

## **ERRATIC POWER SUPPLY: IMPLICATIONS FOR FOOD SAFETY**

As the Food and Drugs Authority, it is our paramount duty to ensure the safety and quality of the food supply chain for the Ghanaian public. Today, we address a pressing concern that threatens food safety: the implications of erratic power supply and high atmospheric temperature on food storage and safety.

Recent erratic power supply has led to frequent power outages that disrupt refrigeration systems crucial for preserving perishable foods. This compromises the integrity of the cold chain, exposing food items to the risk of spoilage and contamination.

Firstly, without consistent cooling, perishable foods such as dairy products, meat, and produce are at risk of spoilage due to bacterial growth. Elevated temperatures create ideal conditions for microbial proliferation, increasing the risk of foodborne illnesses such as Salmonella, E. Coli, and Listeria. This increased growth of both spoilage and disease-causing microorganisms on food means that normal washing of vegetables in water and eating of raw foods such as salads, becomes more risky due to higher microbial load which may not be eliminated by the usual means.

Another, unseen danger is an increased microbial load and vegetative spores spreading in refrigerator units after prolonged power outage. With microorganisms already present in the refrigerator, fresh foods that are introduced into storage quickly get contaminated with these microorganisms and also tend to get spoilt rapidly. This creates a vicious cycle of spoilage within the refrigerator.

In addition, fluctuating temperatures can also degrade the quality of food. Fruits and vegetables may wilt or become mushy, while dairy products can curdle or develop off-flavors. This affects both the nutritional value, characteristics in processing such as crispiness, creaminess, gelling ability and palatability of the final food.

Moreover, the economic repercussions of food spoilage are significant. Individuals, businesses, and communities suffer from wasted resources, elevated food costs, and potential revenue loss for food producers and retailers. In a nation striving for economic stability and food security, these losses are unsustainable and require urgent attention. The risk to food safety regulation, is that to prevent losses, some food vendors may use compromised, contaminated or damaged foods in production or food processing. Consuming contaminated food poses severe health hazards and contributes to the burden of foodborne diseases in our communities.

The increased consumption of spoiled foods, resulting in increased foodborne illness cases will eventually culminate in increased medical costs and burden on the health system as well as increased burden of disease on the country.

Thus, the implications of erratic power supply on food systems are multifaceted and demand collective action to mitigate their adverse effects. While authorities work on restoring reliable power supply, individuals must remember that when it comes to food safety, we all have roles to play. To address these challenges, proactive measures must be implemented at various levels of the food supply chain. Homes, and food businesses can take the following precautions:

1. dispose off spoilt, slimy, smelly foods
2. use up all refrigerated perishable foods like vegetables, raw meat, fish and milk when power fails
3. move perishable foods from fridge to freezer when the power is out
4. cook perishable foods rather than eating them raw
5. when power is out, keep refrigerators closed as much as possible to maintain the coldness
6. frequently wash and disinfect refrigerators to remove microorganisms and their spores
7. Keep most cooked foods in freezer so that even without power, they will remain cold for longer

Food producers, processors, and retailers, may also invest in alternative power sources such as backup generators or solar energy systems to ensure continuous refrigeration during power outages. Additionally, proper insulation and ventilation in storage facilities are crucial for maintaining optimal storage conditions, especially in the face of rising temperatures.

Furthermore, strict adherence to food safety guidelines is imperative. This includes regular temperature monitoring, proper rotation of perishable goods, and implementation of hygienic practices during food storage. Education and awareness campaigns aimed at promoting safe food storage and handling practices among consumers are also essential in empowering individuals to safeguard their health and well-being.

As FDA, we remain committed to safeguarding public health by advocating for stringent food safety standards and collaborating with stakeholders to address emerging challenges. However, ensuring food safety in the face of erratic power supply and high atmospheric temperature requires collective effort and collaboration from all sectors of society. Together, we can mitigate the risks posed by these challenges and ensure a safer, healthier food supply for all Ghanaians.