



Making ambrosia accessible to the masses: Dutch cacao or cocoa powder.

Annette I. Bierman
University Library, Scaliger Institute
P.O Box 9501, 2300 RA Leiden
The Netherlands
E.mail aibmail@euronet.nl

The title of this presentation is a bit confusing. Of course the word ambrosia has nothing to do with the plant Ambrosia, who was recently in the news as hay fever plant, this word refers to the fruits of Theobroma cacao, the tree that was named by Linnaeus Theobroma, food for the gods, and foodstuff for the gods we call ambrosia. When the conquistador Hernán Cortez landed in Mexico in 1519, the native people, the Aztec, thought him to be their beloved god Quetzalcoatl, who was, according to the legend, supposed to come back one day. Therefore they offered Cortez precious gifts, including cocoa beans, which were used by the Aztec as a currency. But they also offered him a drink, made of cocoa beans, and it is understandable that this drink was very precious and costly, just imagine how we would think about a drink that was prepared from euro coins! This cocoa drink was called *Xocoatl*, and was soon called chocolate by the Europeans. Chocolate is most likely an onomatopoeia, referring at the sound choco choco choco that was heard when people were whipping up the cocoa mass to prepare a drink. At his return to Spain in 1528 Cortez brought some cocoa beans back, and in his report to his emperor Charles V he also gave a description of their use. Drinking or eating chocolate became popular in Spanish high society, and moved from there to Italy, France and the Spanish Netherlands.

After the introduction in Europe chocolate, like coffee and tea, was at first considered as a medicine. The effects of chocolate were explicated in accordance to the current principles of humoral pathology: chocolate thickens the body fluids and may cause obstructions, and that is the reason why the Aztec mixed their chocolate with spices. As a medicine chocolate strengthens the stomach, is curative in chest complaints and increases the rate of urine formation. And, now the word medicine has come about, it is time to go to the medicine makers, the pharmacists.

Pharmacists used cocoa beans to make different chocolate products. Today I will only pay attention to the medical use, but in the 18th en 19th century a couple of pharmacists produced so-called luxury chocolate as well. As for medical chocolate, I will merely concentrate on the Dutch situation.

Cocoa beans were already listed in the Amsterdam pharmacopoeia of 1686. They kept their place in this pharmacopoeia until the last edition in 1795. After the foundation of the Kingdom of the Netherlands in 1813 Cocoa beans remained in the Dutch national pharmacopoeia until 1871. However, we have to admit that this entry was probably merely due to the fact that Cocoa beans were also the raw material for making cocoa butter. In the nineteenth century the Dutch pharmacist in general didn't make chocolate any longer, if necessary he bought it. And necessary it was, because he still had to use chocolate. Chocolate had become a valuable stuff to improve the poor taste of certain preparations. For example the popular worm cakes, *Trochisci Santonini*, in which Cinae flowers were mixed with chocolate. Other manufacturers of medicines used chocolate for the same purpose. In a 1901 advertisement for their de-worming confection the manufacturers Robert Gibson & Sons promise that 'children eat them with delight.' Our pharmacist used chocolate also for the

coating of pills, if their contents had a bad taste. In the nineteenth century chocolate was still associated with medicine, and drinking chocolate was supposed to be very good for one's health. Therefore it shouldn't surprise us that we find advertisements of chocolate products in professional medical and pharmaceutical journals.

Dutch cocoa powder became famous because it was so easily soluble in water and milk. The inventor was Coenraad Johannes van Houten (1801-1887), son of an Amsterdam chocolate manufacturer. The factory of van Houten's father was established in an Amsterdam canal side house, and the mill was on the attic floor, so they couldn't use horses to turn the mill and therefore human force was necessary. We don't know why van Houten came to the idea to extract the fat from cocoa beans. Fact is that eating and drinking chocolate was very popular at the beginning of the nineteenth century, but because of the high content of fat (more than 50 %) the drink was not easy digestible, and the young manufacturer thought probably that when he could improve the digestibility of his product this would improve his business as well. So he experimented with crushing the beans in a press. Cocoa fat came out and a powder that contained just a small quantity of fat remained. As an extra he added a bit of potassium carbonate to this powder, and the result was a cocoa powder that was easily soluble in water and milk, and because of the adding of alkali the powder formed a steady suspension with the liquids. The alkali opens the cells of the plant, and improves also the taste of the cocoa powder. Van Houten's invention was patented for a period of ten years in 1828. Van Houten has become famous for this invention, and his name is mentioned till today as the inventor of the process of alkalifying cocoa beans. There is only one fact that may disappoint you: in recent studies it has turned out for sure that Van Houten was not a pharmacist, even though Dutch pharmaceutical historians have long thought that he was one. But he really wasn't, but of course this doesn't make his invention less clever. And by selling this easy-to-use cocoa powder, van Houten's business indeed improved. The factory was so flourishing that he had to move it several times and in 1882 Van Houten's factory was established in a new building, quite a difference with the original canal side house where it all started. And although the alkalifying of cocoa beans was criticized in medical and pharmaceutical circles as being not necessary and possible harmful to the health, this method was soon adopted by all manufacturers of cocoa powder.

The 'Droste effect'

Droste effect is a quite common Dutch phrase that has a close connection with cocoa. We have seen that cocoa and chocolate were long associated with medicine, and some manufacturers used this relation in their commercials. At the Dutch chocolate firm Droste, established in 1863, cocoa tins were about the year 1900 decorated with a nurse to indicate the wholesome effect of drinking cocoa. This nurse became a real trademark for Droste's cacao and is used till today on the cartons containing Droste cocoa. If you take a look at it you will probably understand immediately what Dutch people mean when they speak about a 'Droste effect' The recurring visual effect of the nurse, the cocoa tin and the cup of cocoa was about thirty years ago named 'Droste effect' by a Dutch writer. And in the last edition of the well known Dutch dictionary Van Dale is a headword 'Droste effect' with the definition: a recurring visual effect.