

The health benefits of horse riding in the UK



Research undertaken by the University of Brighton and Plumpton College
on behalf of The British Horse Society

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Executive Summary

Key findings

The physical health benefits of horse riding and associated activities

- Horse riding and activities associated with horse riding, such as mucking out, expend sufficient energy to be classed as moderate intensity exercise.
- Regular periods of trotting in a riding session may enhance the energy expended and associated health benefits.
- More than two thirds (68 percent) of questionnaire respondents participate in horse riding and associated activities for 30 minutes or more at least three times a week. Sport England estimate that such a level of sporting activity will help an individual achieve or exceed the government's recommended minimum level of physical activity.
- A range of evidence indicates the vast majority (90 percent plus) of horse riders are female and more than a third (37 percent) of the female riders who took part in the survey were above 45 years of age. Horse riding is especially well placed to play a valuable role in initiatives to encourage increased physical activity amongst women of all ages.
- Amongst the horse riders who took part in the survey, 39 percent had taken no other form of physical activity in the last four weeks. This highlights the importance of riding to these people, who might otherwise be sedentary.
- Horse riders with a long-standing illness or disability who took part in the survey are able to undertake horse riding and associated activities at the same self-reported level of frequency and physical intensity as those without such an illness or disability.

The psychological and social benefits of horse riding

- Horse riding stimulates mainly positive psychological feelings.
- Horse riders are strongly motivated to take part in riding by the sense of well-being they gain from interacting with horses. This important positive psychological interaction with an animal occurs in a very few sports.
- Being outdoors and in contact with nature is an important motivation for the vast majority of horse riders.

Study methods

The British Horse Society commissioned the University of Brighton in partnership with Plumpton College to research the physical health, psychological and well-being benefits of recreational horse riding in the United Kingdom.

Sport England UK have adopted a threshold value for the contribution of sport to meeting Government guidelines on the recommended intensity and frequency of exercise that is likely to achieve physical health benefits. The threshold value measures the degree to which an individual participates in sport of moderate intensity activity for at least 30 minutes or more, three times a week. The research, therefore, assessed whether horse riding can be classified as a moderate intensity exercise and examined the frequency with which individuals take part

The research also examined the psychological and social benefits of horse riding. Reliable existing evidence indicates that physical exercise produces well-being benefits linked to social interactions and changes in mood, anxiety, self esteem and other personal emotions.

Two scientific exercise testing trials were undertaken to analyse the physical exercise intensity of recreational horse riding using validated scientific measurements of energy expended and current definitions of what constitutes moderate intensity exercise in terms of energy expenditure measured in metabolic equivalents (METs).

The first trial involved 17 participants cycling in a laboratory to assess their aerobic fitness levels. Measurements were also taken of their descriptive anthropometric characteristics. In the second trial the same 17 participants rode a horse for 45 minutes at the Plumpton College equestrian centre following a protocol that replicated the pattern of a typical riding lesson.

A questionnaire survey was undertaken of 1,248 horse riders. The quantitative and qualitative data gathered by the questionnaire allowed an analysis of the respondents' self reported measures of exercise intensity and frequency, and their perceptions of the social and psychological benefits of horse riding.

Physical health benefits

The scientific trials indicated general horse riding energy expenditure was equivalent to 3.7 METs and trotting equated to approximately 5.0 METs. These levels are clearly within the moderate intensity exercise band recommended by the UK's ABC of Physical Activity for Health guidelines that considers moderate intensity to be typically characterized as between three-six METs.

The national compendium of physical activities categorises energy expenditures for different recreational physical activities and reports levels of four METs for general horse riding and 6.5 METs for trotting, which are similar to those obtained in the scientific trials. The compendium also reports that the energy expenditure for saddling and grooming was 3.5 METs which is in the moderate intensity band

More than two thirds (68 percent) of questionnaire respondents achieved the government guidelines for exercise intensity and frequency (30 minutes for three times a week or more at moderate intensity) from horse riding and associated activities alone. Of these respondents 69 percent achieved this level of intensity and frequency through horse riding and the other 21 percent did so through associated activities such as mucking out and grooming.

Women have been identified in government studies as a social group with relatively low levels of participation in physical activity. Some 93 percent of questionnaire respondents were women and 49 percent of female respondents were aged 45 or above. These are comparable figures to a major Sport England survey which found that 90 percent of those participating in equestrianism are women and 37 percent of the female participants in equestrianism are aged 45 or above. The gender and age profile of equestrianism is not matched by any other sport in the UK.

Thirty nine percent of questionnaire respondents indicated that horse riding was the only form of physical activity in which they had participated during the last four weeks. These respondents, if they did not ride, would be sedentary people unless they changed their exercise habits, thus stressing the importance of horse riding for these individuals.

Qualitative data obtained in the questionnaire suggests that for some respondents with long-standing illnesses or disability, horse riding had actually improved their physical or mental condition.

Psychological and social benefits

More than 80 percent of questionnaire respondents reported that horse riding made them feel 'quite a lot' or 'extremely' cheerful, relaxed, happy or active. Qualitative data suggests that horse riding can play a role in managing negative feelings relating to anxiety and depression. The experience of these psychological benefits amongst questionnaire respondents was not influenced by the frequency of participation in horse riding and most psychological benefits were experienced by riders who did not participate regularly.

Asked to rate different motivations for going horse riding 82 percent of questionnaire respondents rated the motivation of 'interaction with horses' as either 'very important' or 'extremely important'. No other motivation received such a high importance rating. Existing evidence suggests that companion animals can provide owners with certain psychological benefits. These findings suggest that the interaction with horses may be very positive psychologically for horse riders.

More than 80 percent of questionnaire respondents rated the motivations 'contact with nature' and 'scenery and views' 'important', 'very important' or 'extremely important'. Some personal development motivations identified as important by respondents included 'escape', 'develop skills', 'challenge myself', 'experience excitement', 'to be physically active' and 'to relax'. Participation in horse riding provides a range of psychological and social benefits, some of which are particular to the interaction with animals and nature and therefore would not be gained from other forms of sporting activity.