



Effects of diet with different zinc levels on growth performance and N-balance of growing mink (*Neovision vision*)

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1 SUMMARY

This study was performed to evaluate the effects of diet with different zinc (Zn) levels on nutrients digestibility, growth performance, and nitrogen (N) retention of growing mink. Seventy-five healthy male minks were selected and randomly divided into five groups with different types of diet. The diet was supplemented with 0, 50, 100, 300, and 600 ppm Zinc (as ZnSO₄H₂O) for 75 days. The minks had no adverse reactions, the treatment codes were Z0, Z50, Z100, Z300, and Z600. From early July to middle September, the results indicated that minks fed 100 ppm added Zn had greater average daily gain (ADG) than other treatments ($P<0.05$), average daily feed intake (ADFI) increased with dietary zinc level increasing ($P<0.05$), feed to gain ratio (F/G) were similar among all treatments ($P>0.05$). Digestibility of dry matter (DM), ether extract (EE), crude protein (CP) and crude carbohydrate (CC) were not affected by different diets ($P>0.05$). N retained was greatest in Z100 group ($P>0.05$). In contrast, Fecal N of minks was lowest in Z100 group ($P<0.05$). In conclusion, when the diet supplementation with 100 ppm Zn as ZnSO₄ H₂O could improve the growth performance of minks during growing period, and the optimal total Zn in diet was 119 ppm.
