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Effects of neutral phytase on growth performance and phosphorus utilization in crucian carp (*Carassius auratus*)

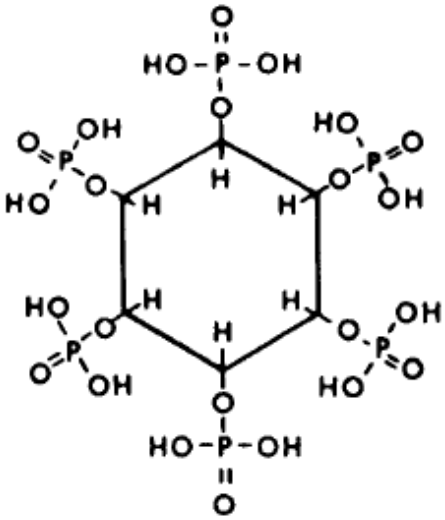
Key words: **Neutral phytase, Crucian carp (*Carassius auratus*), Growth performance, Phosphorus utilization, Apparent digestibility coefficients, Body composition**

Research Summary

- ✓ The aim of this study is to evaluate the effect of neutral phytase on the growth performance, nutrient digestibility of feed, phosphorus utilization, body and blood biochemical indexes, and intestinal digestive enzyme activity of crucian carp with regard to a lack of available P.

- ✓ This study also aims to examine the scope for reducing aquaculture pollution by partially replacing Ca(H2PO4)2 with neutral phytase, thereby minimizing the discharge of P into the environment.

Conclusions



Neutral phytase:

- ✓ **convert phytate-P to available P**
- ✓ **enhance the growth performance of crucian carp**
- ✓ **improve the bioavailability of P, protein and metal ions in the diet**
- ✓ **minimize P discharge into the environment and ultimately reduce aquaculture pollution**