

# CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

**Daniel J. Combs** 

**Project Number** 

# **J0308**

# **Project Title**

# Are You Scared Yet? What Effect Does Being Scared Have on Your Blood Pressure?

# **Objectives/Goals**

#### Abstract

What effect does being scared have on your blood-pressure? My objective was to see whether my mom's blood-pressure would go up during scary moments in movies. Being scared is part of a mammal's survival instinct. I think fear makes blood-pressure go up, which would help you either fight or flee.

### **Methods/Materials**

My materials were: a manual blood-pressure cuff, an electronic bloodpressure machine, a stethoscope, a soothing music CD, and three scary movies. Method: I went to my chiropractor who taught me how to take blood-pressure. Then I took my mom's blood-pressure while she listened to soothing music. I did it four times to get an average of her "calm" numbers. Next, she watched scary movies and I took readings (4 times per movie).

#### Results

Two of the movies, "Carnasaur" and "Alien" produced a greater reaction than the third movie "Salem's Lot". In fact, "Salem's Lot" was just corny enough that it produced more mellow readings than Mom's "at rest" readings. My mom's normal blood-pressure is on the low side of "normal"; she's a pretty mellow person and not easily scared. Her reactions were not as dramatic as I hoped for.

# Conclusions/Discussion

My hypothesis was correct. Being anxious or scared does affect your bloodpressure. People like to watch scary movies because it is exciting and lets them experience the "fight or flight" feeling without being in danger.

**Summary Statement** 

What effect does being scared have on your blood-pressure?

# **Help Received**

Dr. Karen Rinkleib taught me to take blood-pressure; Mom helped with art, typing, being lab rat