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## **STUDIES CONCERNING DDW USE FOR DEUTERIUM DEPLETION IN THE ORGANISM OF LABORATORY ANIMALS**

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### **Abstract**

Administration of DDW (deuterium depleted water) represents a proper method to reduce deuterium in biological systems. In present study experiments were performed in order to observe the deuterium's concentration decrease in laboratory animals' bodies using DDW as depleting agent, the main ingredient for the commercial product QLARIVIA™<sup>2</sup>. Deuterium depletion studies were elaborated on laboratory animals, nourished with standard food and drinking water, respectively DDW. Biological samples were analyzed through mass-spectrometry. The results showed that in natural conditions, the mammals' organisms have the tendency to accumulate deuterium through bioaccumulation process. As a conclusion it can be noticed that the grade of deuterium depletion from mammals' bodies seems to be especially under the influence of DDW's concentration and of administration's period of time.

**Key words:** deuterium depletion, laboratory animals

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