

Fig.S1

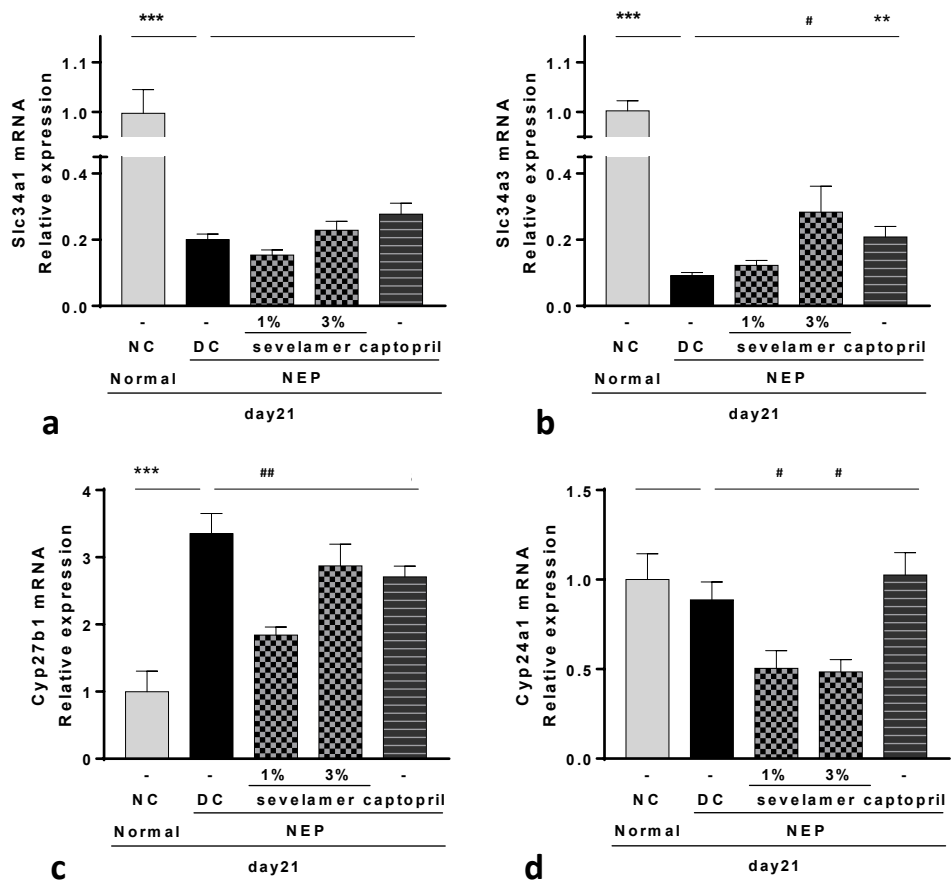


Fig.S1. Effects of sevelamer and captopril on kidney mRNA expressions, Slc34a1, Slc34a3, Cyp27b1, and Cyp24a1 in NEP25 mice. **a** Kidney Slc34a1 mRNA expressions. Slc34a1 mRNA levels were drastically decreased in NEP25 mice. The decrease was not ameliorated by any treatment. **b** Kidney Slc34a3 mRNA expressions. Slc34a3 mRNA levels were drastically decreased in NEP25 mice. The decrease was not ameliorated by sevelamer 3% and captopril treatments. **c** Kidney Cyp27b1 mRNA expressions. Cyp27b1 mRNA was increased in NEP25 mice. Only sevelamer 1% suppressed the increase. **d** Kidney Cyp24a1 mRNA expressions. Cyp24a1 mRNA was not changed in NEP25 mice. Only sevelamer suppressed Cyp24a1 mRNA levels. Mean + SE, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, Student's t-test vs. DC. $^{\$}p < 0.05$, $^{\$\$}p < 0.01$, $^{\$ \$ \$}p < 0.001$, Dunnett's test vs. DC

Fig.S2

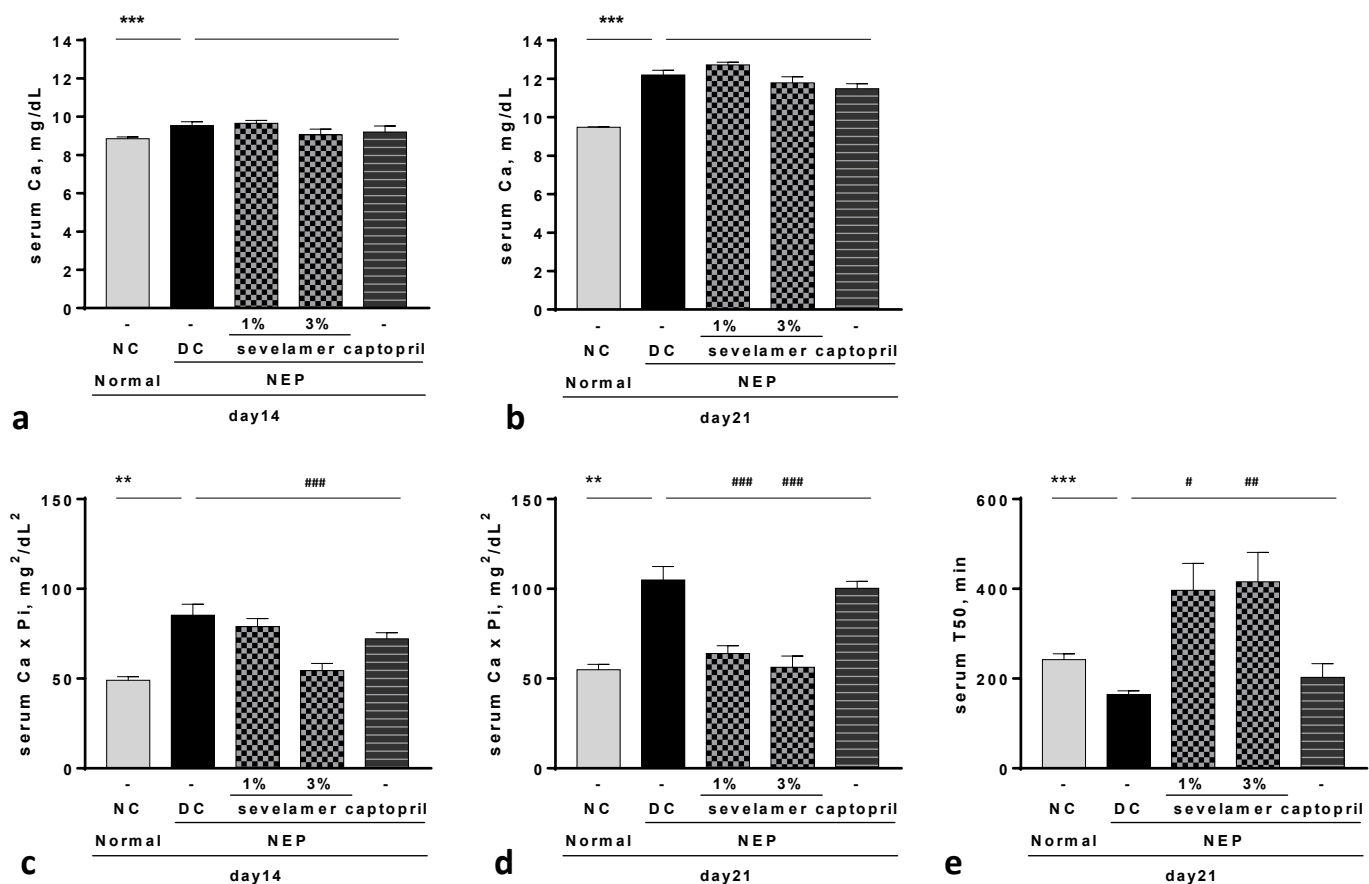


Fig.S2. Effects of sevelamer and captopril on serum Ca, Ca x Pi product, T50 in NEP25 mice. **a,b** Serum Ca levels increased on day 14 and 21 in NEP25 mice. There were no differences in serum Ca levels in the sevelamer, captopril from those in disease control. **c,d** Serum Ca x Pi product was increased on day 14 and 21. Sevelamer treatment ameliorated the increase on both day 14 and 21. Dose-dependent amelioration was observed only on day 14. Captopril treatment did not change the increase. **e** Serum T50 time as calcification indicator on day 21. The T time was decreased in NEP25mice. Serum T50 time in the sevelamer group was greater than in normal control. Captopril did not show a clear effect on serum T50. Mean + SE, *p<0.05, **p<0.01, ***p<0.001, Student's t-test vs. DC. \$p<0.05, \$\$ p<0.01, \$\$\$ p<0.001, Dunnett's test vs. DC