

I have been asked by the Ministry of Health to design a questionnaire that would enable them to find out more about the effects of drinking caffeine on teenagers. The questionnaire will provide information about how caffeine affects teenagers, which is data that can be used by the Ministry of Health. This questionnaire will hopefully also answer which year level caffeine affects the most, as well as how much caffeine they are drinking and how often they are drinking caffeine. ①

A good questionnaire finds out the truth and must be non-threatening. I am aiming to accommodate all possible answers so some of my questions will be multiple choice. My questionnaire will not assume a certain state of affair so I will not make an assumption that may be true, so I will include a 'don't know' response. ⑦

I will be asking in my questionnaire, questions about energy drinks and how often they are consumed by teenagers. I will then go on to ask if they have any of the effects related to caffeine which I have found in my research from the internet. From my research I have found that drinking high amounts of caffeine can increase heart rate, cause dehydration, insomnia, restlessness, high blood pressure, heart palpitations, anxiety, dizziness and headaches. I have asked the respondent to circle the following that have applied to them after they have consumed an energy drink. This would enable the Ministry of Health to find out the most common effects that drinking caffeine has on teenagers.

From the information and feedback I will receive I will coherently link the two together to see if they have any relation to each other.

### Design concept:

#### Questionnaire One:

1. My purpose is to design a questionnaire for the Ministry of Health that would enable them to find out more about the effects of drinking caffeine on teenagers. Teenage years start when you are thirteen and go to when you are nineteen; this is why I am asking at the start of my questionnaire if the respondent is aged between thirteen and nineteen because my questionnaire is targeted at teenagers. I have included a 'rather not say' option because some people may find this question personal and would rather not give their age out this is why I also have not left it as an open question where they can just write what age they are. ⑦

2. I have asked what gender the respondent answering my questionnaire is so the Ministry of Health can compare different genders related back to the effect that caffeine but more specifically energy drinks has on them and see the different results. ②

3. I have asked how often the respondent drinks energy drinks so the Ministry of Health can relate how often they consume them to how many effects that applies to them after they consume an energy drink.

4. In my questionnaire I have asked what the respondent's favorite type of energy drink is. I have given multiple choices of energy drinks which I found from my research that are the most popular and have tried to accommodate all possible answers with providing good choices so that 'other' is not the favorite choice. I have provided space underneath if the respondent does choose the 'other' option to state what the other type of energy drink is.

5. The purpose of my questionnaire is to find out more about the effects of drinking caffeine on teenagers. I have asked in my questionnaire if the respondent is aware of the effects of drinking high amounts of caffeine has on the central nervous system. I have asked them to circle either yes, no or unsure. I have given the option of choosing 'unsure' because I do not want to assume a certain state of affair and be making an assumption that may not be true.

6. I asked the respondent when they usually drink an energy drink. I have left this as an open question and have asked them to state when they consume an energy drink because I thought that different people may rely on energy drinks at different times of the day or because my questionnaire is targeted at teenagers if there is a certain period when they rely on energy drinks the most. For example exam week.

7. I have asked the respondent how they feel after they consume an energy drink. I have also left this as an open question and asked them to state how they feel after consuming the energy drink. I left this as an open

question because I thought that people may feel different to others and I didn't want to restrict the answers I got and imply a desired answer. 3

After my desk check I made the following adjustments. I found that my questionnaire didn't follow a logical sequence so I replaced question four with the current question seven. For question seven I now have asked a new question about the effects that caffeine can cause and asked the respondent to circle one of three options. So I now have come up with questionnaire two for which I will put this through a pilot survey. 4

### **Questionnaire Two:**

Questions 1,2 had no change

3. I have asked the respondent when they consume an energy drink in question three not question seven because items on a questionnaire should be grouped into logical coherent sections and I thought that this question followed easily from the previous question. I have also made this question multiple choices because multiple choice questions are the most popular. I have tried to accommodate all possible answers and have included a 'don't know' response so I am not assuming a certain state of affair. 7

Questions, 4 and 5 had no change

6. The Ministry of Health have asked me to design a questionnaire that would enable them to find out more about the effects of drinking caffeine has on teenagers. From my research I have found effects that caffeine can cause, I have listed these effects and have given a scale where I have asked the respondent to circle how often the effects that caffeine can cause have applied to them. I have given them three options never, sometimes or often, this will enable the Ministry of Health to see how often these effects of drinking caffeine occur on teenagers.

7. I have asked the respondent if they feel energized after they consume an energy drink instead of asking them how they feel after they consume an energy drink and leaving it as an open question asking them to state how they feel I found from the feedback I received that this was not a good question so I changed it asking if they feel energized after consuming the drink. I have given them a yes or no option to see if energy drinks actually do have the effect of energizing teenagers.

I originally decided to use a multi-choice question to measure how often using time and gave the following options for the answer [every day, most days, some days, not very often]. I thought the options were good when I checked it, but for the pilot study I found people circled more than one option, and some didn't answer the question, so I added "circle the most often you drink caffeine", and "never" as an option. I decided to follow this survey question with another that asked "How many caffeine drinks have you had today?" and this was so I could find out not just how often they drink caffeine but how much. 7

Once I had finished questionnaire 2 I then used it for my pilot survey. This involved me asking 10 friends to complete my survey and feed back to me any changes they thought were necessary.

The results of the pilot survey results and feedback were recorded in my log book and these showed that I got a 90% return. When I started to do the analysis of this data I was able to conclude that only 40% of students who did the pilot survey actually drunk energy drinks at school.

One problem with my pilot questionnaire was that some people did not know what they meant by caffeine in their survey, so I added a question at the beginning of the questionnaire "Please tick which of these common caffeine drinks you drink at least once a day" and provided appropriate forms of caffeine in the list (coffee, coke, Pepsi, V, etc.). 5

I have briefly looked at the respondent's favorite type of energy drink and have collated the data I have received with how often the effects that caffeine can have after consuming a caffeinated drink occurs. The Ministry of Health could look into this further and look into the recipes of the energy drinks to see if there are any ingredients that could be related to the effects that the energy drink is causing.

I filled out a log book after every class lesson to document the design process that I went through to complete my final questionnaire. 6