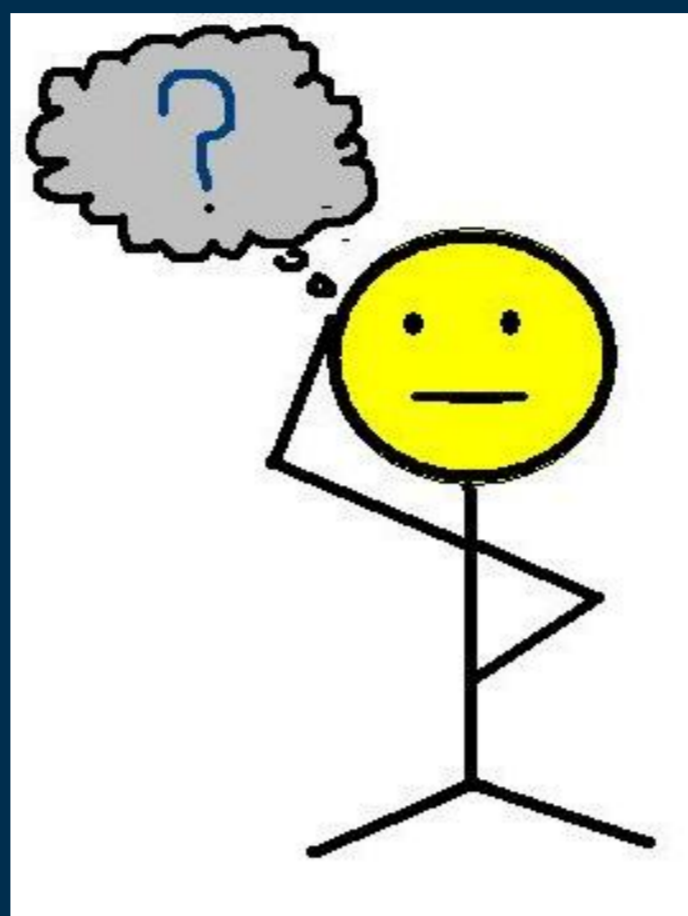


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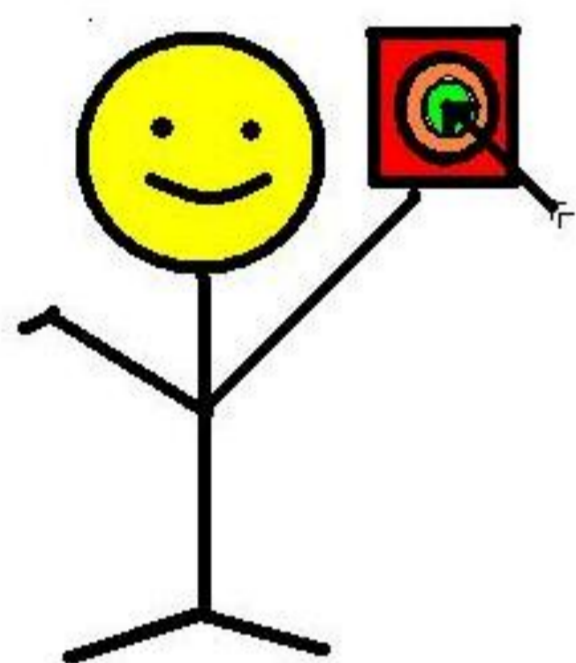
## A. WHAT ARE THE APPLICATIONS OF SILVER-COMPOUNDS?

- Silver is well known as an ornamental metal and has been used in cutlery since ancient times.
- The advantages of silver were identified hundreds of years ago, and since then it has been used in various fields ranging from currency coins to medical equipment.
- This metal has the ability to fight against the harmful germs without causing side-effects.
- Hence, silver in different forms has wide applications in the health sector, including treatment for eye infections of the newly born, wounds, burns and urinary infections.



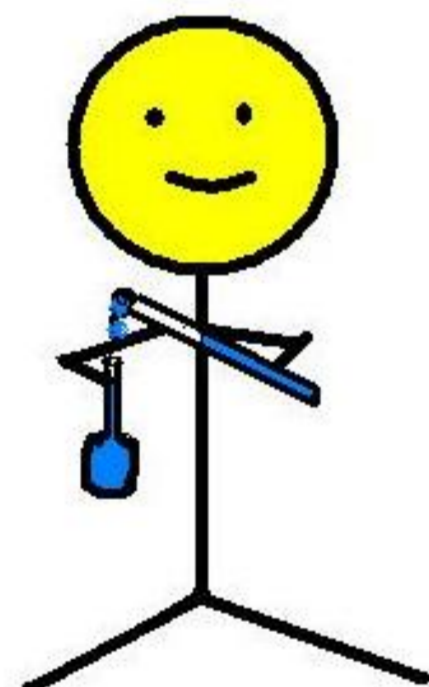
## B. WHAT IS THE IMPORTANCE OF SILVER IN OUR RESEARCH?

- Contact lenses (CL) are medical devices that are worn on the eye to correct long or short sightedness and / or for a cosmetic reason.
- They are placed in a plastic storage case when removed from the eye and it is here the CL cleaning process takes place.
- With usage, these storage cases get dirty with germs, which interfere with the hygiene of the storage case. Thus these germs, pose a risk of eye infection, as they might get transferred to the eyes through CL.
- In an attempt to minimize the accumulation of these germs, storage cases with silver have been recently introduced.



## C. WHAT DID WE AIM AT?

- To date, the products manufactured with silver components have been successful in their respective applications. In this study, we aimed at the evaluation of the effectiveness of the CL storage cases incorporated with silver.



## D. HOW DID WE ASSESS THE STORAGE CASE?

- Initially, the storage cases were filled with known quantities of germs and after specific time-periods a count was performed on the number of germs remaining. This count established whether there was an increase or decrease in the number of germs. Here, an increase suggests that germs grew in the storage case, while a decrease suggests that germs were killed.



## E. WHAT DID WE FIND?

- Overall, we found there was a decrease in the number of germs in the storage cases incorporated with silver. Interestingly, when a storage case was loaded with a lower quantity of germs there was a complete kill-effect, while for a higher quantity there was a significant decrease in the number of germs.



## F. DOES IT MEAN THE SILVER STORAGE CASES ARE WORKING?

- In our current research, we looked at one of the aspects for the storage case evaluation, and there are some other issues under our consideration. Hence, at this stage it is too early to draw conclusions. However, our research is in progress with a multi-directional approach to obtain conclusive findings.