

## CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

Shimona Srivastava

**Project Number** 

J1435

### **Project Title**

# Microwave Radiation's Effect on the Growth of Bacteria

#### **Abstract**

### **Objectives/Goals**

Measure the impact of microwave radiation on the growth of bacteria

#### Methods/Materials

I made an incubator out of a lamp and a box. Then I put the milk into the incubator for four days. After this, I placed the milk into the microwave for various lengths of time: 5, 10, 15, 20, 40 and 120 seconds. Then, I took a q-tip and dipped it into the milk and smeared the sample onto the agar. After that I put the many samples into the incubator. I observed the agar with the bacteria and compared the growth of bacteria.

#### **Results**

If the heat levels are not high enough in a microwave, then it will prompt bacterial reproduction.

#### **Conclusions/Discussion**

A microwave is generally safe to warm food in as long as heat level becomes high enough.

#### **Summary Statement**

This experiment was done to measure the effect of microwave radiation on bacterial growth.

## **Help Received**

Brother helped prepare the board; Dad helped fill the application; Mom helped get all the materials.