Name(s)	Project Number
Edwin H. Do	**J2109**

Project Title

Drinking Water: Is Higher Price Better Quality?

Abstract

Objectives/Goals

The objective of this experiment is to identify cleaner and cheaper brands of drinking water and to educate consumers about purchasing drinking water.

Methods/Materials

A TDS (Total Dissolved Solids) water meter to measure the impurity count in various tested waters. Ten different types of drinking water: tap water, distilled water, reverse osmosis water, Kirkland bottled water, Fiji bottled water, Crystal Geyser bottled water, Dasani bottled water, refrigerator filtered water and Glacier Vending Water and Aquarius Vending Water. Equations were used to calculate prices of drinking waters.

Results

Drinking water that had a higher price did not necessarily have a lower impurity count. It was hypothesized that drinking water that costs more than a reverse osmosis purified drinking water should have a lower impurity count. However, many of the drinking waters tested cost more than reverse osmosis purified drinking water and had a higher impurity count.

Conclusions/Discussion

Using a reverse osmosis purification system has many benefits. It is cheaper than most bottled water brands and has a low impurity count. Although it uses water as a one to four conversion ratio, this water can be properly recycled. Also, reverse osmosis purification process eliminates the use of plastic bottles which is beneficial to the environment. Lastly, reverse osmosis drinking water is effective in removing many chemicals and contaminants missed by basic tap water and certain drinking water bottle brands.

Summary Statement

There is no direct correlation between the purity and the cost of drinking water.

Help Received

My dad helped me research and understand the water purification methods, Teacher helped edit science fair work