

INVESTIGATION OF THE NEEDS OF AGED OR DEBILITATED HORSES

*Dr Briec de Moffarts (DMV, Ms, PhD)
Director Research & Development of TWYDIL®*

NEW PRODUCT: TWYDIL® BEBACK



Though the needs of horses under intensive care, aged or debilitated are not entirely known, some general rules can be outlined about their basic nutrition. As a general rule, specialists are unanimous in saying that the needs of an aged but healthy horse with a light work load are

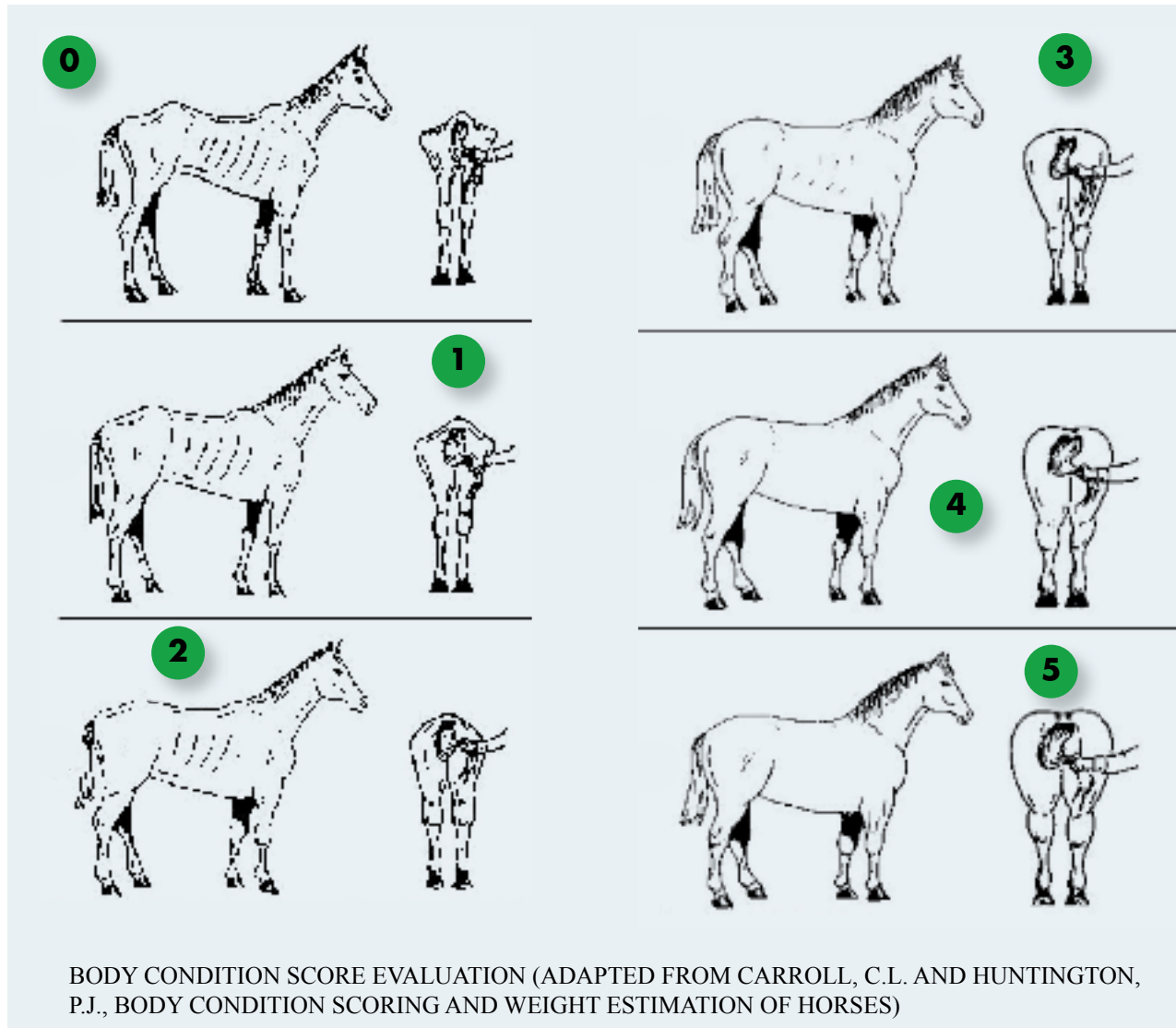
similar to those of an adult horse, while a horse aged but in increasingly poorer condition, with dental deficiency, must receive special appropriate feeding.

As a rule, special attention must be paid to the health of horses in increasingly poor condition, whether due to a primary pathology (colic, diarrhoea, trauma resulting in a confinement) or simply to age (often during retirement).

1. An energetic provision based on regular body check scores

The factors of weight loss of such horses lie in the inversion of the anabolic balance (mass increase) into a catabolic one (mass decrease), and in an increase of their needs as well as in a regression of their ingestion process. The factors considered here are: ageing, cessation of training and lack of physical activity, progressive loss of the dental function, absorption trou-

Figure 1



BODY CONDITION SCORE EVALUATION (ADAPTED FROM CARROLL, C.L. AND HUNTINGTON, P.J., BODY CONDITION SCORING AND WEIGHT ESTIMATION OF HORSES)

bles, sickness or even parasitism. In such cases helping the horse requires an energy provision consisting of a feed rich in fat (paradoxically easily digested by Equidae). The advantage of such a feeding is that fat, which is highly concentrated in energy, needs no mastication. This fat must be progressively supplemented; some aged horses can ingest hundreds of millilitres of oil a day. It is generally advised to use a mixture of vegetable oil (maize, linseed, colza etc.). Cereals should not be neglected, since they can support the horse's digestion when given in a treated form (as flakes, or ground etc.).

A regular body check, in case a regular weighing is not possible, can help spot the variations in the horses' condition (cf. Figure 1). A score of 2.5 to 3 will be optimal for this type of horses.

2. A diversified provision of fibres of good quality

For most horses, grass of good quality is one of the best solutions; however, for horses that cannot masticate properly, the use of moistened sugar beet pulp will be necessary to balance their cellulose deficit. Horses showing intestinal troubles can also receive mucila-

ginous fibres (cooked linseed or bran) in the form of a mash. In addition, they can benefit from a feed supplementation with prebiotics and probiotics (Figure 2) which help stabilise their digestive tract by replenishing the microflora.

3. An adapted protein ratio and quality amino acids

Seriously debilitated horses in a state of rapid weight loss will draw energy from their protein reserves (the muscles); this phenomenon will make them cachectic. In such cases, some additional protein ratio of 14-15% in their feeding is

necessary. In addition, aged horses with muscle loss due to inactivity can receive feeds rich in amino acids of good quality that, when combined with some just little work, will help keep their musculature in good shape (cf. HPH 02/03).

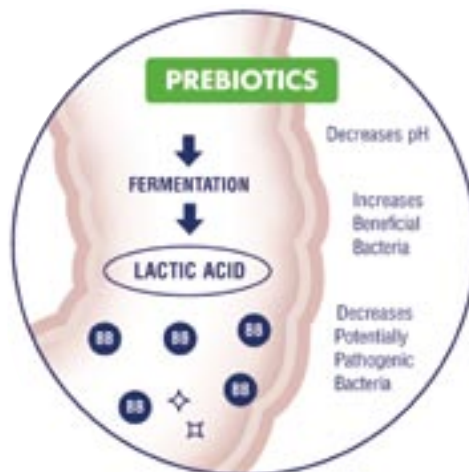
4. Vitamins and minerals to sustain the horses' organic functions

As with all horse categories, the feeding of horses in this age group must also contain the 14 vitamins, the 7 dietary minerals, and magnesium. In addition, the calcium-phosphorus ratio (1.8 to 2:1) should be constantly checked, considering that this ratio is even more important for aged horses fed with bran (which is very rich in phosphorus).

Horses with soft stool or with more or less serious dental deficiency need increased electrolyte provision due to the loss of water and electrolytes with the stool, and to the poor fermentation of fibres. It should be mentioned that the latter serves as a regulator of the hydro-

ionic balances. Please, plan a dose of 20 to 30g electrolytes a day to cover the horse's needs.

TWYDIL® BEBACK is a new feed supplement adapted for the needs of aged and debilitated horses since it provides them with the whole range of vitamins, trace elements, magnesium, amino acids and probiotics and prebiotics necessary for their well-being, convalescence and regeneration.■



BIBLIOGRAPHY

Carroll CL, Huntington PJ: Body Condition Scoring and Weight Estimation of Horses. *Equine Veterinary Journal*. 1988, **20**, 41 - 45.

Ralston SL: Clinical nutrition of adult horses. *Vet Clin North Am Equine Pract*. 1990, **6**, 339-54.

Siciliano PD: Nutrition and feeding of the geriatric horse. *Vet Clin North Am Equine Pract*. 2002, **18**, 491-508.

Dunkel BM, Wilkins PA: Nutrition and the critically ill horse. *Vet Clin North Am Equine Pract*. 2004, **20**, 107-26.

Julliard V: Impact of nutrition on microflora of the gastro-intestinal tract in horses. *ENUCO*, 2005, 85-103.

Figure 2

