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Investigation of Foraging Strategies of *Xiphophorus Helleri*: Group versus Solitary Feeding

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In any foraging situation, an animal must determine if the benefits of continuing to forage in a particular manner exceed costs such as exposure to predators and lost reproductive opportunities. In addition to these costs, other factors exist which influence foraging decisions, including hunger level and competitive ability. Specifically, these conditions have been shown to have a significant effect on the choice of an organism to feed in a group or individually. Experiments were conducted using female green swordtail fish, *Xiphophorus helleri*, to determine which foraging situation (group or solitary) is chosen in four different treatment sets: normal diet/no predator present; reduced diet/no predator present; normal diet/predator present; reduced diet/predator present. Preliminary results suggest the fish subjects prefer the group environment to the solitary one in all cases.