

Global Equine Research Alliance Study

Drs. Chris Kawcak and Wayne McIlwraith are participating in a world-wide study in which the effects of early exercise on the musculoskeletal system are being studied in the hopes of finding a means of strengthening bones, joints and soft tissues in horse's limbs. In collaboration with Drs. Elwyn Firth and Chris Rogers at Massey University in New Zealand, Drs. Rene VanWeren and Ab Barneveld at Utrecht University in The Netherlands, and Drs. Roger Smith and Allen Goodship at the University of London, the investigators are studying a group of 33 Thoroughbred horses in New Zealand. Half of these horses have been exercised since 10 days of age, in addition to the normal pasture routine of the control group. Several clinical and imaging examinations have been performed to date, and, in April, samples were collected from the horses. These samples will be evaluated by the different laboratories to determine if there is a positive effect of early exercise on bone, joints, tendons and ligaments.

The remaining horses will be race trained and regularly reevaluated through to the end of their three-year-old year of training and, hopefully, racing. The ultimate goal will be to see if early exercise will lead to a significant reduction in lameness and injury in the horses during race training.

Results so far indicate a significant increase in bone strength due to early training. The tendons and ligaments of the trained horses also appear to be more mature, and the trained horses are far more fit in their appearances compared to the control horses. Therefore, there appears to be a positive effect of early exercise on tissue strength. If this positive trend in results continues, then early training of horses may be a simple method of preventing orthopedic injury in horses.

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