

## ***SYNOPSIS***

The use of equines for leisure purposes has been in constant increase for the last decades, the feeding behaviour of the juveniles has gained interest since these animals have to comply with the new methods of employment, maintenance and feeding.

The feeding behaviour of foals in the first days after parturition is especially relevant regarding the growth of the animal, the first contacts with the environment leave deep impressions on the new-born, which will influence the innate behavioural patterns and may also affect the adaptability of specimens to the behavioural and nutritional challenges they will face during their lifetimes. In our days, the adaptability of equines to the changes in employment and feeding gain more importance due to the evolution of the modern society, where horses have the new role of leisure or even “companion” animals. Ethological studies show that the first hours or even minutes after parturition are essential for knowledge acquisition. In the first minutes of the life of a new-born, the contact with caretakers and certain objects enhances the capacity of accepting new situations, thus reducing stress factors, and helps to build a balanced behavior. Reducing stress in the life of equines can help to prevent nutritional problems that increase at the animals kept by smallholders.

During research, twenty foals have been observed at three farms, from parturition to ab lactation. For the observation of the development of some behavioral patterns and the growth of the specimens, three observation intervals have been defined in the research protocol: the first seven days starting from parturition, followed by days 28-30 and 178-180.

The specimens have been observed with video cameras, specific issues being raised by this method during the research; physical data – such as weight and wither height – was collected within intervals predefined by the research protocol. The collected data has been recorded in ethological files and centralized in tables according to different criteria; and after the statistical processing, it has been displayed graphically for a more ample representation of the phenomena.

The foals’ first rising to its feet is essential for its survival, the average time of the group was 56 minutes after parturition, the minimal time being of 19 minutes, while the maximum was of 125 minutes. After standing, the first suckling and the consumption of the colostrum is very important for the survival of foals, the medium time that has passed until the first suckling was 94 minutes, with a minimal individual value of 37 minutes after parturition and a maximum of 175 minutes after parturition.

The passing of the meconium has a decisive role in the life of the new-born, this act being the proof that the gastrointestinal tract is active and functioning correctly, the retention of meconium can cause colic and in extreme cases, even the death of the animal. The passing of the meconium has occurred successfully,

without human intervention, at all the specimens of the observed group, in an average time of 164 minutes, the individual minimum being of 62 minutes, while the maximal value was of 295 minutes after parturition. The statistical calculations showed a positive correlation between the first time standing and the first time suckling.

The analysis of the data shows differences with regard to the breed and gender of the specimens: fillies have risen to their feet and begun suckling faster than colts, the specimens of the Lipițan breed have risen to their feet and begun suckling close to the average time, the specimens of the Nonius breed have risen to their feet and begun suckling below the average time, while the specimens of the Romanian Semigreu crossbreeding have risen to their feet and begun suckling faster than the average.

The average weight of the observed specimens has been around 48 kg at birth, with a minimum of 39 kg and a maximum of 61 kg. The physical evolution of the individuals has had an increasing trend, at the end of the observation period the average was of 158 kg, the minimal value being 125 kg and a maximal value of 197 kg. Heavier weight at birth does not guarantee a heavier weight at the moment of ab lactation, distinctions in the evolution of specimens can be observed during the physical development, the increasing trend remaining constant with smaller differences. The wither height evolution is more balanced within the observed group, the average at birth being of 105 cm with an individual minimum of 92 cm and a maximum of 112 cm, while at the end of the observation period, the average was of 139 cm, with a minimum height of 125 cm and a maximum of 147 cm.

In the first period of their lives, the foals feed solely on dam milk, after 10-14 days of age the foal starts to feed also on forage. From its first days of life, the foal is very attentive to the mare's behavior, especially to its feeding, and if it can reach forage, the foal will approach it with specific suckling motions, without actually consuming it.

The duration of feeding has a decreasing trend with the aging of the specimens, the average being of 178 seconds, while at the end of the observation period, at the age of 180 days, the average duration of suckling decreases to 47 seconds. In the first days, almost half of a suckling interval is used to recognize the teats, and alternating between the two teats of the mare, this period decreasing considerably with the aging of specimens. The time spent feeding and the number of feeding intervals presents major differences from one specimen to another.

At the specimens observed from birth to the age of 180 days, the daily suckling intervals averaged at 74 times per day, with a maximal average of 83 times per day and a minimum of 51 sucklings per day.

The observed group of foals was composed of 20 specimens, which suckled dam milk averagely 74 times per day during the observation period, with a high individual dispersion, the minimal value being of 5 sucklings per day, and a maximum of 92 sucklings. For a more thorough representation of this behavior, the

observation period has been divided into four categories of age which have been interpreted separately.

During the first two days, the average number of suckling intervals was 79 per day, with an individual minimum of 39 sucklings per day, and a maximum of 92 sucklings per day.

During the next period, days 3 to 7, the suckling intervals averaged at 83 per day, with an individual minimum of 67 and an individual maximum of 91 sucklings per day.

With each day, the foals gain more certainty in locating the teats of the mare, during days 28-30, they already have forages on their daily menu, but dam milk still has the major role in their nutrition. During this period, foals consume dam milk averagely 78 times a day, with an individual minimum of 61 sucklings per day, and an individual maximum of 90 times a day.

During the last period of the observation, before ablactation, during day 178 to 180 of their lives, foals consume dam milk averagely 51 times a day, with major individual differences, between 5 and 67 sucklings a day. The periodicity of suckling intervals can be outlined, peak intervals of feeding alternating with intervals of resting. Major differences between specimens are influenced by breed, gender etc. The characteristics of the dams' milk production are being influenced to some measure by the quality of available forages.