



ASSESSMENT OF DEUTERIUM DEPLETION IN PLYMOUTH ROCK CHICKENS' BODIES

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Abstract

Deuterium content of living animals body can be increased, with dramatical effect over the health state, through bioaccumulation process by continuously adding of heavy water in their nourishment. On the other hand, deuterium depletion has been mentioned in literature as a health stimulator and a new possible anticancer tool. In this context, the present paper investigated the deuterium depletion process at chickens (breed Plymouth Rock, white variety), after DDW's (deuterium depleted water) administration. Chickens were raised and nourished with standard food and drinking water, respectively DDW. Liquid and solid samples were analyzed through mass-spectrometry for isotopic deuterium content. The results showed that DDW's administration decreased the isotopic content in deuterium in chickens' bodies. The deuterium depletion is made in time and it is a process which affects the entire organism.

Key words: chickens, depletion, deuterium

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