

Discourse on a History of Chocolate: Culture and Science (Part 1)

Iwao Hachiya

Meiji Seika Kaisha, Ltd. Food Research & Development Laboratories
5-3-1, Chiyoda, Sakado-shi, Saitama 350-0289, Japan

Summary

Chocolate culture started to flow along human history from the Olmec civilization of Mesoamerica (BC 1500-BC400). The ancient Mesoamerican loved to drink aromatic and bitter chocolate with added spice and/or corn powder. They had believed that cacao was the food of Gods, and it was presented by the God Quetzalcóatl. The word cacao originated from Maya hieroglyphs. After the Maya, Aztecs called their chocolate cacauatol. Cacau is cacao and -atol means water. In the early 16th century, Spanish invaders changed the name from cacauatol to chocolatol after their conquest. Then chocolatol was modified to chocolate at least by the end of the 16th century. The English chocolate is the same spelling as the Spanish chocolate, in spite of different pronunciation. Therefore, chocolate originally means water of cacao (=drinking chocolate). The word cocoa was born in England according to "Chocolate Book" written by Helge Rubinstein. Any way, in the history of chocolate, this drinking preparation continued until the middle of the 19th century. Cocoa beans are the essential material for chocolate. Cocoa beans are the seed in pods, which are the fruit of cacao trees, which grows in tropical rainy areas. In 1754, the Swedish scientist Carl von Linné gave the cocoa tree the name of *Theobroma cacao*. Now, three types, criollo, forastero and a hybrid (trinitario), are commercially cultivated in the world. Currently the major production is forastero, and criollo and trinitario are minor. World cacao production reaches about 3 million tons. After harvest, Cocoa beans usually are treated by fermentation and drying for better development of chocolate aroma through roasting. Eating chocolate is prepared by dispersion of cocoa mass, milk powder and sugar particles into cocoa butter instead of water. Cocoa butter shows polymorphism, which has 6 forms (I-VI). Only the stable V Form is used for chocolate products to be sure of good gloss without fat bloom.

The bitter drinking chocolate of the Aztec style was sweetened with sugar by the Spanish. After this modification, chocolate was newly born as an exotic and delicious luxury drink. Chocolate was also accepted as a new medicine. For these reasons, this sweetened chocolate fascinated Spanish royalty, nobility and clergymen.

In 1614, a trade mission of Japanese feudal lord, Masamune Date, arrived in Seville and they stayed for 3 years and half in Spain. It may be sure that Tunenaga Hasekura, the mission's leader, was the first Japanese person who drank chocolate.

Nowadays, the chocolate industry maintains the top rank in the world confectionery market. Why

do people love chocolate so much? It may be that the increase of serotonin in our brain induces a happy mood in our heart after eating, and we are also fascinated with the exotic aroma of chocolate, which was can't experience with other foods.