

FOOD SAFETY ALONG THE FOOD CHAIN: EVERY STEP MATTERS

What to do to ensure food safety at every point the food goes through.



FOOD AND DRUGS AUTHORITY
Your Well-being, Our Priority.

What is Food Safety?

Food safety refers to the practices and regulations put in place to ensure that food is handled, stored, and prepared in a way that prevents contamination and minimizes the risk of food-borne illnesses.

Food safety along the food chain refers to the entire process involved in the production, processing, distribution, and consumption of food. It involves various stakeholders such as farmers, processors, distributors, retailers, cooks and consumers, all of whom play a role in ensuring food safety at different stages of the chain.

When it comes to Food safety, every single step matters and it takes a collaborative approach to ensure overall safety of food.

To ensure safe food, a one health approach can be considered since human health, animal health and environmental safety are all related and affect one another

Importance of Food Safety in the food value chain

Food safety is crucial for protecting our health by ensuring that the food we consume is free from harmful contaminants. It involves maintaining cleanliness and safety standards throughout the food production and distribution process, from farms to kitchens. Neglecting food safety measures can lead to the spread of bacteria and other pathogens, resulting in foodborne illnesses. By adhering to food safety guidelines, such as proper hygiene practices and thorough cooking methods, we can minimize the risk of getting sick from the food we eat. Prioritizing food safety not only promotes public health but also instills confidence in the food industry, ensuring that consumers can enjoy meals that are both delicious and safe.

"In the journey of our food from farms to our plates, there are risks that can make us sick. These risks come from things like chemicals, germs, and physical factors like small rocks, glass or metal

pieces. If we eat food with these things in it, it can harm us.

How should we prevent contamination and ensure safe food at every stage of the food value chain?

1. On the farm

- Farmers must follow Good Agricultural Practices (GAP)
- Safe water must be used in farming. Contaminated water used in irrigation can result in contamination of final crops with factors like heavy metals and even some microorganisms.
- Chemicals used on crops should be safe, at the right concentrations and done at the right time. Improper application of chemicals can cause chemical contamination (eg, pesticide residue) in harvested farm produce.
- Manure must be used in a way that will not contaminate crops when harvested
- Harvesting should be done in the right manner to prevent damage to crops and contamination.
- Freshly harvested crops should not be contaminated from soil, waste, dirty water or fecal matter.
- Animal farming must be done following good and legal practices to prevent transfer of diseases from animals to humans (zoonotic diseases), as well as transfer of medicines (eg, antibiotics) from meat to humans.



2. In Packhouses / When Processing Foods

- **Sanitation and Hygiene:** Maintain cleanliness throughout the packhouse premises, including equipment, storage areas, and personnel. Regularly sanitize surfaces and equipment to prevent cross-contamination.
- **Good Personnel Hygiene:** This includes regular handwashing, wearing appropriate protective clothing, and maintaining clean equipment and surfaces.
- **Good Manufacturing Practices (GMP):** Follow a well laid out Food Safety Management System designed to prevent contamination and ensure food safety.
- **Water Management:** Ensure that water used in the packhouse is safe and free from contamination. Regularly test water quality and maintain proper sanitation of water storage and distribution systems.
- **Temperature Control:** Maintain appropriate temperature and humidity levels for different types of produce to prevent spoilage and microbial growth. Use refrigeration or cold storage facilities as needed.
- Adulteration and all other forms of food fraud are crimes. Adulteration can result in illness and death and eventually destroy customer trust and trade.



- **Pest Control:** Implement measures to prevent pests from entering the packhouse, such as sealing entry points and maintaining a clean environment. Use safe and approved pesticides if necessary, following proper application guidelines.
- **Packaging Materials:** Use food-grade packaging materials that are clean and free from contaminants. Ensure that packaging materials are properly stored to prevent contamination.
- **Storage:** Proper storage practices (stacking, segregation, inventory) and conditions, such as temperature and humidity control, should be maintained to prevent contamination, spoilage and extend shelf life.
- **Quality Control:** Implement quality control measures to inspect produce for defects, foreign objects, and signs of spoilage before passing them for sale. Discard any produce that does not meet quality standards.
- **Allergen Management:** Take steps to prevent cross-contact with allergens, including segregating allergenic produce and implementing thorough cleaning procedures between production runs.
- **Traceability:** Implement systems to track and trace produce from farm to packhouse to market. This ensures accountability and allows for quick response in case of food safety issues.
- **Personnel Training:** Train all personnel on proper hygiene practices, including handwashing, proper clothing, and avoiding handling produce when sick. Emphasize the importance of food safety protocols.
- **Documentation and Record Keeping:** Keep detailed records of all activities related to food safety, including sanitation procedures, pest control measures, temperature logs, and quality control checks. This documentation helps in identifying areas for improvement and in complying with regulations.

3. Storage



- **Separation of Products:** Store different types of produce separately to prevent cross-contamination. This is especially important for fresh agro produce that are prone to ethylene production, which can accelerate ripening and spoilage in other nearby produce.
- **Proper Handling:** Handle produce and packaged food products with care to avoid damage to fresh agro produce and packages that can accelerate spoilage and provide entry points for pests and pathogens. Use appropriate handling equipment and techniques to minimize physical damage during loading and stacking.
- **Regular Inspection and Monitoring:** Conduct routine inspections of stored produce to detect signs of spoilage, mold, pests, or other issues. Implement a monitoring system to track temperature, humidity, and other environmental conditions to ensure optimal storage conditions are maintained.
- **Pest Control:** Implement pest management practices to prevent infestations and minimize the risk of contamination by insects, rodents, or birds. This may include using traps, baits, and pesticides approved for use in food

storage facilities.

- **First-In, First-Out (FIFO) Rotation:** Implement a FIFO system to ensure that older stock is used or sold first, reducing the risk of spoilage and waste. This helps maintain product freshness and quality while minimizing the accumulation of expired or unsellable produce.
- **Temperature Control:** Maintain proper temperature conditions suitable for the specific type of produce being stored. Different fruits, vegetables, and grains have different temperature requirements for optimal storage to slow down ripening, minimize spoilage, and inhibit microbial growth.
- **Humidity Control:** Control humidity levels in storage facilities to prevent moisture buildup, which can lead to mold growth, rotting, and spoilage of produce. Proper ventilation and air circulation help to manage humidity levels effectively.

4. Distribution

- Transportation of food should be done in a clean and hygienic manner.
- Food should not be transported with non food items.
- Vehicles for transporting food should be cleaned and sanitised regularly
- Proper temperature should be maintained for foods during transportation. Frozen foods must always be transported in a vehicle or in coolers.

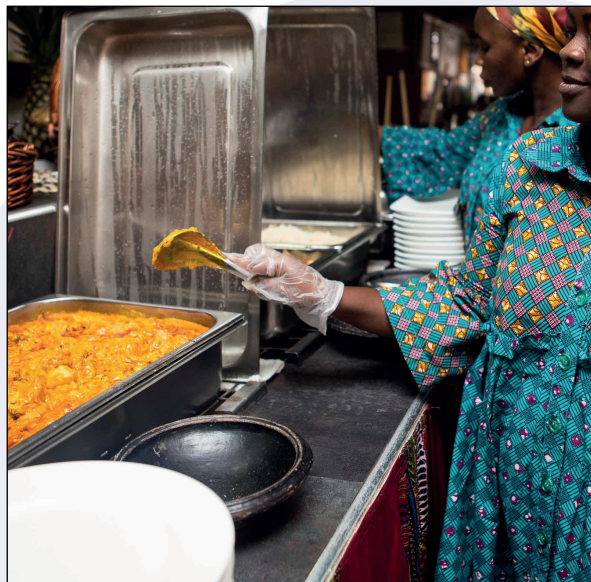


5. Retail of Foods

- Foods should be displayed in a clean, dry environment, away from direct sun.
- Food should never be displayed on the ground.
- Foods Should be displayed separating foods that will be cooked from those that are eaten raw.
- Protect food from dust, dirt, chemicals, getting wet, etc.
- Protect food from deterioration by maintaining appropriate temperatures, protecting them from contamination and prevent damage to packages.
- Do not use mosquito coils around food
- Ensure eggs are always free from faecal matter.
- Maintain Good personal Hygiene by keeping yourself and your hands clean when selling, dressing in clean clothes, wearing aprons and hair covers where needed. Traders in markets should have Food Hygiene Test (FHT) and keep the certificates. If you don't feel well (vomiting, running stomach, flu) stay away from food and get treated.



6. Food Preparation and Food Service Establishment



- Good sanitation is important in ensuring food is safe. Food should always be prepared in a clean environment. Cooking utensils should be kept clean.
- Kitchen staff should adhere to strict personal hygiene codes. Hands and clothes should be clean and staff must be medically cleared to handle food.
- There should be proper separation of cooked foods from raw foods. This includes separation of utensils used for cooked foods and those for raw foods. This prevents cross contamination of pathogens.
- Food must be prepared and cooked properly to eliminate all food safety hazards. Under-cooked food can cause severe food borne illnesses when pathogens are present.
- Cooked foods must be kept hot while cold foods kept cold by refrigeration or keeping on ice until consumed.
- Food must be prepared with wholesome and safe raw materials.

7. Consumption

- Consumers should patronize food from licensed food service establishments (Food Hygiene Permit or Street Food Vending Permit) and only buy prepackaged products that are registered.
- Buy foods from clean environments and vendors who observe good hygienic practices.
- Wash your hands before handling food
- Prepackaged products should be checked for:
 1. Expiry/ Best Before dates
 2. "Defaced" labels
 3. English Labelling
 4. Made in Ghana foods should have FDA registration numbers
 5. Cans should not be rusty, bloated or dented
 6. Packages should be sealed and intact
 7. No pests activity (insects, etc.)



Progressive Licensing Scheme - Facts to know

It is a Government of Ghana initiative implemented by FDA.

It is a three staged licensing regime to support small businesses to improve on the safety, quality and wholesomeness of their products.

It is aimed at accelerating the growth of the local food industry.

It ensures that all food businesses, irrespective of size can comply with food safety requirements and get registered.

The PLS encourages small scale and cottage sized food processors to be compliant with food safety and quality standards and not shy away from getting their businesses registered.

The small-scale business comes into compliance progressively; from a low compliance stage to 100% compliance over time.

The Government of Ghana supports the small scale industries through the Ghana Enterprises Agency, by facilitating training in product development, GMP and others, improvement of product labels and laboratory analyses of products.

Licensing fees for cottage industries under the progressive licencing scheme are relatively low. Because it is a 3-stage registration scheme, it grades the level of compliance of the food business:

- **Level 1-** meets basic food safety standards, but has to improve on technological inputs, technical know-how, maintenance and quality.
- **Level 2-** generally complies with food safety and quality standards but can make further improvements in technological inputs.
- **Level 3-** meets all food safety and quality standards under national food safety regulatory requirements.

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