

# Avoid bacteria in fresh-cut fruits

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**F**RESHLY cut fruits are considered as ready-to-eat foods since they need no other preparation before consumption. They are aimed at improving fruit consumption because they are very convenient for consumers.

Recently, there has been an increase in the availability of these freshly cut fruits on the Ghanaian market, geared towards satisfying consumer needs.

These fruits invariably have been washed, peeled (where necessary) and cut to size for easy consumption.

Fruits have the potential to become contaminated if they are improperly prepared, processed or handled.

To reduce illnesses as a result of improper handling of fruits, people who process fresh-cut fruits need to be careful in order to avoid contaminating them since further cooking is not required before consumption.

It should be noted that despite the health benefits of fruit consumption, fresh-whole or fresh-cut fruits are high risk foods which may be sources of food poisoning or intoxication.

## Sources of bacterial contamination of fruits

Some sources of contamination of fruits before harvesting include soil, fertilisers and irrigation water which may harbour bacterial pathogens.

Bacterial Pathogens are single celled microbes that cause diseases. We come in contact with pathogens every day. Most of the time, our body's immune system destroys them before they can cause harm.

After harvesting, handling and transportation of fruits may lead to microbial contamination.

To be specific, some post-harvest practices which impact on the safety of the fruits include; lack of adequately maintained toilets and hand-washing facilities for fruit handlers, improper sanitary and hygienic practices of fruit handlers and insanitary conditions of vehicles and containers used for transport.

Others are temperature abuse of fruits during transport, contaminated processing equipment or food contact surfaces, presence of animal activities in food processing or preparation areas, contaminated water/ice used for preparation and unclean packaging materials.

Below are guidelines and useful tips to help fruit processors ensure that freshly cut fruits are safe for consumption.

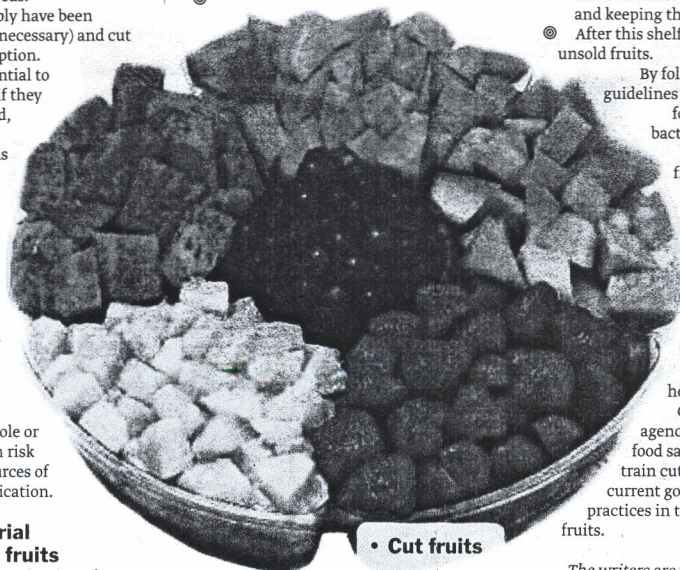
- ⊙ Ensure that pests are not near stalls where you buy your fruits.
- ⊙ Select fruits without excessive soil on the edible portion.
- ⊙ Select fruits which are whole and intact since bruising or cutting expose the edible portion which could potentially harbour micro-organisms.
- ⊙ Equally important is to select fruits which look wholesome without any signs of decay, off odour and discolouration.
- ⊙ Ensure that fruit containers are clean for transportation.
- ⊙ Keep fruits at cool temperature (\* 7°C).
- ⊙

- ⊙ Frequently clean your cutting knives, boards and bowls between cuts to avoid microbial growth and contaminating the fruit.
- ⊙ Use clean and sterile bags or packaging materials to store cut fruits.
- ⊙ During transport and sale, packaged cut fruits must be transported and sold under cool conditions.
- ⊙ Fresh-cut fruits have a shelf life of five days at 2 - 7°C. This temperature can be achieved by packing clean ice blocks (ice made with potable water) on fruits in an ice chest or cooler and keeping the cooler closed.
- ⊙ After this shelf life, discard all unsold fruits.

By following these guidelines for controlling bacterial

pathogens in fresh cut fruits, the risk of transmission of bacteria during processing of cut fruits will be low and consumers will be assured of better health.

Government agencies responsible for food safety also need to train cut fruit handlers on current good manufacturing practices in the processing of cut fruits.



• Cut fruits

After buying fruits, use potable water or treated water for washing and processing them:

- ⊙ Change the wash water often to prevent accumulation of foreign matter and microbes.
- ⊙ Wash fruits again with disinfectant. The most commonly used commercial antimicrobial intervention for fresh produce (including fruits) during processing is wash water containing 50 - 200 part per million (ppm) of chlorine.
- ⊙ Ensure that processing facilities are clean and free of pests.
- ⊙ When cutting and packaging the fruits, wash hands thoroughly with soap and water.
- ⊙ Wear clean protective clothing.
- ⊙ Ensure cutting knives and bowls are clean. Disinfecting of cutting knives, boards and bowls can be achieved by subjecting them to a 77°C environment for at least 30 seconds after cleaning.
- ⊙ Avoid cracked, chipped, creviced or dented cutting boards, bowls or knives.
- ⊙ Discard badly bruised or rotten fruits immediately.

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- 2: Government agencies responsible for food safety also need to train cut fruit handlers on current good manufacturing practices in the processing of cut fruits.
- 3: After harvesting, handling and transportation of fruits may lead to microbial contamination.

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