

British Horseracing Authority medication and doping control research summary report: Herbal diuretic product

Why the research was needed

Herbal products are used by horseracing trainers but there is a common misconception that such 'natural' herbal products are not prohibited substances. These products contain ingredients able to affect body systems, and thus they are, by definition, prohibited substances under the Rules of Racing. The Authority's policy is that medications, including herbal products, may be used during training, but that they must be withdrawn so that their ingredients are not present on racedays, and that must not be administered on racedays. The purpose of this research was to investigate the blood and urine levels of a herbal product and monitor its effects on the horse, so as to better advise trainers

Overview of the research study

The study was conducted using two horses at the Authority's Centre for Racehorse Studies with analysis at HFL Sport Science. Research procedures, which complied with the Animals (Scientific Procedures) Act, were subject to ethical review and the analyses were conducted to industry standard quality procedures. A herbal product claiming to contain fluid extract (F.E.) of Buchu, F.E. Uva Ursi, F.E. Corn Silk and F.E. Juniper (Homoplus, Peak Performance Ltd, Wexford, Ireland) was studied. It claims to have diuretic properties, and that it does not contain prohibited substances. Chemical analysis of the product itself, and horse blood and urine samples before and after its administration, took place. Sampling followed standard veterinary practices, including the use of jugular vein catheters and manual urine collection. The properties and volume of the urine were also measured to assess the claimed diuretic effect.

Outcomes and Conclusions

Chemical analysis of the product itself determined the presence a number of substances including arbutin, quercetin, quercitrin and isoquercitrin, consistent with the claimed ingredients. These are regarded as prohibited substances under the Rules of Racing. These and other relevant substances were not detected in the blood or urine of horse given the product. There was no evidence of a diuretic effect of the product. Some chemical evidence of potential indirect evidence of administration (a 'biomarker') was noted and will be investigated further. This particular product clearly contains prohibited substances; it should not be used on racedays as this would be both an offence against restrictions on raceday administration and use of substances to affect performance. In this study there was no evidence of presence of active ingredients in the horse or a diuretic effect after its use, so on this basis it would be judged to be ineffective. No safety data is available for this product and it is not regulated by the UK authorities. Trainers are advised against its use on raceday and in the absence of other published scientific information are advised before its use to consider whether they have information that it is either safe or efficacious.

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