Drinking Alkaline Electrolyzed Water Suppresses the Elevation of Serum Triglyceride Level in Rats

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Received Feb. 27, 2005 / Accepted Sep. 13, 2006

Keywords: alkaline electrolyzed water, triglyceride, reduction, rat, drinking

ABSTRACT

Rats were fed with the semi-synthetic diet and alkaline electrolyzed water (AEW) made from electrolyzing tap water in order to examine the effects of AEW on serum lipids level, short-chain-fatty acids contents in the cecum of rats, and the growth of rats. The triglyceride and phospholipid levels in the serum were significantly lower in AEW-drinking rats than in tap water-drinking rats. AEW made from ion-exchanged water was also examined for its effects on the serum lipids level of rats that were fed non-oxidized or oxidized diets. The serum triglyceride level was lower in rats taking oxidized diet and AEW than in rats taking oxidized diet and ion-exchanged water. These results indicate that AEW is capable of suppressing the elevation of serum triglyceride level of rats. The content of butyric acid in the cecum of AEW-drinking rats was significantly lower than that of tap water-drinking rats. No effect of AEW drinking on rat's growth was observed.