### FEEDING PRACTICES IN STANDARDBRED HORSES IN THE NORTH OF PORTUGAL

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#### **ABSTRACT**

In this study we intended to characterize and evaluate feeding practices of trotting racing horses in the District of Vila Real, Portugal. For this purpose, a field survey involving 12 horses was conducted to determine feeding practices, to estimate crude protein (CP), digestible energy (DE), and dry matter (DM) consumption by these horses, and to compare those intakes with 1989 recommendations of the National Research Council (NRC, 1989). Trainers were interviewed regarding: 1) the age and sex of the horses; 2) their feeding practices, and 3) training and racing schedule. Also biometric measures were taken for all animals in order to estimate body weight. The average estimated BW was of 550kg and the type of work was classified as moderate for the majority of animals. The estimated mean DM intake for all horses was 13,18 kg. The mean percentage of roughage in the ration for all stables was 46,04 %. The mean daily CP and estimated DE intakes for all horses were 1476,61 g and 31,74 Mcal, respectively. These data indicated that estimated CP, DE, and DM consumption are only slightly above the recommendations.

### INTRODUCTION

The use of Standardbred horses in Portugal is becoming more popular. In the North of Portugal, they are used in trot races known as "passo travado". "Passo travado" consists of a lateral trot instead of the normal diagonal trot; this is a very popular trot race in summer time. In the race season, these animals are under very intensive working conditions, with races every week or every other week, and owners start to look for advice concerning feeding and management practices. The aim of this study was to try and characterize the feeding regime of these animals during training season.

#### MATERIALS AND METHODS

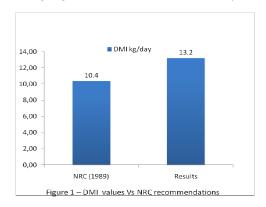
A filed survey was carried out involving a total of 12 saddlebreed horses under training conditions for "passo travado" races. This survey was carried out during training period, meaning that these horses were not competing at this time, but only in training for the

competition season soon to arrive. The survey was elaborated in order to evaluate feeding and management practices. Trainers/owners were interviewed regarding: 1) the age and sex of the horses; 2) their feeding practices, and 3) training and racing schedule. Also biometric measures were taken for all animals in order to estimate body weight; body condition score of the horses was also evaluated. Training was observed for at least 2 days in order to assess the intensity of training, and samples of feeds were collected for latter analysis.

Dry matter (DM), protein (CP) and digestible energy (DE) intake were estimated and compared to the NRC (1989) recommendations.

#### RESULTS AND DISCUSSION

The average estimated BW for the animals studied was of 550kg and the type of work was classified as moderate for the majority of animals. All animals were fed twice a day. The estimated mean DM intake for all horses was 13.18 kg which is 2.83 kg above the NRC recommendations (Fig.1). In spite of this higher amount of feed ingested, horses were in good body condition score, and not fat. The mean percentage of roughage in the ration for all stables was 46.04% and the type of roughage varied between meadow hay, alfalfa hay, and oat straw.



The mean daily CP and estimated DE intakes for all horses were 1476.6 g and 31.7 Mcal, respectively representing 367.7g and 4Mcal per day above NRC recommendations (Figs. 2 and 3). On the basis of this survey, overfeeding of protein is a common practice, probably due to the high values of protein in the commercial feeds offered.

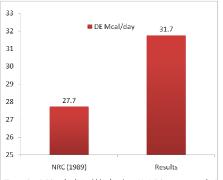


Figure 2 – DE intake (Mcal/day) values Vs NRC recommendations

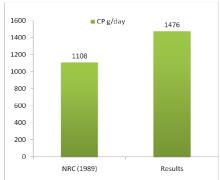


Figure 3 - CP intake (g/day) values Vs NRC recommendations

Nevertheless, and although reflecting a higher amount of feed and nutrient intake compared to recommendations, these animals were not in competition yet, only in training. This means that feeding regimes must be evaluated during competition season in order to better access feeding practices of these animals.

## FINAL CONSIDERATIONS

Data collected on this survey indicates that estimated CP, DE, and DM consumption are above the NRC recommendations. Nevertheless, feeding regimes and feeding practices should be evaluated also during the racing season on order to access any changes in these intakes.

# REFERENCES

National Research Council (NRC), 1989. *Nutrient Requirements of Domestic Animals.*  $n^{\varrho}$  6 *Nutrient Requirements of Horses*, 5th revised edition. National Academy of Sciences, Washington D.C. 100 pp.