

WHITE PAPER: EQUINE PHYTOCANNABINOID DOSING STUDY

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A study was performed in 30 horses from three different barns by three different veterinarians in three different states to determine the most effective dosage of phytocannabinoids such as cannabidiol in the horse based on the condition being addressed and the size of the animal.

Each horse was given a precise dosage of zero THC hemp oil, administered (ideally) twice daily of 25 or 50 mg of CBD applied to the inner lip, to provide transmucosal absorption which has been determined in the dog to be the better route of administration over oral through the GI system or transdermally through the skin.

Each horse was first given the 25 mg dosage for two weeks and observations were recorded by the veterinarian and by the horse owner. After a week of washout where nothing was given to the horse so their blood levels would return to zero phytocannabinoids, the higher tier of dosing with 50 mg twice daily to the inner lip was administered over a two week period and observations were made and recorded.

At the end of the second period, it was asked of the horse owners to discontinue the use of the hemp extract so we could measure the time it takes for the CBD to be completely cleared from the blood of their horse. All of the private owners refused to stop the CBD because their horses were doing so well.

This CBD blood clearance determination is an important measurement to make so as to accurately inform horse owners when to stop giving CBD for therapeutic purposes so as to not test positive for CBD on blood tests performed at various events. Another, larger clearance time study for both horses and dogs is currently in the planning stage, and is being done in collaboration with one of the largest drug testing labs in the country.

RESULTS:

25 mg Dosing once or twice daily.

Due to circumstances beyond the control of the veterinarian, a number of horses were only able to be given their hemp once daily. These horses still showed good improvement on the hemp dose.

This **lower dosing tier** worked well for:

- Anxiety associated with loading into trailer, eventing, general nerves and difficulty riding as a result
- Mild lameness was reduced or eliminated depending on the severity of the problem

50 mg Dosing once or twice daily.

This **higher dosing tier** worked well for:

- More severe lameness
- Laminitis, mild to moderate. Severe, progressed, chronic did not respond as well
- Metabolic syndrome
- **NOTE:** For horses without severe issues, at this higher dosing tier, some would experience a certain degree of "relaxation" and rest comfortably until called to action.

Other applications remain to be determined with future research.

Note: Animal size did not seem to be as important a determinant of dosage effectiveness. The size of the experimental subjects