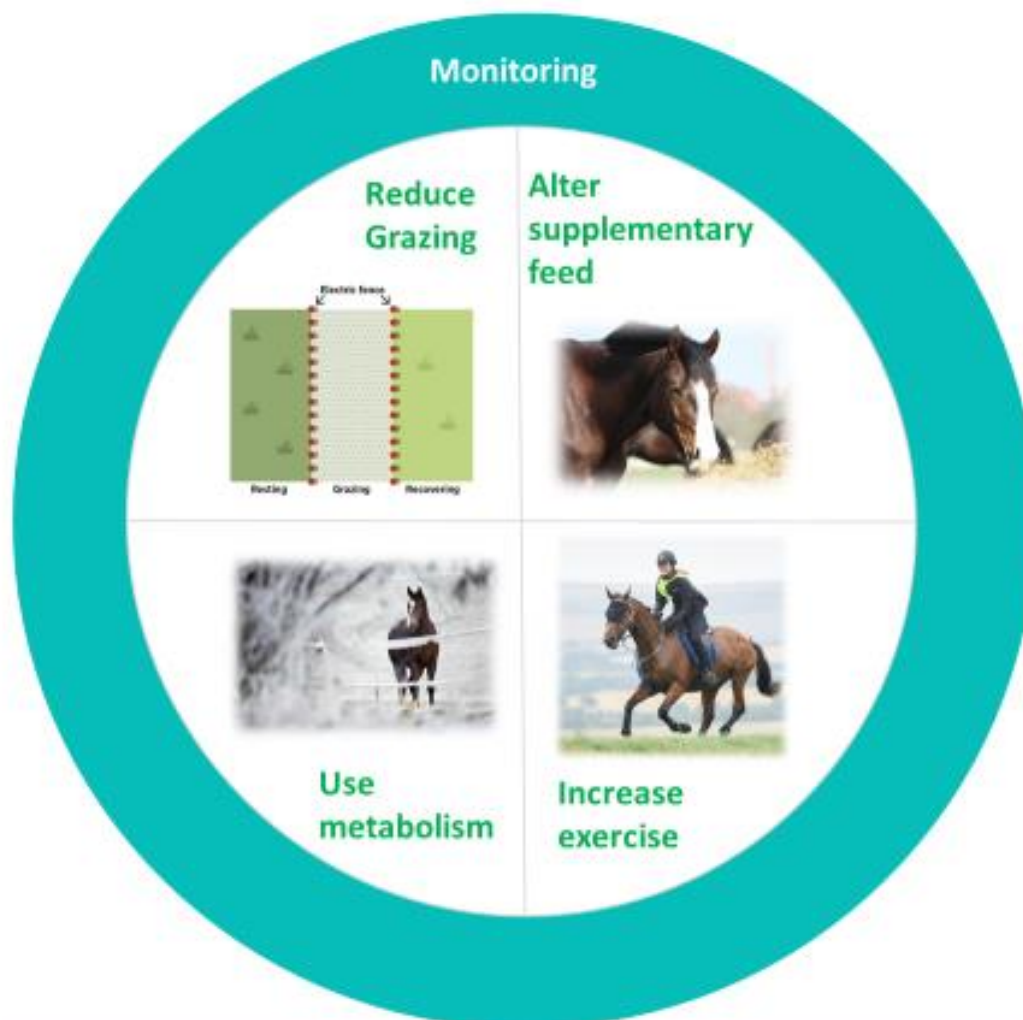
### Slow and steady changes

All changes must be made gradually, so build work up slowly to avoid injuries, and make any changes to feed slowly too.





# Equine Weight Management



To help owners decide on weight management strategies, we've split weight management into four key areas: the following pages will help you to consider each area in turn, and think about where you can make changes

Page 3





# What can you change?





# Things I can change:



As you go through the guide, use this page to write notes about things that you can change in your horse's set-up



# Reduce Grazing:

what could you change?

What could you change?	Options	Things to consider
<b>Paddock configuration (e.g. electric fence)</b>	<ul style="list-style-type: none"> <li>• Strip graze</li> <li>• Limited grass paddock</li> <li>• Track system</li> </ul>	<ul style="list-style-type: none"> <li>• Safety with electric fence</li> <li>• Supplementary forage needed (haylage/hay) if grazing low</li> <li>• Social isolation can be stressful; try to keep horses in the same field as friends if possible.</li> </ul>
<b>Choice of paddock</b>	<ul style="list-style-type: none"> <li>• Rotating grazing by body condition</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple horses needed to ensure grass can be kept short</li> <li>• Ensure appropriate worming and poo-picking programme</li> </ul>
<b>Choice of non-grass paddock</b>	<ul style="list-style-type: none"> <li>• Limited grass paddock, yard or dust turnout</li> </ul>	<ul style="list-style-type: none"> <li>• Supplementary forage needed; leaving horses without forage can lead to ulcers or colic</li> <li>• Need to consider environmental enrichment</li> </ul>
<b>Number of horses in paddock</b>	<ul style="list-style-type: none"> <li>• Increase number of horses to reduce grass</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure groups which get on with one another well, for safety</li> <li>• Ensure appropriate worming and poo-picking programme</li> </ul>
<b>Type of animals in paddock</b>	<ul style="list-style-type: none"> <li>• Co-graze with other animals such as sheep</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure appropriate worming programme</li> </ul>
<b>Time at grass</b>	<ul style="list-style-type: none"> <li>• Reduce grazing time (e.g. stabling, yard turnout)</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced turnout also limits movement; can be counter-productive, especially for arthritic or older horses</li> <li>• Consider enrichment</li> <li>• Replace grazing/grass with supplementary forage</li> </ul>
<b>None of the above</b>	<ul style="list-style-type: none"> <li>• Grazing muzzle</li> </ul>	<ul style="list-style-type: none"> <li>• May not suit some horses; it's important to assess your horse's behaviour to ensure it is not stressed.</li> <li>• "Binge" eating behaviour when mask is removed could induce laminitis</li> <li>• Ensure horse can eat and drink effectively</li> <li>• Important to remove muzzle daily</li> </ul>

# Alter Supplementary Feed:

## what could you change?

What could you change?	Options	Things to consider
<b>Bucket feed (incl supplements)</b>	<ul style="list-style-type: none"> <li>• Discuss nutritional needs based on age, health, workload and condition with a nutritionist</li> <li>• Regularly re-assess feed and supplements to ensure appropriateness</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure that the horses gets an appropriate amount of food (over 1.5% current bodyweight at a minimum); ensuring regular access to forage helps to limit health problems such as ulcers and colic.</li> </ul>
<b>Volume of supplementary forage (hay/haylage)</b>	<ul style="list-style-type: none"> <li>• Discuss forage with a nutritionist</li> <li>• Consider forage analysis</li> <li>• Work out the appropriate volume of forage by weight</li> </ul>	<ul style="list-style-type: none"> <li>• Even dieting horses need adequately nutritious diets to avoid health problems, so it may be necessary to feed a vitamin and mineral supplement.</li> </ul>
<b>Type of supplementary forage</b>	<ul style="list-style-type: none"> <li>• Discuss forage with a nutritionist</li> <li>• Consider forage analysis</li> <li>• Some overweight horses benefit from swapping from hay to haylage or vice-versa, or using a low-calorie hay-replacer.</li> <li>• Oat straw can also be mixed with other forage, as a very low-calorie option</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial feed companies offer nutritional advice; independent nutritionists can advise on feed and supplements across different companies.</li> <li>• Adjust weight of forage according to % dry matter (i.e. haylage weighs more than hay because of water content, so more weight needs to be fed in comparison to hay – ask a professional if you need help).</li> <li>• Weigh your feed, use luggage scales to weigh your haynet.</li> </ul>
<b>Soak hay</b>	<ul style="list-style-type: none"> <li>• Reduce sugar content in forage through soaking</li> </ul>	<ul style="list-style-type: none"> <li>• As above</li> <li>• Research about length of soaking time varies; we recommend 6-12 hours if possible.</li> <li>• Use fresh water for each net.</li> </ul>
<b>Slow intake of forage</b>	<ul style="list-style-type: none"> <li>• Double-net hay or use a trickle net</li> <li>• Split forage into multiple sections and place in different areas to encourage foraging</li> <li>• Use specially designed toys such as a Hayball</li> </ul>	<ul style="list-style-type: none"> <li>• As above</li> <li>• Some horses can get stressed about difficulty accessing forage, as with a trickle net. Watch your horse to ensure it is comfortable.</li> </ul>

## Increase exercise: what could you change?

What could you change?	Options	Things to consider
<b>Riding horse</b>	<ul style="list-style-type: none"> <li>Plan fun things! Fun rides, farm rides, beach, etc</li> <li>Set goals</li> <li>Join #Hack100miles or #hack1000miles</li> <li>Track exercise with app to see how fast and far you're going</li> <li>Get a sharer or pay a professional to help with the horse</li> <li>Equine boot camp – send to trainer for a period of time</li> </ul>	<ul style="list-style-type: none"> <li>Walking is considered <b>very</b> gentle exercise; it's better than nothing, but trotting and cantering will help to burn more calories. If you're not sure what your horse can do, talk to your vet about exercise and training.</li> <li>Keep a record of the times you ride and duration, so you can track your progress.</li> <li>Team up with a friend and plan activities together/share your riding-diary, for motivation.</li> <li>Buddy up with others for transport-sharing</li> <li>Build fitness slowly</li> <li>Get help from an instructor</li> <li>Check with a vet what your horse is capable of</li> <li>Wear a hat and hi-vis (even if you're doing activities from the ground)</li> <li>Join online clubs such as online agility club for monthly challenges, #hack100miles</li> </ul>
<b>Non-ridden exercise (medium-energy)</b>	<ul style="list-style-type: none"> <li>Driving</li> <li>Lunging</li> <li>Long-reining</li> <li>"pony" from another horse (ride &amp; lead)</li> <li>Equine agility (advanced)</li> <li>In-hand dressage (more advanced movements)</li> <li>In-hand hacking or jogging with horse</li> </ul>	
<b>Non-ridden exercise (gentle)</b>	<ul style="list-style-type: none"> <li>Horse-walker</li> <li>Agility (basic)</li> <li>In-hand dressage (basic)</li> <li>In-hand hacking with horse (gentle)</li> <li>Long reining (basic)</li> </ul>	
<b>Increase field movement</b>	<ul style="list-style-type: none"> <li>Track system</li> <li>Increase enrichment in field to encourage movement (e.g. poles)</li> <li>Turnout with youngsters or bossy horses</li> </ul>	<ul style="list-style-type: none"> <li>Ensure safe field set-up</li> <li>Ensure herd gets on well with one another to minimise stress and risk of injury</li> </ul>

## Use Metabolism: what could you change?

What could you change?	Options	Things to consider
Allow the horse to thermo-regulate	<ul style="list-style-type: none"> <li>• Don't rug the horse, or rug less than usual to encourage the horse to use its own calories to keep itself warm</li> <li>• Consider giving the horse a trace or hunter clip</li> </ul>	<ul style="list-style-type: none"> <li>• Take into account the horse's age, type, hardiness, body condition, and amount of natural shelter/artificial shelter when deciding whether to rug less, clip or not rug your horse. It's important that the horse has some shelter from the elements.</li> </ul>
Allow the horse to lose weight over winter	<ul style="list-style-type: none"> <li>• It's natural for horses to lose weight over winter. A useful rule of thumb is to be able to see the slight outline of ribs in spring, so that you have leeway for when the grass comes through.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure the horse has enough forage to keep warm</li> </ul>
Encourage foraging behaviour on low-calorie forage	<ul style="list-style-type: none"> <li>• In the wild, horses would walk many miles to seek out forage. Be creative to encourage more movement and foraging behaviour at home.</li> <li>• Use rougher grazing land, woodland (if trees are safe), tracks, or yard areas to encourage movement while foraging</li> <li>• Split supplementary hay into multiple portions and hang from bushes, trees, in hay-balls, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Dieting horses are often limited in forage choice, which can cause boredom and depression. Creativity over food sources can help – for example, some owners split 2lb of hay into six haynets and hang in different areas – some are hay, some straw, soaked, some not, some have peppermint tea poured on, etc</li> </ul>

## Common barriers: what could you change?

What is the barrier?	Options	Things to consider
I have hardly any time!	<ul style="list-style-type: none"> <li>Find a sharer</li> <li>Pay a professional to help school or hack your horse</li> <li>Pay someone to help with yard chores, giving you more time to exercise your horse</li> <li>Alter your horse's routine to allow more time; for example sharing chores with another owner, altering turnout times, etc</li> </ul>	<ul style="list-style-type: none"> <li>It can be hard to find people you trust, but don't give up hope! Ask for references about professionals and sharers</li> </ul>
I can't restrict grazing on my yard in any way, and I can't exercise my horse either because he/she is old or injured	<ul style="list-style-type: none"> <li>There is such a thing as the wrong yard, even if it's perfect in every other way. If the yard can't help you manage your horse's weight, moving may be the best option for your horse's health.</li> </ul>	<ul style="list-style-type: none"> <li>Seeking other horse owners with overweight or laminitis/EMS horses in the local area may help, since you may be able to work together on one yard, creating a set-up that suits you all.</li> </ul>
No matter what I do, the horse doesn't seem to lose weight	<ul style="list-style-type: none"> <li>Speak to your vet; it may be that your horse suffers from a metabolic condition such as EMS; this will require veterinary assistance to manage</li> </ul>	<ul style="list-style-type: none"> <li>Horses are often tested for Equine Metabolic Syndrome (EMS) by using a blood test</li> </ul>
I find it hard to assess my horse's weight	<ul style="list-style-type: none"> <li>That's completely normal – you're not alone!</li> <li>Work with a friend to condition score each others' horse</li> <li>Ask your vet, farrier, instructor, saddler, nutritionist, physio, or other professionals to help you to condition score your horse.</li> </ul>	<ul style="list-style-type: none"> <li>Make sure that whoever is assisting you, whether professional or friend, knows that you want an honest opinion! People sometimes find it hard to talk about weight. However, try not to be downhearted – realising there's a problem is the first step to fixing it!</li> </ul>

## Measuring Changes

To track your success, measure your changes at a time you'll remember each month – for example the 1<sup>st</sup> of each month, on payday, every Saturday – and write them down in a diary or on the “notes” section on your phone to keep track. You can find a free Excel weight tracker spreadsheet at <http://www.careaboutlaminitis.org.uk/>

Method	How	Useful for?	Pros and Cons
<b>Weight tape</b>	Use a weight-tape (or piece of string) to measure the girth area of your horse (ensure horse is standing squarely!)	Measuring change over time; use in conjunction with BCS	<ul style="list-style-type: none"> <li>• Very quick and useful tool for measuring change over time.</li> </ul>
<b>Body Condition Scoring</b>	<p>Use a formalised system to assess the amount of body fat on the horse (ensure horse is standing squarely!)</p> <p>The Cresty Neck Score (CNS) can be useful for considering the neck area specifically; the link in the green box above explains how to use the CNS.</p>	<p><b>Assessing appropriate body condition at one point in time</b></p> <p>Measuring change over a long period of time (months not weeks)</p>	<ul style="list-style-type: none"> <li>• Gives a useful overview of the amount of fat on the horse, as opposed to its weight.</li> <li>• Can be difficult to judge, especially on heavier breeds/those with PPID (ask a friend to help you be objective!).</li> <li>• It can take a while for changes to be visible at BCS level</li> </ul>
<b>Photographs</b>	Take regular photographs of your horse from the side, back and front on flat ground, to compare over time. (ensure horse is standing squarely!)	Measuring change over a long period of time (months not weeks)	<ul style="list-style-type: none"> <li>• Insensitive method, and only shows major changes. However, still a useful tool.</li> </ul>
<b>Weighbridge</b>	Use a weighbridge at the vets, with a nutritionist, or at shows to determine the exact weight of your horse	Measuring change over time; use in conjunction with BCS	<ul style="list-style-type: none"> <li>• Useful if you know the ideal weight of the horse, or can compare with previous or future measurements.</li> <li>• Most sensitive method</li> </ul>
<b>Weight Calculation</b>	Measure the body length and neck and girth circumference with a tape measure (kg) = (heart girth <sup>2</sup> x body length) / (11,880 cm <sup>3</sup> )	Measuring change over a long period of time (months not weeks) ; use in conjunction with BCS	<ul style="list-style-type: none"> <li>• Useful if you know the ideal weight of the horse, or can compare with other measurements.</li> <li>• More accurate than a weight-tape, more convenient than a weigh-bridge</li> <li>• Need two people to measure length of horse!</li> </ul>
<b>Other (girth measurements, etc)</b>	Keep a record of current girth hole	Measuring change over a long period of time (months not weeks)	<ul style="list-style-type: none"> <li>• Extremely inexact, but used by many for convenience. If you do this, make sure all your girths are the same length!</li> </ul>

# Condition scoring

Score	Pelvis	Back and Ribs	Neck
<b>0 Very Poor</b>	Angular, skin tight. Very sunken rump Deep cavity under tail	Skin tight over ribs. Very prominent and sharp backbone.	Marked ewe neck. Narrow and slack at base.
<b>1 Poor</b>	Prominent pelvis and croup. Sunken rump but skin supple. Deep cavity under tail.	Ribs easily visible. Prominent backbone with sunken skin on either side	Ewe neck, narrow and slack base.
<b>2 Moderate</b>	Rump flat either side of back bone. Croup well defined, some fat. Slight cavity under tail.	Ribs just visible. Backbone covered but spines can be felt.	Narrow but firm.
<b>3 Good</b>	Covered by fat and rounded. No gutter. Pelvis easily felt	Ribs just covered and easily felt. No gutter along the back. Backbone well covered but spines can be felt.	No crest (except for stallions) firm neck.
<b>4 Fat</b>	Gutter to root of tail. Pelvis covered by fat. Need firm pressure to feel.	Ribs well covered - need pressure to feel.	Slight crest Wide and firm.
<b>5 Very Fat</b>	Deep gutter to root of tail. Skin distended. Pelvis buried, cannot be felt.	Ribs buried, cannot be felt. Deep gutter along back. Back broad and flat	Marked crest very wide and firm. Fold of fat.

*(Based on the Carroll and Huntington Method)*  
 To obtain a body score, score the pelvis first, then adjust by half a point if it differs by one point or more to the back or neck.



# Enrichment

Enrichment means making your horse's environment more interesting, keeping your horse mentally stimulated and limiting boredom. It's particularly important for horses on weight management strategies which limits their access **to the 3 Fs – Forage, Friends and Freedom**. It's really important for your horse's psychological wellbeing to try and maximise their access to these three resources, whilst also trying to improve their health by reducing their weight. Some ideas are below, but you can find more by searching online.

## Stable enrichment (all of these can also be used in field!)

Scratching pads can be bought from many online stores, or improvised with old broom heads (but ensure safety!)



Stable toys such as treat balls, carrot garlands, etc are good enrichment for some horses. However, make sure the treats are low calorie, and watch your horse to ensure that it is not becoming overly frustrated; food frustration is not fun for your horse!

If your horse is stabled but allowed a little movement, provide choice by making a small yard area in front of the stable which allows the horse to choose whether to be inside or outside.

If possible and safe, a larger stable or barn shared with a friendly horse can help improve your horse's stabled time. If this isn't possible, ensure that the horse has some time to interact with other horses, for example grooming another horse over a fence.

Create a 'hedgerow haynet' with cow parsley, sticky-weed, hawthorn etc. (be careful to choose accurately – consult a book if necessary to identify edible plants, and never feed large quantities of any one item).



Split your hay into different sections, and then soak each with a different herbal tea in the water – peppermint, chamomile, etc, to allow your horse choice and provide interest.



If your horse is allowed exercise and it is safe to do so, in-hand hacking can be a nice way to spend time together as well as giving your horse a very light work-out. Explore new hacking routes and practice the things which you struggle with on ridden hacks – bridges, gates, wheelie-bins, white lines etc!



# Enrichment

## Field enrichment

Horses in typical UK paddocks often have nothing to do but eat. Making the paddock more interesting could encourage your horse to interact with its environment, spending less time eating and more time playing, moving and resting.



Diversifying your horse's environment by giving them access to woodland areas, rough grazing, or extra space (as on a track system) can help to provide natural enrichment which encourages the horse to move around more.

Some owners also plant special bushes and horse herb-gardens to encourage foraging (of course, you need to limit intake of any one food, and also check to ensure you're not giving your horse anything poisonous).

Some owners enjoy placing hay in the bushes so the horse has to forage for it!



Placing obstacles in the field can be interesting for the horse; some owners place logs, trotting poles, sand-pits, ponds, gravelled areas, scratching posts etc around the field.



Horses love different smells and herbs. Some owners create herb pastes with a little water and herbs such as peppermint, chamomile, or turmeric, and paint them on logs to encourage the horse to smell and forage (ensure logs are safe for horses).



If hay is supplemented, feeding it in a hayball (or similar) or trickle net on the floor (barefoot horses only; haynet must be safely secured) can help mimic foraging behaviour.



## Supporting your horse

There are lots of different ways to manage weight, but no matter which methods you choose, the important thing is to ensure that you keep a close eye on your horse's welfare. What works for one horse, might well be very stressful for another horse or in another setting.



Every time you monitor your horse's weight, it is a good idea to track the methods you're using to manage weight (on page 18) and then monitor how your horse is doing, in terms of their weight but also their physical and mental wellbeing. If you're not sure, ask an equine professional who knows you and your horse well, such as your instructor, vet, or farrier.

# Problem prioritisation

You may have concerns about different aspects which affect weight management; for example your own time availability, conflicting health concerns with your horse, and so on. Use this page to write down the problems, prioritise them, and consider how you could make changes. An example has been completed to assist you.

What is the problem?	How big a problem is this (out of 10)?	Ideas for overcoming the problem
<p><b>Example:</b></p> <p><i>The horse's current weight</i></p> <p><i>Concerns about sand colic because I know my land is very sandy</i></p> <p><i>Lack of time for exercising horse</i></p>	<p><b>Example:</b></p> <p><i>8/10 – I'm worried about long term health risks as he's young</i></p> <p><i>9/10 – I know other horses have had sand colic here and this is potentially a more serious immediate problem than the weight</i></p> <p><i>4/10 – I could make more time but it's tricky!</i></p>	<p><b>Example:</b></p> <p><i>Top priority is the sand colic, but the horse's weight is also a big issue. Therefore I need to use weight management strategies that do not work by having the horse on very short grazing. I will strip graze but allow plenty of grass and will supplement soaked hay, and my main weight management strategy will be increased exercise by more intense hacking; I can ask a friend to lunge the horse 2x a week to help me.</i></p>
<p><b>Your horse:</b></p> <p><i>The horse's current weight</i></p>	<p><b>Your horse:</b></p>	<p><b>Your horse:</b></p>



## Weight management strategies I will use:

Reduce Grazing:	Alter supplementary feed:
Use metabolism:	Increase exercise:
How I will monitor changes:	


Write the strategies you plan to use on this page, as well as how you will monitor your horse's progress.

Number the changes – which one will you start with, and when will you do it?



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# Weight management progress:

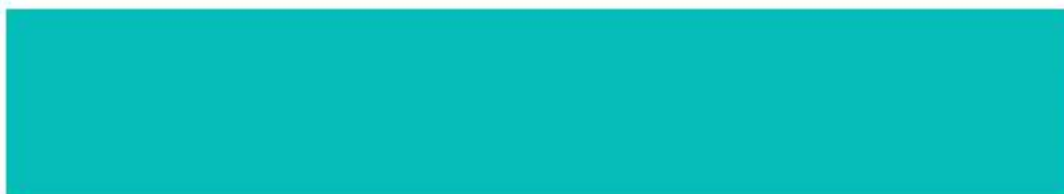
Month	Weight or BCS	What's worked well	What's worked less well	Ideas for future:

Use this page to record your progress each month, and plan ideas for future weight management strategies



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