



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Talar Kassabian	Project Number 34690
Project Title Quest for Longevity	
Abstract Objectives/Goals The purpose of my project is to test if antioxidants can counteract the effects of free radicals. Methods/Materials I will place 15 male flies in cultures with the different experimental concentrations of H ₂ O ₂ only, acai only, and concentration combinations of both, in addition to the control culture. To measure the effect of my variables I will keep track of the dead flies on a daily basis. Results My results show that the hydrogen peroxide shortened the life span, while the acai powder helped lengthen the life span of the flies except for the highest concentration of acai. When peroxide and acai were combined the lifespan of the flies decreased in comparison to the control group, except for the combination on 4.5% acai and 0.5% H ₂ O ₂ , but when compared to the different corresponding concentrations of H ₂ O ₂ the flies lifespan increased. Conclusions/Discussion According to my data it is clear show radicals do decrease the lifespan of fruit flies. According to my data the flies with 1.5%, and 3% acai had longer lifespans, however the flies with 4.5% acai had shorter lifespans, which rejects my hypothesis of all concentrations of acai being beneficial. Since only one combination (4.5% acai+0.5% H ₂ O ₂) had a longer lifespan than the control groups, while the rest had shorter lifespans, my hypothesis was rejected.	
Summary Statement Can antioxidant counteract the effects of free radicals.	
Help Received Teacher helped put project together; Mother helped handle flies; Father helped put together board.	