

## **Aloe vera gel and Coriandrum sativum seeds: traditional medical plants and their role as anti-diabetic agents in dogs**

Authors: Wöschler S<sup>1</sup>, Coenen M<sup>1</sup>, Abraham G<sup>1</sup>, Kuchta K<sup>2</sup>

Institute: **1** Institute of Animal Nutrition, Nutrition Diseases and Dietetics, Faculty of Veterinary Medicine, University of Leipzig, An den Tierkliniken 9, 04103 Leipzig, Germany; **2** Clinic for Gastroenterology and Gastrointestinal Oncology, Göttingen University, Robert-Koch-Str. 40, 37075 Göttingen, Germany

This study aims to evaluate acute anti-diabetic or anti-obesity effects of Aloe vera gel and milled Coriandrum sativum L. seeds as oral treatment for several diabetes related blood parameters including glucose (G) and insulin (I) in dogs. 4 female and 5 male healthy beagle dogs were used in 2 experimental phases each 5 weeks 1 week of control diet (cd), 2 weeks of phytotherapy (cd herbal preparation) and 2 weeks of wash-out period (cd). The herbal preparations were dosed 2g/kg body weight (BW)/day. Fasting and postprandial blood parameters were assessed after control period, first-, and second week of phytotherapy period. The BW was measured weekly and a general examination was carried out two times per week. The BW decreased 1.4% and 0.8% after two weeks of treatment with A. vera ( $p=0,001$ ) and C. sativum ( $p=0,112$ ), respectively. Hemogram and blood chemistry revealed no impact of herbal preparations. Blood G peaked at 160 up to 183 min after the meal containing A. vera and C. sativum respectively. Max I concentrations of 37 up to 55  $\mu\text{U/ml}$  refers to the I response on the meal and showed no treatment effect. A. vera gel and C. sativum seeds exert in a 2-week oral treatment period no significant side effects on general conditions of dogs and on blood parameters. In healthy dogs, no effect was detectable on blood G and I responses. However, significant positive effects on weight regulation could be confirmed.