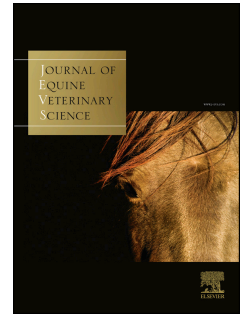


# Accepted Manuscript

Enteral fluid therapy in horses: effects of maintenance hypotonic electrolyte solutions containing maltodextrin, sucrose or dextrose administered in continuous flow

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**Enteral fluid therapy in horses: effects of maintenance hypotonic electrolyte solutions containing maltodextrin, sucrose or dextrose administered in continuous flow**

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**Abstract**

**Objective** To evaluate the effects of maintenance hypotonic electrolyte solutions containing carbohydrates administered by naso-esophageal tube in continuous flow in horses during 12 hours on body weight, waist circumference, water intake, aspect and moisture content of the stool, frequency of defecation, urine density and urinary glucose, sodium, potassium, chloride, urea and creatinine and urinary volume in horses.

**Design** We used six mares randomly divided into three treatments in two Latin squares 6 X 3, concurrent, in mixed-model.

**Procedure** All solutions had the same composition (5 g of NaCl, 0.5 g of KCl, 200 mg of magnesium pidolate and 1 g of calcium gluconate, diluted in 1,000 mL of water), only differing in power source and osmolarity. ESMaltodextrin - electrolyte solution plus 15 g of maltodextrin (measured osmolarity of 203 mmol L<sup>-1</sup>); ESSucrose - electrolyte solution plus 15 g of sucrose (measured osmolarity of 234 mmol L<sup>-1</sup>); and ESDextrose - electrolyte solution plus 15 g of dextrose (measured osmolarity of 264 mmol L<sup>-1</sup>). The electrolyte solutions were administered at a dose of 15 mL kg<sup>-1</sup> h<sup>-1</sup> for 12 h in continuous flow.

**Results and Conclusion** Maintenance hypotonic electrolyte solutions containing maltodextrin, dextrose and sucrose were effective in promoting diuresis and decreasing urinary density, without presenting adverse effects. ESSucr was more effective in softening the stool.

**Keywords:** Equine; hypotonic fluids; continuously; small caliber tube, enteral

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