

Fermentation in food processing.

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Description

The process of converting the carbohydrates into organic acids by using some bacteria or microorganisms is termed as fermentation. It destroys majority of the harmful microorganisms and chemicals in foods and turn into beneficial bacteria. These bacteria help to produce new enzymes to coordinate in the digestion process. Soy products, dairy products, grains, and some vegetables are some of the products which are benefit from fermentation process. The process of fermentation destroys harmful microorganisms and chemicals in foods and restores them with beneficial bacteria. These bacteria help to produce new enzymes which supports in the digestion. Soy products, dairy products, grains, and some vegetables are some of the foods that are benefited from fermentation. The fermentation process helps in generating a range of products by the oxidation of carbohydrates which are earlier organic acids, alcohol, and carbon dioxide. These products limit the growth of spoilage or pathogenicity in the food which has preservatives.

They are many kinds of fermentation processes involved but greatly there are three main processes of food fermentation are Lactic acid Fermentation, Ethanol Fermentation and Acetic acid Fermentation. Temporary increase in gas and bloating are the main common reaction of food Fermentation where it results into the release of excess gas produced after probiotics will help to kill harmful gut bacteria and fungi. Apple cider vinegar is one of the fermented product which helps to kill the harmful bacteria. That a specific food or potable is created by fermentation doesn't essentially indicate that it contains live microorganisms. Bread, beer, wine, and distilled alcoholic beverages need yeasts for fermentation however the assembly organisms area unit either inactivated by heat in the case of bread and a few beers or area unit physically removed by filtration or alternative means that in the case of wine and beer. Moreover, several hard foods area unit heat-treated once

fermentation to reinforce food safety or to increase shelf-life. Thus hard sausages area unit typically are gratin once the fermentation and condiment and dish and alternative hard vegetables area unit created shelf-stable by thermal process. Some product, like several of the industrial pickles and olives isn't hard in the least however rather area unit placed into brines containing salt and organic acids. Even non-thermally processed hard foods could nonetheless contain low levels of live or viable organisms merely grateful to inhospitable environmental conditions that cut back microorganism populations over time. It's necessary to notice, however, that the absence of live microbes within the final product doesn't preclude a positive practical role. As an example, food fermentation microbes could manufacture vitamins or alternative bioactive molecules in place or inactivate anti-nutritional factors and nonetheless be absent at the time of consumption.

Conclusion

Fermentation is the process which helps to secrete all the harmful microorganisms in the body and turn them to essential beneficiary bacteria which helps for Digestion and absorption, Synthesis and availability of nutrients, Immune functions, Control the Mood and behaviour. Fermented bacteria help to Makes food more digestible. Fermented foods have more nutrients and generate Chock full of good bacteria and Helps curb sugar cravings and helps in the Increase of flavor in the food.

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