

## Energy drinks

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*TOPIC: Energy drinks, which contain high levels of caffeine, sugars and other carbohydrates, are designed to improve alertness and reflexes. Many people and groups like these drinks. Other people and groups, however, say that excess consumption can lead to negative side effects, including insomnia, irritability, anxiety and stomach upset. Parent groups in many countries are mobilizing to ban energy drink sales to minors.*

### Secondary research report

Energy drinks are a commonly known beverage, enjoyed by various people around the globe. On one hand, energy drinks are known to improve brain functions (as seen in an article about the influence of energy drinks by “Healthline”) (Pearson 2017). Some people think that the main reason for the consumption of energy drinks is to improve one’s mental alertness. This beverage is mostly popular amongst students because energy drinks help them function while they are tired or sleep deprived. In addition, not only do students benefit from energy drinks, but it is also stated in a study utilizing a driving simulator done by PubMed Central (a database from the National Institutes of Health) that energy drinks can reduce drowsiness and increase the driving quality of those at the wheel, during late night road trips and such. (Mets et al, 2011)

On the other hand, it could be argued that energy drinks do more harm than good. In most cases, the caffeinated drink is a double-edged sword. Although it does improve your brain’s ability to stay alert, caffeine can cause various heart problems. As said on the “caffeineinformer.com” website, the most to least common side effects of energy drinks are: palpitations, tremors, shaking, agitation, gastrointestinal upset, chest pain, dizziness, paresthesia, insomnia, respiratory issues, and headaches. Furthermore, higher doses can cause anxiety and panic attacks, painful withdrawal symptoms, and severe fatigue. For example, one of the most popular energy drinks, the “Bang energy drink” have 300 mg (about the weight of ten grains of rice) in just one can! Therefore people, especially teenagers, must be cautious about energy drinks and their dosages.

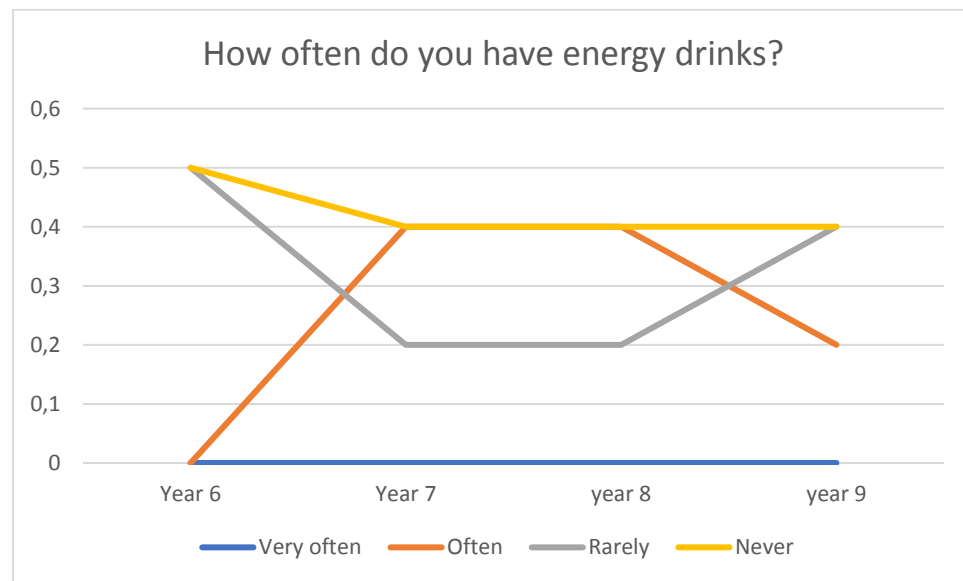
To add onto these issues, most energy drinks include a sizeable amount of sugar as well. It is common knowledge that too much sugar will cause anyone’s blood sugar to spike, inducing multiple perilous health risks. Hence people who have diabetes, or difficulty with controlling their blood sugar levels. This increase in blood sugar leads to elevated levels of oxidative stress and inflammations. Though not only people with diabetes should be concerned about the quantity of sugar in energy drinks! As seen in a reported study, people who drink one or two energy drinks daily have a 26% higher chance of suffering from type 2 diabetes. (Owens, 2020)

Not only do energy drinks affect our health and wellbeing, but they also have a significant impact on the environment. Unimaginable amounts of plastic is left to pollute the ocean each year, forcing the marine creatures inhabiting our magnificent world to face devastating consequences. Utilizing glass over plastic is recommended, however many energy drink companies are oblivious to these perils. For example, only 45% of aluminium cans are

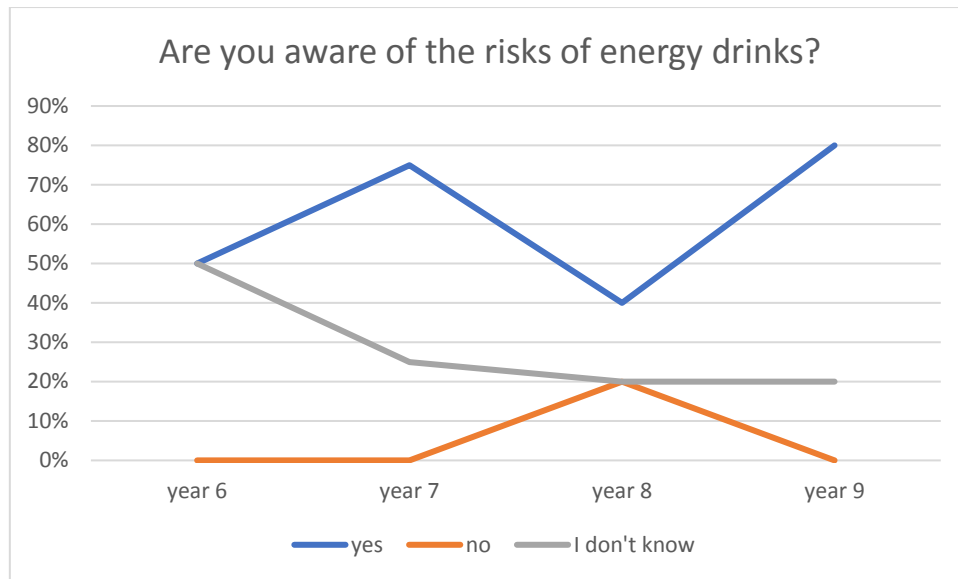
recycled in the UK, in comparison to 68% glass bottles. The evidence is crystal clear, and we need to take action.

### Primary research report

The research question of my primary research is: Does age affect the awareness of St. Lawrence students about the health risks related to energy drinks? I am interested in this question because it is important to know which age we should educate students about energy drinks. My hypothesis is that older pupils will be more aware of the health risks. My independent variable is age, my dependent variable is awareness of energy drinks harms. My control variable is the context of St Lawrence College. 26 students answered my questions.



We can see from the above graph that the percentage of students that never have energy drinks decreases as age increases. Although there is not a clear pattern, we could assume that older pupils might consume more energy drinks.



Also, as you can see in the graph above, younger pupils (year 6) are unsure whether energy drinks are bad, perhaps this is because they are unaware of the risk factors related to them. An explanation for this is that as a person gets older, they acquire more knowledge, and as children, year 6 pupils they do not have yet a detailed understanding of the health risks of energy drinks. An example of this is that most of them only mentioned increased heart rate. However, there is no clear pattern that awareness of the risks of energy drinks increases with age as the rest of the responses fluctuate. To improve my research in the future I would attempt to ask more people in the future and add more detailed questions to show a variety of comparable results.

### Action

My aim is to persuade energy drink companies to use more environmentally friendly materials. I chose to do this because climate change is an extremely significant issue, and it would be amazing to help in this way. I will create a petition, because as more people sign the petition, the company will pay attention to it. It will be able to pressure the company into making a change.

Below you can find a link to my petition and my letter.

<http://chng.it/TqVH4X7v4G>

*I am asking you to sign the following petition which will be sent to companies producing energy drinks.*

*The fact that companies aren't using recycled metal for their cans can have a massive impact on the current state of climate change. By using up earth's resources, they are intensifying the dangers of global warming, and the increase in popularity in energy drinks amplifies this factor. Over the years, the materials in which energy drinks are stored has changed, and now most companies use aluminum instead of glass, which is an improvement, however we must urge energy drink companies to utilise more recycled metals, so that their carbon footprint is minimized. As we know, it takes excessive amounts of energy to extract new resources, in comparison to recycled ones, this action provides a reduction of the amount of energy.*

*Also, more and more young adults are consuming energy drinks every day, contributing to the massive impact energy drink companies have on our planet, climate change and our health. Concerning health, some side effects of energy drinks are: palpitations, tremors, shaking, agitation, gastrointestinal upset, chest pain, dizziness, paresthesia, insomnia, respiratory issues, and headaches. As seen in a reported study, people who drink one or two energy drinks daily have a 26% higher chance of suffering from type 2 diabetes. (Owens, 2020) I recently found out that younger pupils are unaware of these risks. So, I think energy drink companies should mention these by incorporating a health warning in their products.*

*Companies must be urged to be held accountable for the consequences of their actions and decisions. Therefore, I am asking you to please sign my petition.*

## **REFERENCES**

Owens, J, (2020), Energy drinks, <https://www.ethicalconsumer.org/food-drink/shopping-guide/energy-drinks>

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