

## CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J0507** 

#### **Project Title**

# Which Type of CO(2) Carbonation Keeps Its Bubbles the Longest When Added to Liquid?

## **Objectives/Goals**

#### **Abstract**

I tested whether liquid carbonated with dry ice keeps its bubbles longer than pre-carbonated water bought in a store or liquid carbonated with carbon dioxide in the form of a tablet. I hypothesized that liquid carbonated by dry ice would keep its bubbles longer than store bought pre-carbonated liquids or liquids carbonated with carbon dioxide tablets.

#### Methods/Materials

To test my hypothesis, I compared the time in which water carbonated with dry ice kept is bubbles to water carbonated with carbon dioxide tablets and pre-carbonated water. I repeated the experiment seven times.

#### Results

I found that water carbonated with dry ice kept its bubbles an average of 4 hours and 27 minutes. In comparison, pre-carbonated water kept its bubbles an average of 3 hours and 32 minutes and carbon dioxide tablets kept its bubbles an average of 3 minutes and 42 seconds.

#### **Conclusions/Discussion**

I concluded that liquid carbonated with dry ice kept its bubbles the longest.

## **Summary Statement**

Which type of CO(2) carbonation keeps its bubbles the longest when added to liquid?

#### Help Received

Ms. Lucera and Mr. Buenaventura for their guidance; Mom, Dad and Mike for their support.