The effects of protein level on growth rates of the common mummichog, *Fundulus heteroclitus*

This study was done on whether different amounts of dietary protein will affect the growth rate of the mummichug, *Fundulus heteroclitus*. The protein level should affect the growth rates of the mummichugs due to the fact that they need sufficient protein levels in order to grow efficiently and obtain energy. I had a total of nine experimental groups with three different levels of a protein diet. There were three tanks for each of the three protein levels. One protein level was spinach-added diet (low). The other was commercial pellets (medium) and the third was a shrimp added diet (high). There were no significant differences in the growth rates of mummichugs among the protein diets (ANOVA, $p>.05$). Published studies found that when the right protein to energy ratio was shown, that was when the fish size had increased the most and the fastest. My data did not show a significant difference; one reason could be because 10 fish were in a ten gallon tank, so there was not as much movement as there would have been in the wild, they all gained weight. Another reason could be because one fish could be more dominate than the others so he ate a lot of the food.

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