Influence of Deuterium Depleted Water on Rat Physiology: Reproductive Function, Forming and Posterity Development

Lilia V. Fedulova, Stepan S. Dzhimak, Elena A. Kotenkova, Ekaterina R. Vasilevsky, Irina M. Chernukha

Abstract

Reproductive function and postnatal progeny development of rats in four generations treated with deuterium depleted water (40 ppm) were investigated. The targeted generations were parent (F0), first (F1), second (F2) and third (F3). Replacement of tap water to deuterium depleted water did not influence on fertility index as well as on survival and postnatal offspring development. Reproductive function, physical parameters and reflexes development in rats and pups consumed DDW was similar or more intensive in comparison with control group. Therefore, DDW consumption did not possess any toxic effects and may enhance general postnatal development.

Keywords

Fertility, deuterium depleted water, rats, generation, adaptation
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