

From Edible Products to Disinfecting Currency Notes

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Abstract : The Indian rupee is the official currency of India. With time, science and technology got advanced, and our society is slowly making its way to a cashless mode of transaction. But as India is still a developing country, a large part of our society still depends on transaction through cash. During times of pandemics, we came to understand that everything that we touch is not safe from microbial contamination. The Indian currency is also not an exception. The Indian currency is the modern-day medium of harmful bacterial as well as other microbial contaminations resulting in diseases in human bodies. Therefore, the need came to make the currency disinfectant to give our people a healthier lifestyle. The main focus of the study is to develop a solution that, when applied to the currency notes, will kill the persisting bacteria or microbes present in the notes. So various natural edible products were used in order to prepare the solution, which is highly effective against the presence of harmful bacteria such as *E. coli* and *S. aureus*. The antibacterial activity of these natural ingredients is not unknown to us, so extracts from those products were mixed together to form a solution which was made the Indian currency notes antibacterial for 20min approx. The solution was creating a layer on the surface of currency notes, therefore, making it antibacterial for a given duration of time, i.e., no bacterial growth was seen during the time period of 20 minutes, therefore, making it safe for the usage of human hands.

Keywords : Indian currency, antibacterial property of Indian currency, surface coating, currency disinfectant

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