Food for the summer season

by ***Domenico Bergero, Cynthia Préfontaine***
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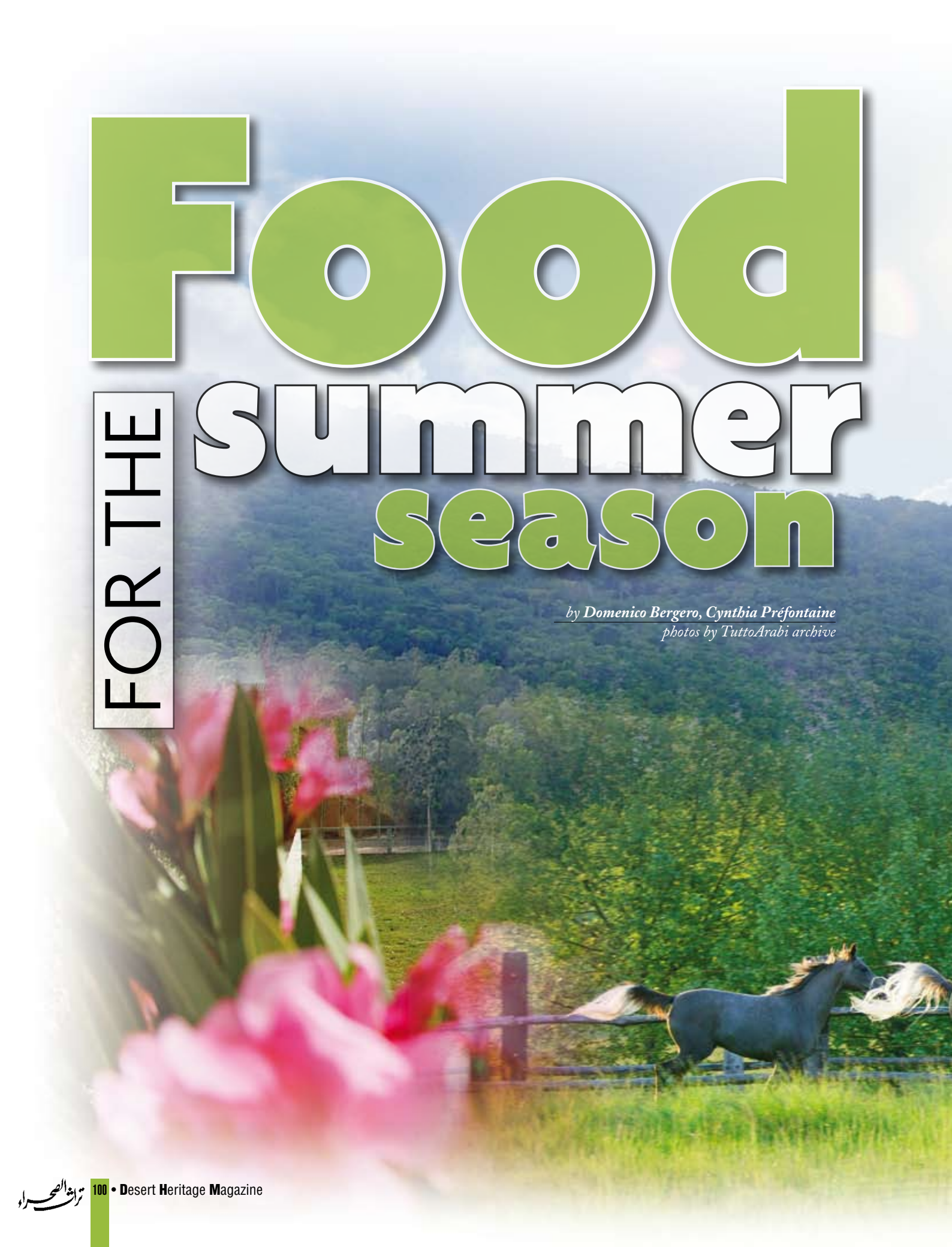

Summer is a critical time for every horse, but for sports horses it is even more so, as they find it difficult to get rid of the heat produced during exercise. Therefore, it is necessary to act to improve the sports horse's ability to withstand seasonal dangers.

For grazing horses, summer is typically the period in which activity is concentrated in the early hours, evening hours or even at night. During daytime, the activity is significantly reduced, if not totally absent. During these hours, horses enjoy standing in the shade of the trees, lazily chasing insects away. Nothing more. On the contrary, working horses do not always choose the environment they prefer the most or the hours in which they can train. Often it is the rider to decide, who in turn is pressurized by lots of daily commitments. This way, sports horses are those mostly at risk at this time of the year.

When we talk about food for sports horses during the summer season, it is worth clarifying some key concepts, connected yet separate. It is necessary to differentiate between food in the studs, food preservation and rehydration.

FOOD IN THE STUDS

First of all, the quantity of food given to the horses should not be reduced, as it often wrongly assumed. The need for food is in fact connected with weight and type of exercise, not with the whims of weather. However, that the diet must be adapted to the feeding quality and routine is absolutely true. In this season more than any other time of the year, horses require a balanced diet from an energy point of view, which provides the correct amount of energy and other nutrients. At this time of the year, horses spend an awful lot of energy to maintain the body temperature through regulatory mechanisms such as sweat; otherwise, the temperature would tend to rise. By doing so, the horses utilize energy but also get rid of water, electrolytes (sodium, potassium and chlorine) and also proteins. That is why it is necessary to change the quantities.

Body condition (presence and quantity of subcutaneous fat) and weight are two of the key factors to take into account. During the summer months, obese horses can become prone to a whole range of problems, because subcutaneous fat affects their ability to dissipate heat. In this case, if the external temperature is too high and particularly humid, as it is often the case in some stables with poor air circulation, the horses can be subject to health problems such as heat strokes. When it comes to feeding overweight horses, the portions must be appropriately reduced to help them gradually lose weight – also in relation to the exercise required – avoiding sudden drops in the total quantity of food. This can be done by changing the type of food and feeding routines.

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For the other horses, you can start by changing the quantity of hay or other fodder used. Fodder is the main source of fiber in food and is very important to guarantee the correct functioning of the gut and the intake of nutrients produced by microorganisms found in the large intestine (cecum and colon). The fiber is used mainly thanks to the fermentation process, which produces a remarkable quantity of heat. In the summer, the quantity of hay can be reduced to about 1 kg a day, in order to diminish the entity of this process without compromising the fundamental function of the large intestine, which incidentally supplies important vitamins, very useful in summer.

For horses kept on a bed of straw, it might be advisable to leave the quantity of hay supplied unchanged, but use another type of bedding other than straw, which is excellent in winter. This way it is possible to avoid the intake of too much fiber, as horses often love it, especially if it's straw from wheat.

Conversely, for grazing horses it is very important to ensure the presence of many shady areas.

In order to help the organism work less, busy dissipating heat in summer, you can also avoid feeding them during the hottest hours. Essentially, they must be fed at dawn, rather than in the morning, and then after sunset, rather than in the early night. This rule obviously clashes with stud schedules and staff requirements, but it is an excellent measure if you can arrange shifts.

With regards to concentrates, avoid sudden changes and products too rich in protein, as the large quantity of nitrogenous waste excreted makes kidneys overwork in a period in which less urine is produced due to sweat. In these cases, the risks are considerable. You can also use compounds that are light on the intestine, as they are simple to digest and rich in water.

During the summer months, the smaller amounts of hay can be balanced with a higher quantity of cereals or other foodstuffs (about half a kg more). In this case, the total energy of the food is essentially the same, but the heat produced by digestion is lower.

If we supply simple mixed foods, it is also possible to increase slightly the portion of barley and reduce that of maize. We

can also add a higher amount of bran, which has a refreshing effect on the intestine.
If, instead, we opt for compound fodder, we can give our friend a mix that lightens up the work of the digestive system and adds water, at least once a week.
If the horses are very tired and the hot temperatures make them lazy, we can integrate their food with electrolytes and cooking salt, but also with water-rich produce such as apples, carrots and other vegetables or, even better, let the horse graze for a few hours, preferably on a green and luscious polyphyte meadow.

FOOD PRESERVATION

High temperatures are dangerous not only for our horses. Many types of fodder do not withstand heat due to their composition, as the ingredients they contain are damaged by high temperatures. Molasses, for example, tend to ferment when it is hot or, in the best scenario, tend to become more liquid, creating serious issues about its preservation and use. The sun and the heat produced by its rays make fats become rancid much more quickly. This phenomenon can lead to a quick degradation of fats, creating a smell similar to that of rancid butter, and cause gastroenteric problems in the horses. After purchasing bags of fodder or bulks of cereals, in the summer it is necessary to preserve them accurately, to avoid problems. Each stud should have space to store fodder, which can also be used for other types of food and supplements. This way, the bags will not be kept outside where humidity and heat can damage their content. The food storeroom should always have – but even more so in the summer – good ventilation and a pleasant temperature, should not be overfilled with bags and should be kept without dust. In this room, it would be useful also to have insect and rats repelling systems.
It is best never to use altered food: apart from not giving the full intake, it might make the liver work excessively or, in the worst cases, lead to fully-fledged diseases.

REHYDRATION

Sweat is the main mechanism used to dissipate heat. In horses, sweat is produced all over the body by the so-called sweat glands, which are more concentrated in the areas where the nerves pass, on the back and between the legs. In the area of the neck, particularly visible is the quantity of albumin excreted through sweat, which takes the form of the white foam created by the rubbing of reins against the skin. The quantity of sweat excreted depends on numerous factors, such as the physical condition of the horse and the room temperature and humidity.
Sweat consists mainly of water, electrolytes (predominantly sodium, chlorine and potassium) and proteins.
During the summer period, there is an excessive sweating mainly due to the weather conditions and the abundant loss of water, electrolytes, proteins and a higher use of energy by the organism, so as to reduce and then maintain the body temperatures at normal levels.

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Horses can use lots of water when they are training in hot and humid environments. In these conditions, endurance horses can excrete up to 500 g per km and even more (especially less-trained horses). Therefore, during the hot season the horses must always have water near-by, as it compensates the loss of fluids and the amount of electrolytes the animal needs. For horses living in a loose box, it is necessary to clean the every day, so as to avoid potential obstructions or breakages, which would prevent the horses from drinking.

Grazing horses that do not have drinking troughs must be supplied with water in specific containers, preferably located in shady areas, where the sun does not shine directly and so the water evaporates less.

In order to counteract the abundant loss of electrolytes occurring during training and competitions, it is best practice to supplement the food with some salt, which adds sodium and chlorine (food quantities are usually very rich in potassium, the third main electrolyte). The quantity to be supplied can range between 20g and 100g, depending on the amount of activity and intensity of exercise.

Under many circumstances and during demanding training sessions and competitions, it is also important to use supplements readily available on the market, which supply not just electrolytes but also other minerals and vitamins, many nutrients involved in the regulation and dissipation of excessive body heat.

These products can be purchased as a powder to be mixed with water or food or as a paste. If they are given after tough training, it is always better to ensure that the horse drinks because, if that does not happen, it might lead to the opposite effect. The horse may find it difficult to drink water due to an altered sense of thirst, or after intense competitions. In this instance, the presence of salts in the stomach attracts liquids, thus worsening the dehydration of tissues. So make sure your horse drinks, even after the most unrestrained ride!