



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Xavier T. Csato	Project Number 36389
Project Title Radiation Investigation: What's in YOUR Fish?	
Abstract Objectives/Goals The objective of my study is to determine whether the species and/or location of fish has an affect of the radiation levels found within. Methods/Materials Vernier Labpro, Vernier Radiation detector, Bluefin Tuna, Cuttlefish, Red Sea Bream, Mahi Mahi, Fresh Tuna, Sockeye Salmon, Farmed Salmon, Pacific Snapper, Albacore Tuna, Iwashi Sardine, Dover Sole, Computer, Logger Pro Application, and paper plates. My procedure for testing the fish was to buy fish, identify where fish is from, cut all of the fish into equal portions, and test for radiation using a Vernier Radiation Monitor. Results When I finished testing and I analyzed my data I realized that the Albacore Tuna from Fiji had the highest average count of radiation, and the two fish with the highest overall count of radiation were the tuna and the Dover Sole from the USA. According to the Vernier radiation monitor I used, anything above 10 counts of radiation is unsafe, and even though nothing equaled or topped 10 radiation counts, the Dover Sole and tuna came close with a 7. Conclusions/Discussion After analyzing my data, I partially accept my hypothesis about the tuna fish containing the most radiation. According to my data, fish from the USA contain the most radiation and tuna contain the most radiation. This could be bad because there is a revolution to start buying locally produced foods, but fish from the USA contains radiation and may be harmful to your health.	
Summary Statement I showed that the radiation levels in different species of fish from different locations while not harmful alone, can be harmful when consumed at a constant rate.	
Help Received My mother helped me purchase the fish I used, my science teacher Norm Brennan provided a radiation detector, and different stores such as Whole Foods, Pavilions, Nijiya Market, and Marukai provided me with where the fish was from.	