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. 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 NEP25 mice. 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. $p<0.05$, $^2$p<0.01, $^{3\text{}}$p<0.001, Dunnett’s test vs. DC.