Soybean Fermentation and its Applications

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Abstract

The fermented soy foods that originated many thousand years ago in the Asian countries are often referred to as indigenous fermented foods. Some of the fermented soy foods are now popular in the west. The increased palatability of fermented soy foods is due to the desirable changes in soybeans properties, including texture and organoleptic characteristics (flavor, aroma, and appearance or consistency). Elimination of beany flavors, improvement of digestibility and enhanced keeping quality of the product improved safety and increase the nutritional value are considered the main goals. Fermentation makes the organoleptic characteristics of soybean more attractive to the consumer than the raw soybean. Microbial fermentation is considered as one of the oldest and most economical method for food production and preservation. Fermentation process may increase the digestibility and bioavailability of proteins, carbohydrates, lipids and minerals; enhance the nutritional value such as vitamin content; shorten the cooking time, convert animal feed into food fit for humans; and increase the microbial safety.

Keywords: Soybean, Asian countries, characteristics, economical method, organoleptic