

FIGHTING FOOD FRAUD IN GHANA WITH FORENSIC SCIENCE

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INTRODUCTION

In Ghana, food fraud is an economically motivated phenomenon facilitated by factors including industrialization, consumer taste and preference, desire to gain undue profit and low probability and severity of punishment to perpetrators (1).

SOME KEY ISSUES

“Once you eat food in Ghana you have eaten something that you are not supposed to eat”.
(Dr. Faustina DufieWireko-Manu)

“The awareness of food fraud is very limited in Ghana and Africa. This has given many people the opportunity to dupe unsuspecting consumers”.
(Prof. Elvis Asare Bediako)

The review identified sugar, sawdust, water, foam, carbide, Plaster of Paris, bixa, saccharine, miraculous berry, monosodium glutamate, baking soda and Sudan IV as key adulterants in most Ghanaian markets. Common foods that were prone to fraud were found to include honey, bread flour, flour made from cereals, groundnut paste, powdered pepper and tomatoes, palmwine, "pito", and fruits (2).

AIM

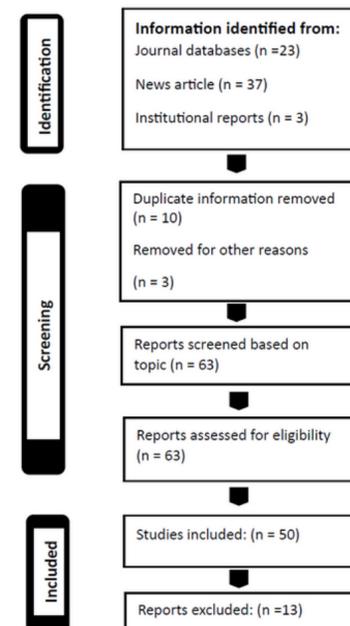
This paper aimed to review relevant literature concerning the food fraud situation in Ghana from journal databases, online news articles, and institutional reports and recommend a step-up in the war against food fraud with forensic science.

HOW FORENSIC SCIENCE CAN HELP

Scientific/technical tools, such as DNA analysis and databases, soil/microbial analysis, trace evidence analysis, chemical and toxicological analysis and digital evidence analysis could be used to assist in the identification of perpetrators of food fraud and detection of unlawful activities, enhance product tracking and traceback, process verification and the determination of the authenticity, quality and safety of products instead of overreliance on traditional investigative strategies.

Forensic science can bring about efficient resolving of complex problems to minimize investigation time and provide robust, transparent and reliable scientific evidence to help answer legal questions regarding food fraud.

METHODOLOGY



CONCLUSION

The need for; Food fraud advocacy and education about the harmful effects of food fraud and where they can report suspected cases.

Incorporation of forensic techniques in the training and practices of employees of food inspectorate departments, food inspectors, supervisors and food scientists.

Expansion and establishment of well-equipped forensic resources and food forensic laboratories.

Finally, food fraud is a multifaceted phenomenon and it requires a global effort to minimize it. There is the need for equal prioritization of food forensics in the developing world where a lot of issues of food safety and fraud are recorded just as it is done in the developed world where most of our foods are been processed and imported from.

Related literature

1. Step up war on food fraud with forensics, a focus on Ghana – Scientect [Internet]. [cited 2022 Feb 27]. Available from: <https://scientect.org/2020/12/12/step-up-war-on-food-fraud-with-forensics-a-focus-on-ghana/>
2. Food adulteration is injurious to human health - Survey [Internet]. [cited 2022 Sep 4]. Available from: <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Food-adulteration-is-injurious-to-human-health-Survey-149216>

