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**The influence of the enriched environment on the reactivity  
of the precociously handled foals (*Equus caballus L.*).**

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In a preliminary study, we evaluated the effect of precocious handling (at birth, 10, 30 and 60 days) and enriched environment on foal. Two experimental groups were created:

- 3 foals not handled and stabled in semi-enriched environment (Group A).
- 6 foals handled and stabled in an enriched environment (Group B).

All nine foals were tested with a novel object test (umbrella) at three months of age, to assess the Heart Rate (HR) values measured by a telemetric heart rate monitor (Polar Horse Trainer®), during opening, touching and closing of the umbrella.

The statistical analysis carried out by means of the Mann-Whitney test showed lower HR values of the foals of group B ( $P < 0.05$ ).

Furthermore we have investigated 10 foals born between 2006 and 2008 to study the influence of enriched environment and precocious handling on behavioural responsiveness. The foals were housed on a farm which ensured an enriched environment and made social intra and interspecific interactions easier, *alias* autoshaping. They were submitted to:

- Handling within 24 hours from birth.
- Handling and reactivity test (arena test) executed at 10, 30 and 60 days.

The temporal correlation was studied among ages and baseline HR values, using the Spearman's test, to assess the beginning of neurovegetative HR control.

In fact statistically significant differences were obtained ( $r = -0.431$ ;  $P < 0.02$ ). Temporal values of obtained HR baseline, using the Wilcoxon test, showed lower values at 60 days. The comparison was significant among mean and max baseline HR values of 30 vs 60 and 10 vs 60 ( $P < 0.05$ ), while no differences were observed during the reactivity test. This shows that adequate conditions of management associated to a precocious and continuous handling allow the foals to maintain their natural investigative behaviour disappearing fear and flight reactions.