Fermented Food and Ancient Civilization

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Abstract. The ancient civilizations originally developed fermentation as a way to preserve food by stopping the reproduction of spoilage organisms, and a tool to prevent disease by inhibiting the growth of pathogenic organisms; the improvement of fermentation always accompany with development of human civilizations \cite{1}. This paper represented the remarkable roles of three important fermented foods in ancient human civilization.

Introduction

Fermented dairy products, vegetables and brewed beverage are the most important fermented food in human history. It shares an integral part of ancient wisdom and developed throughout the history of human civilizations \cite{2}. Methods for the fermentation of milks and vegetables have been recorded since the dawn of civilization \cite{3}. In China and many other region of the world, fermented beverages were even started since the beginning of the Neolithic age. They become more and more popular along with the development of human civilizations, and people in medieval Europe even drank the alcoholic beverages to avoid drinking contaminated water.

Fermented Dairy Products and Its Related Culture and Civilization

Preservation of dairy products by fermentation is a widely practiced and ancient technology. The traditional biotechnology ensures not only increased shelf life but also make the food more digestible. The fermentation of milks has been described with the earliest document records dating back to the civilization of the fertile crescent \cite{4}. The fermented dairy products became very popular among early civilization in the middle east, and later among the Egyptian and Greek civilization in North Africa and Europe. Then, the health-promoting attribute of the fermented milk products were first mentioned back to the post-roman Republic period of the ancient Roman civilization \cite{2}.

Alcoholic Beverages and Its Related Culture and Civilization

Making alcoholic beverages has been a human activity ever since the beginning of urbanization and civilization in the Neolithic age, and the oldest evidence of grain-based fermented beverage comes from the Neolithic village of Jiahu in Henan province in China \cite{5}. The earliest written documents about beer appeared along with an exchange of goods evolved and the initial social classes organized; and most of our basic brewing knowledge was found in the literatures in Old Babylonian period, which revealed that brewing technology had been
regarded as one cornerstone of civilization [6]. The brewing process was marked on the stones of ancient Egyptians’ tombs, which indicated that beer play a crucial role in cults in Egyptian civilization [7]. Wine was the favorite drink of the upper classes and became a state monopoly during the Hellenistic period. The strict brewery regulation limited the public abuse of alcoholic beverages and demonstrated a new era in human civilization [8].

**Fermented Vegetable and Its Related Culture and Civilization**

Fermentation has been wildly used as an important method to preserve fresh vegetable and fruits in developing countries for ages. However, some fermented fruits and vegetables have a long history from ancient ages and are associated with several human civilizations. Again, the fermented cabbage can be traced to the middle of Neolithic age in China, and then the technology was brought to Europe during the golden age of Mongol Empire. Korean-style fermented cabbage was thought to have originated in the primitive pottery period [9].

**Conclusion**

The fermentation technology as an important part of food science was started, recorded and improved along with the development of human civilization. It seems like fermented dairy products, vegetables and beverages are reproduced in different regions of the world and developed in different period in the history of human civilizations. However, each of them has been regarded as one of the most important aspect recorded in the literatures of each great ancient civilization by coincidence. These precious evidences and coincidence demonstrate that the fermented food is significant in the history of human civilizations.

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**Reference**


