



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

Name(s) Jamie L. Ryan	Project Number 31488
Project Title Does Sugar Affect a Mealworm's Weight?	
Objectives/Goals The objective is to determine if sugar will affect the weight of mealworms. Methods/Materials Prepare 16 containers with a cup of oats and ¼ of a potato. Separate the 16 containers into four groups. In all the containers, gently lay ten worms. The first groups label as the control group. Label each container A, B, C, or D without repeating letters. Add the varying amounts of sugar to the containers and label. Weigh worms at appropriate times and record data in log book. Repeat the process daily for the total allotted time. Results The group of mealworms without sugar reached an average weight of 0.5 grams per worm on days 10 through 13. The group of mealworms with 2T of sugar reached an average weight of 0.5 grams per worm on days eight and nine. The group of mealworms with 4T of sugar reached 0.7 grams per worm on day 13. The group of mealworms with 6T of sugar reached an average weight of 0.5 grams per worm on days 11 through 13. Conclusions/Discussion The conclusion of this project was that 4T of sugar reached the greatest weight per worm. My hypothesis was correct because 4T of sugar did increase the weight of the mealworms. Two tablespoons of sugar wasn't enough sugar to make an impact on the worm's weight. Six tablespoons of sugar was too much sugar for the worm's diet. So if you needed to gut load your mealworms, to feed your livestock or even to enjoy yourself, then it would be a smart decision to add sugar to the worm's diet before it is consumed.	
Summary Statement The project will determine if different amounts of sugar will affect mealworms weight.	
Help Received none	