To investigate the possible effects of food on developing tadpoles. TK stage I tadpoles of *Rana rugosa* and NF stage 45 tadpoles of *Xenopus laevis* were fed on boiled spinach (group 1), Sera micron (group 2), medaka's food containing a small amount of estrogen (group 3), and medaka's food + cholesterol (group 4). Results showed: (1) *R. rugosa* group 1 tadpoles were normal in development, and completed metamorphosis. Group 2 tadpoles were of various sizes, preyed on each other during early larval stages, and 50% completed metamorphosis. 70% of group 3 and 4 tadpoles died, and the remaining 30% completed metamorphosis. (2) For *X. laevis* still under investigation, group 2 tadpoles are normal, and 50% completed metamorphosis. Group 1 tadpoles are at stages 49-57, only one completing metamorphosis. Group 3 and 4 tadpoles began to appear from day 90 on, but were underdeveloped, and subsequently died.