

CALIFORNIA STATE SCIENCE FAIR 2009 PROJECT SUMMARY

Name(s)

Sara S. Aboobakar

Project Number

J2401

Project Title

Becoming the Biggest Brine

Objectives/Goals

Abstract

My goal was to see if placing a crushed L-Lysine tablet in my brine shrimps' habitat would help them grow larger, compared to the regularly grown shrimps.

Methods/Materials

I used 10 brine shrimp eggs (which would later hatch) in each of the four 500 mL bottles, the bottle were cut around the top making it easy to see the shrimps and for the shrimps to get air. Two 500 mg L-Lysine tablets were crushed and then one of the tablet's powder was put in one bottle, and the other's powder in the other bottle. Four grams of crushed rock salt was also put in each bottle. Lastly, 500 mL of water was added to each bottle.

Results

After the two week period the L-Lysine enhanced shrimps grew to be larger than the regularly grown shrimps.

Conclusions/Discussion

L-Lysine is a natural amino acid that builds protein in both animals and humans. However it can only be consumed and not produced. Since L-Lysine is all natural, it created a non-toxic and healthy enviornment. One side effect was that it made the shrimp hyper and energetic. Although the L-Lysine grown shrimps grew to be larger, they grew at a rapid pace at the start and slowed down after the 8 day mark. While the regularly grown brine shrimps kept at their gradual pace the whole two week period. So overall, the application my project can make to the real world is that if athletes want the results of steroids and don't want to harm their bodies, they can take L-Lysine pills as a substitute.

Summary Statement

My project is about the effects of L-Lysine on brine shrimps, and if it will advance their growth pace, compared to the shrimps that are regularly grown.

Help Received

Mother helped with the ordering of the materials.