Is bottled water really better than tap water?

**Objective**

To determine which type of water is better for us to consume.

A lot of people say that bottled water is much healthier than tap water. But is that really true?

During our project we compared several different aspects to determine which type of water is really better. We tested bottled, tap and filtered water. We compared the price, effects on the environment and on our health, the taste and preference of people.

**Price difference**

In our investigation, price difference was one of the main factors that separates the types of water. We discovered that bottled water is up to 1,415 times the price of regular tap water. Even with a water filter the cost of tap water is still 1,329 times cheaper. People in Australia think they pay too much for petrol but in actual fact they pay almost double this cost for bottled water. Although the difference in price is so large, Australians still spend over 500 million dollars a year on bottled water.

Those are not the only prices we compared. We also looked at 9 Australian water brands that were sold in Woolworths.

**People’s choice?**

To see what people prefer we surveyed 60, year 10 high school students. 27% of students in our survey say they prefer bottled water. 30% say they prefer regular tap water. 43% say they prefer filtered tap water. Although it is thought that people prefer bottled water over tap water our results infer that this is wrong. Most people prefer filtered tap water and the least popular water in our year group is bottled water.

**Do they taste the difference?**

Our final test was if people could taste the difference between bottled water, filtered tap water and non-filtered tap water. We did this because people who prefer bottled water always say that it tastes better, but is this actually true? We used 3 cups that were exactly the same and put in a sample of each different type of water. We tested 18 males and 12 females. There were only 3 options in this test! A student could have gotten all 3 three samples correct; a student could have gotten only 1 sample correct; or a student could have gotten all samples incorrect. I think people can taste the difference between bottled, filtered and non filtered tap water. This is because from the 30 students that tasted the waters, 22 got at least one of the samples correct.

**The effects different types of water have on the environment?**

It may be obvious that bottled water has a larger effect on the environment than regular tap water but how big is the difference? The production of bottled water including packaging, transporting and chilling creates over 60,000 of green house gases per year in Australia alone. Whereas tap water only has around 1% of the effects on the environment compared to bottled water. To manufacture these plastic bottles around 50 million litres of oil is used per year in Australia. It may be thought that the majority of these bottles are recycled but in actual fact only 36% of these bottles are recycled causing 400 million bottles entering landfill every year.

**The effects on our health?**

It is unlikely that there will be major contamination to Australians drinking water supply (tap water) because it is closely monitored. When outbreaks occur in our water supply it is quickly acted on, so there is no need to worry about diseases in these safe supplies. Tap water is tested on a daily basis for impurities whereas some bottled waters are only tested on a monthly basis so there could be outbreaks which would go unnoticed for as long as a month. Fluoride is an important mineral added to our tap water, but is not currently added to bottled water.

**Conclusion**

In conclusion we have found out that overall tap water is a lot better than bottled water. One huge aspect that shows that tap water is better is the cost as it is more than one thousand times cheaper then bottled water. Tap water is also better for the environment as it has only 1% of the impact that bottled water does. The final major aspect is that tap water is closely monitored so there is a very little chance of getting diseased water unlike bottled water which is checked on a less regular basis, increasing the chance of a unknown outbreak. All of this shows that tap water is better than of bottled water.

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