

# **A liquid chromatography method using a monolithic column for the determination of corticoids in animal feed and animal feeding water**

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## **Abstract-**

**An HPLC-DAD method for determining corticoids in calf feed and in animal feeding water samples using a monolithic column has been developed and validated. The method optimization included the study of binary mobile phases of water and acetonitrile. The optimum separation was achieved at 40 degrees C, with acetonitrile:H(2)O 29:71 v/v used as mobile phase and a 3 ml/min flow-rate, which resulted in their separation in about 5 min. Two reported sample procedures were applied to feed and for animal feeding water samples prior to HPLC. Method validation was carried out according to the EU criteria established for quantitative screening methods. The results indicate that this method is highly specific, reproducible and accurate. The proposed method was found to be robust and unaffected by small variations in the extraction procedure and in HPLC conditions. The developed method for the determination of corticoids in feed and water samples was also found to be suitable for different kinds of feeds and waters.**

**Index Terms- Corticoids; Growth-promoting agents; Monolithic column; Animal Feed; Animal feeding water;**

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