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Antioxidative Effect of Enzymatic Hydrolysate of Horn and Hoof in Rat

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The antioxidative effects of enzymatic hydrolysate of horn and hoof (EHHH) from cow and buffalo, keratin-containing livestock waste, were studied using rat with carbon tetrachloride (CT)-induced liver injury. There was no effect on rat growth such as body weight gain, kidney or liver weight, when rats were fed on a diet containing EHHH. When liver injury was induced in rats using CT, the value of rat liver thiobarbituric acid-reactive substances (TBARS) increased. However, EHHH effectively reduced the value of the liver TBARS. Furthermore, EHHH restored the liver mitochondria catalase activity, which was reduced by CT.

Keywords: horn and hoof, enzymatic hydrolysate, carbon tetrachloride induced-liver injury, antioxidant activity

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