FOOD AND DRUGS AUTHORITY
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EFFECTS OF THE USE OF POLYETHYLENE FOR PACKAGING FANTE KENKEY

Kenkey is a staple food in Ghana. Fante kenkey is enjoyed mostly by the people of the Western and Central Regions. Traditionally, Fante kenkey is made by wrapping fermented corn dough in dried plantain leaves. However, in recent times, some producers have introduced another dimension to the cooking process by wrapping the corn dough in flexible plastic films (polyethylene) preceding boiling. Producers claim that this extends the shelf life of the kenkey as this prevents the molds formed on the leaves from directly infesting the kenkey.

Meanwhile, the continuous use of plastic films as a primary packaging material for Fante kenkey has raised health concerns. According to some health experts, the temperature at which the kenkey is cooked can release harmful chemicals and toxins in plastics, which can contaminate the kenkey and pose health risks to consumers.

A study conducted by Mensah et al (2012) revealed that one of the primary concerns for the use of plastics in cooking Fante kenkey is the release of plasticizers which are chemicals added to plastics to increase their flexibility and durability. Plasticizers such as bisphenol A (BPA) and phthalates have been linked to various health problems, including hormonal imbalances, reproductive issues, and cancer. When plastics are heated, plasticizers can leach into the food they are in contact with, causing food contamination. Another concern is the release of dioxins and furans, which are toxic chemicals that can form when polystyrene plastics are heated to high temperatures. These chemicals have also been linked to a range of health problems, including cancer, reproductive issues, and immune system damage.

As indicated above, BPA and phthalates are synthetic chemicals used as precursor materials in the manufacturing of plastics. According to Seachrist *et al*. (2016), BPA has been considered a possible human carcinogen in the prostate and breast due to its tumour-promoting properties in laboratory rats. Moreno (2014) reported that some studies in women found that exposure to phthalates led to increased levels of thyroid hormone, oxidative stress, and illnesses such as endometriosis and breast cancer.

A study set out to determine the risks of BPA exposure associated with the consumption of Fante kenkey wrapped in plastic films concluded that there was no significant risk associated with the consumption of Fante kenkey (Thesis FA Agilik 2019). However, it cautioned that the use of polyethylene in wrapping Fante kenkey before cooking should be discouraged due to the biological magnification of phthalates as their continual consumption might pose severe public health issues. Research findings published in scientific journals for decades have also shown that BPA is

immediately excreted in the urine when ingested, indicating a low public health concern.

To avoid the negative effects of cooking Fante kenkey wrapped in plastic, the Food and Drugs Authority has recommended the continuing use of traditional wrapping materials such as dried plantain or banana leaves. These materials are natural and do not release harmful chemicals when heated. Additionally, they add flavor and aroma to the food, enhancing its taste and overall experience.

The FDA's Public Education Unit would continue to educate producers and consumers on the proper uses of plastic packaging materials in food production, in our markets and homes. The general public is again admonished to make sure their hot foods, at the point of sale, are not primarily wrapped in plastic bags.

It is important to note, however, that Bisphenol A, which is used in polycarbonate plastic containers, is not used in the manufacture of low-density polyethylene plastics including those used for bagging koko and the 'olonka' bags. Based on its most recent safety assessment, the US FDA's current perspective is that BPA is safe at the current levels occurring in foods. However, there is an ongoing review of scientific evidence and available information based on the concerns raised by the European Food Safety Agency (EFSA) to reduce exposure to BPA.

Consumers are therefore advised to avoid covering boiling food items with plastic bags.

The FDA would continue to engage all stakeholders including consumers, consumer protection advocates, the scientific community, and producers, to ensure that the health and safety of the people of Ghana are guaranteed.

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