



**Fig. S1. Regression analyses of urine ions in common carp (*Cyprinus carpio*) exposed to neutral pH (pH 7.6) control water or acid water (pH 4.0).** (A) There was no statistical significance between urine  $[\text{NH}_4^+]$  and urine  $[\text{Na}^+]$ . (B) There was a significant positive relationship between urine  $[\text{NH}_4^+]$  and urine  $[\text{K}^+]$ ,  $P < 0.05$ . (C) Urine  $[\text{NH}_4^+]$  and urine  $[\text{PO}_4^-]$ ,  $P < 0.05$ , and urine  $[\text{NH}_4^+]$  and urine  $[\text{Mg}^{2+}]$ ,  $P < 0.05$ .