

Nwaoha Promise

Sadoz Int'l Schools

JSS 2

Essay on “ IF I CAN INVENT SOMETHING NEW”

Nigeria faces significant challenge in ensuring the safety of food and water supply, resulting in frequent outbreaks of food and water borne diseases. The lack of access to reliable testing methods and high cost of existing technologies worsen this situation. Diseases like bloody diarrhea, dysentery, typhoid have taken so many lives and now the outbreak of **cholera** with over 2,102 cases and 63 deaths recorded by Nigeria Centre for Disease Control (NCDC) as at 5th July, 2024 . Having sisters in hostel accommodation also brings stories of related cases; few months ago, a friend of my sisters was rushed to the hospital for the case of food poisoning , she missed her semester’s examination as a result. The stories of “killer beans” in September 1996 with 16 lives lost in a month , “killer wedding food” in April 2020 that got 19 guests poisoned and story of wall gecko infested food that killed a family of 6 in December 2022 are few of the menace that food and water poison have done in Nigeria.

NAFDAC and other food safety agencies have done a lot in their safety standards and inspection measures, but individuals and families can help out in ensuring the protection of their own health by using simple and handy tool like “Mobile testing kit” which will enable rapid detection of contaminants in food and water . If I can invent something new, I will invent **PURE CHECK**: A Mobile Testing Kit for Safe Food and Water. The mobile testing kit will be a portable, user-friendly device that utilizes advanced technology to detect harmful bacteria, viruses and chemicals in food and water. Results are interpreted using a colorimetric indicator which changes color in the presence of contaminants, providing a clear and simple visual indication of safety or danger. The mobile testing kit will offer numerous benefits including;

- Rapid detection of contaminants which enables prompt action
- Increased access to safe food and water, particularly in rural areas
- Empowerment of food vendors, water suppliers and consumers to ensure quality control

- Reduced incidence of food and water poisoning, resulting in improved public health
- Economic benefits through reduced healthcare costs, increased productivity and reduced wastes

The design will also consider sustainability and ease of use. This kit will come in form and size of the simple thermometer we know with built-in sensors to avoid direct contact with the food and water checked. It will also be solar-powered making it suitable for use in remote areas without access to electricity.

Conclusively, the mobile testing kit has the potential to transform food and water safety in Nigeria. With such device in pockets, bags and keyholders of individuals, the safety of food and water they take on daily basis will be assured. Its rapid, reliable and affordable means of detecting contaminants will improve safety practice and public health, hence eliminating food and water poisoning for healthier and safer future for Nigerians.