Anthropologists study people throughout the world, their evolutionary history, how they behave, adapt to different environments, communicate, and socialise with one another (Royal Anthropological Institute 2017). They do so with a scientific interest, they look to understand the people they are studying and look only to understand. There are no ulterior motives in true anthropology and they do not strive to change their research subjects in anyway. Bernardino de Sahagún has often been called the “First Anthropologist” for the work that he did studying the natives of Central America. While Bernardino de Sahagún should be recognized for his contributions to the field of anthropology and our understanding of Central America before the Spanish conquest, giving him the title of “first anthropologist” goes too far given his study’s evangelical motivations.

Born in 1499, Bernardino de Sahagún grew up and spent the first third of his life in Spain. He studied at the University of Salamanca which at the time was a “principal center of culture in Western Europe” (Leon-Portilla 2002). At the University he joined the priesthood and in 1529 he set sail with a group of Franciscan monks for the New World. Less than a decade after Cortes’ conquest the land of New Spain was filled with conflict when he arrived. During the early part of his time in the New World, he demonstrated a talent for learning native languages and worked at the Imperial College of Santa Cruz in Tlatelolco instructing natives in a variety of different subjects. It was there that he trained his main collaborators who would assist him in the creation of a number of works about the people of Central America before the Spanish conquest. In 1547, he undertook his first research endeavor collecting 40 Huehuetlahtolli which were orations from the pre-Spanish literary tradition. His research efforts continued to expand until 1558 when he began his general study of New Spain which would led to the creation of the Historia General otherwise know as the Florentine Codex (Leon-Portilla 2002).

The Historia General is an incredibly important text for which Bernardino de Sahagún has received a number of accolades and acknowledgements. It is one of the few texts that describes life in Central America before the Spanish Conquest in great depth. In The True History of Chocolate, the Sophie D. Coe and Michael D. Coe (2013, 65-66) argue “Fray Bernardino de Sahagún [is] rightly held by many in the anthropological profession to have been the world’s first field ethnographer.” Stuart B. Schwartz (2000, 24-25) points out “The Florentine Codex has been called one of the greatest ethnographic works ever.” The below is a statue erected to de Sahagún in Hidalgo, Mexico. There is also a statue of him in his hometown in Spain. These statutes illustrate the high levels of praise Bernardino de Sahagún has received for his work in New Spain.
Among the number of biographies written about Sahagún, he has been called “the creator of anthropological research methodology” (Leon-Portilla 2002, citing D'Olwer) and “one of the high points of Spanish science” (Leon-Portilla 2002, citing Graibrois). Leon-Portilla’s (2002) biography is even called *Bernardino de Sahagún: First Anthropologist*.

While Bernardino de Sahagún’s work deserves many accolades, the claim that he is the “first anthropologist” goes too far. The explicit motivations for his study run counter to the central goals of anthropology as a science. He embarked on this research to learn as much as he could about the “idolatrous, human, and natural things” of New Spain (Leon-Portilla 2002, 133) in order to make evangelizing the natives of New Spain easier. Anthropology at its core is focused on understanding for understanding’s sake. De Sahagún’s project was focused on understanding with the aim of changing and eradicating. Leon-Portilla (2002, 133) admits this saying “it would be wrong to postulate that he was moved primarily by what we would qualify as scientific interest.”

The evangelizing goal of de Sahagún’s mission is indisputable. In the prologue to the first book of the *Historia General* he says that Fray Francisco de Toral ordered him to conduct and complete the work. The evangelizing mission is not about celebrating or understanding another culture or group of people. It is about changing a group of people’s beliefs and way of life.

[https://www.youtube.com/watch?v=484cFgk-p1c](https://www.youtube.com/watch?v=484cFgk-p1c)

The above link shows a clip from the 1986 movie *The Mission* which is about 18th Century Spanish Jesuit Missionaries in South America (Joffe and Bolt 1986). In this clip the natives are shown singing and chanting songs they have been taught by the missionaries. This is a dramatic representation of the missionaries’ tendency to encroach into the lives they are interacting with rather than just observing and understanding.

Bernardino de Sahagún should be acknowledged for this contributions to the world including pioneering some essential anthropological methods. His portrait by Cecil O’Gorman shown below rightly includes a book that alludes to his work among the natives in New Spain.
Bernardino de Sahagún should be remembered for this work, for showing the world what life in Central America looked like before the Spanish conquest. To call him the “First Anthropologist” goes too far and is ignoring reality. De Sahagún’s evangelistic motivations disqualify him from that title as the missionaries sought to understand and change, whereas anthropology at its core is about celebrating and understanding in and of itself.

The Anthropologist Ruth Benedict is quoted as saying “The purpose of anthropology is to make the world safe for human differences” (Royal Anthropological Institute 2017). The work of missionaries does not align with this purpose. Bernardino de Sahagún was certainly an indigenist and an appreciator of native culture but he was a missionary and not the “first anthropologist.”

Works Cited


In recent years, there has been a resurgence of chocolate in the media as a means of weight loss, body transformation, and pursuing a healthy lifestyle. Individuals have flocked to this fad, willing to integrate chocolate into their diet in the hopes of physical improvement. The Flat Belly Diet states, “The Flat Belly diet does not offer magic….but it does offer science” (xi) and proceeds to coin the term “MUFAS”, mono unsaturated fatty acids, as the science behind the subject (5), citing dark chocolate specifically as a MUFA to be utilized on a daily basis throughout the diet program (27). Before and after pictures of thrilled women, finally rid of their belly fat once and for all wave gleefully from the pages of the self-help book.

For many, this may seem like a wholly novel idea. However, in light of deeper research, it becomes clear that the authors of this diet plan are simply tapping into the age-old penchant that humans have for turning to chocolate for medicinal purposes. In the following blog post, I will examine that phenomenon, tracing chocolate’s journey as a medical agent throughout history. I theorize that this continued use is due to both its chemical makeup and its esteemed position in social history.

To begin, it is crucial to look at the beginning of chocolate’s historical journey as a remedy. Presilla and de los Santos explain that chocolate was used for religious offerings and elite ceremonies by the Aztec and Mayan communities pre-European invasion (20). By making offerings to the gods and drinking cacao at ceremonies, the Mayans and Aztecs implicitly indicated an association of chocolate use with longevity and health. Additionally, as explained by Dillinger et al., missionary Bernardino de Sahagún’s Florentine Codex explicitly named chocolate as an Aztec remedy. In his written account of Aztec customs, he named chocolate as a therapy used by the civilization for everything from infection and fever to diarrhea or excessive phlegm (2060). However, Europeans took this practice to an even further level. Historians Sophie and Michael Coe describe how the Europeans “stripped it [chocolate] of the spiritual meaning which it had for the Mesoamericans, and imbued it with qualities altogether absent among the Aztecs and Maya… it was a drug, a medicine” (Chapter 5).
With medicine in the 16th century being speculative at best, incorporating this holy, revered substance into the medical repertoire was an attractive option. When chocolate was discovered, the medical world at the time revolved around bleeding, deadly surgery without anesthetic, and other foul remedies meant to balance the “humors” (Dillinger, 2059). Therefore, the reports of Aztec medical expertise were more than enough to catch the attention of King Phillip II, who sent his royal physician, Francisco Hernández to investigate (Coe and Coe, Chapter 4). Hernández quickly adapted the Aztec rituals to fit within the European system of the four humors. This publicity caused many others to follow suit. Notable Spanish doctor Antonio Comero de Ladesma claimed that it “preserved health” and made the user “amiable” while Englishmen Thomas Gage and Adam Stubbes also endorsed the product (Dillinger et al 2064). Thanks to this widespread publicity touting the efficacy of chocolate, by the Baroque period, chocolate, had fanned across Europe as a viable medication, endorsed by royalty and beloved by individuals of the highest class (Coe and Coe, Chapter 5). Of course, this was soon met with controversy, as by the 18th century medical professionals were also warning the public of the dangers of chocolate, claiming that excessive use could result in hyperactivity, discomfort, and even death (Coe and Coe, Chapter 7). While these claims were eventually disputed, chocolate’s role as a medicine was beginning to be contested.

A London doctor warns of the dangers of chocolate. Source

By the turn of the 19th century, modern medicine was on the rise and chocolate’s medicinal value was in a nosedive. As data and facts replaced assumptions and ideas, chocolate was replaced by the scientifically supported medicines we see today (Coe and Coe, Chapter 8). This is due to the fact that modern science found the health benefits of chocolate to be modest. However it is important to note that chocolate can cause several physical effects. First of all, its chemical makeup which include caffeine means that chocolate consumption does give a slight energy boost, and it is addicting (Presilla and De Los Santos, 10). Additionally, a recent study conducted by Joke van Wensen and colleagues found that over time, certain doses of dark chocolate can have health benefits such as lower blood pressure (1). Another study found that chocolate consumption increases total plasma antioxidant
study found that chocolate consumption increases total plasma antioxidant capacity (Halliwell 787). However, in these studies, and many more, the effect of chocolate is minimal, and it is yet to be seen if the results are long lasting and prove causation rather than simply correlation.

In light of these facts, it is incredible that situations like the one in this article are still occurring. How is it possible that chocolate keeps on being disproved as a healthcare option, but continues making dramatic resurgences as medicine? First of all, it seems clear that chocolate’s chemical makeup is a huge contributor. It has addictive qualities and does give a small boost of energy, so it is easy for a consumer to fall into the habit of eating it, and to believe that they are physically benefitting. However, cocaine, cigarettes and french fries are all products that give a physical boost and are addicting, but no one operates under the assumption that they are medically valuable. The crucial difference here is that, as described above, chocolate has been revered and storied by experts and the highest castes of society for centuries, from the Aztec warriors to the Kings and Queens of European society. Chocolate has carried social power for centuries, and this is a powerful thing in the human brain. It is a treasured part of Western culture, and it seems clear that the social context of chocolate continues to outweigh medical opinion. For this combination of reasons, it is very likely that chocolate will never lose its allure as a healthcare option.

References


Hundreds of years before Cadbury, Hershey and the like transformed chocolate into a mass-produced and affordable dietary staple, chocolate was a royal indulgence. Reserved for the most prestigious social classes in Mesoamerica, sumptuary laws in New World governed who was able to consume it and, according to some accounts, consumption of chocolate without sanction by commoners was punishable by death (Presilla, 18). The value and reverence the Aztecs had for chocolate made a strong impression on early travelers, who readily shared the frothed-beverage with their commissioners in the Old World, making the ruling elite of the 16th century among the first Europeans to regularly imbibe.

Elite Origins in Mesoamerica

Chemical analysis has allowed researchers to place chocolate over 38 centuries back, although not much is known about the drinking habits of early cultures such as the Olmecs and Mayans (Coe, location 464-578). The only surviving written evidence for classic Mayan use of cacao has been found on elegantly painted and carved cylindrical vases and vessels in the tombs and graves of the elite (Coe, location 578). Some of these excavated vases are externally marked with Mayan hieroglyphs denoting cacao, and internally bear chemical traces of alkaloids found in cacao and dark rims on the interior that suggest the contents were once liquid (Coe, location 625). There is not enough evidence to concretely conclude that chocolate was chiefly drunken by the ruling class, but the inclusion of chocolate provisions for the afterlife of the elite suggests Mayans placed a high level importance on the drink.

Much more is known of the chocolate consumption habits of the Aztecs than the Mayans. Aztec emperor Motecuhzoma Ilhuicamina...
A Mayan lord sits raised above a servant on a platform next to a frothing pot of chocolate, forbidding the servant from touching the container. (Mayan Civilisation)

Motecuhzoma Ilhuicamina (c. 1398-1469 AD) issued a series of laws stating that “he who does not go to war, be he son of a king, may not wear cotton, feathers or flowers, nor may he smoke, or drink cacao” (Coe, location 1372). Only members of the royal house, the lords and nobility, long-distance merchants who endured dangerous lands and battles with foreign groups, and warriors were allowed to drink chocolate in Aztec society (Coe, location 1324). In Historia general de las cosas de Nueva España by the Franciscan friar Bernardino de Sahagún, Sahagún describes how stringently this hierarchical framework for chocolate consumption was followed by the Aztecs; cacao was very valuable and rare, and was proverbially referred to as “Yollotli eztli”, or the “price of blood and of heart”, because if people of the working class drank it without permit, it would cost them their life (“si alguno de los populares lo bebía, costábale la vide si sin licencia lo bebían”) (Moreno, 500).

Chocolate’s link to luxury and power in Aztec culture is further enforced with the cacao bean’s role in the economy. The Aztecs used cacao beans as currency: a rabbit cost about ten beans (Coe, location 832). When the elite drank chocolate, they were quite literally drinking money. This did not go unacknowledged by the Europeans, who quickly realized that cacao was as valuable to this group of people as gold and gems (Presilla, 18). Watch this video to learn a little more about cacao beans in Aztec culture and the introduction of chocolate to Europeans (Youtube).

Royal Introductions in Europe

In 1544, chocolate made its first documented European appearance in Spain. Dominican friars brought Mayan nobles to the courts of Prince Philip, who presented some of the wonders of the New World to the king: quetzal feathers, painted gourds, and containers of beaten chocolate (Presilla, 24). Forty years later in 1585, the first official cacao bean shipment reached Seville from Veracruz (Coe, location 1848).

The Spanish altered the chocolate recipe slightly – preferring it hot as opposed to cold, as the Aztecs had taken it. The Aztecs would add ingredients they were familiar with such as vanilla, herbs, flower petals, and honey, and the Spanish did the same with sugar, cinnamon, hazelnut, anise, and almonds (Presilla). The Spanish sipped it out of mancerinas, a plate or saucer with a ring in the middle to hold a small cup and prevent it from slipping, rather than jícaras. One thing that didn’t change, however, was the elite ties of chocolate; making and drinking chocolate “involved special pains and paraphernalia” (Presilla, 25).
During the 17th century, chocolate spread throughout Europe. It was highly valued as an exotic, tasty alternative as well as a health-promoting drug and was treated differently than other foods. During the reign of Charles III of Spain, chocolate was sent directly to the “royal keeper of jewels” rather than the kitchen (Presilla, 32). France mimicked Spain’s royal consumption of chocolate, reserving it strictly for the aristocracy while England allowed it to hit the free market (Coe, location 2412). Any Englishman or woman was able to consume it so long as they had enough money to pay for it.

Sources


In today’s world, people everywhere consume chocolate and cacao products regularly. Aside from its regular consumption and constant production as a food product, cacao is also a unique biological specimen with a long history of medicinal and therapeutic uses.

Chocolate is produced from cacao, which grows on a tree called *Theobroma cacao*. This tree is highly distinctive, with finicky growing conditions that trace back to the Amazon River Basin in South America (Presilla 8). Cacao has a difficult time flowering outside of a twenty-degree radius from the equator, above an altitude where temperature can drop below sixty degrees Fahrenheit, or in conditions that are too dry (Coe & Coe, 2013). Besides these extremely specific growing conditions, cacao also grows in a manner that was considered unusual to European onlookers upon visiting the New World. Perhaps a response to the damp, shaded growing conditions, cacao trees flower from the trunk or from thick branches, a phenomenon known as “cauliflory” (Coe & Coe 20-21). Though the tree flowers all year round, it is actually “biologically inefficient”, in that “only 1 to 3 percent [of flowers] actually bear fruit,” (Coe & Coe 21).

The fruits of *Theobroma cacao* also have important medicinal and therapeutic uses, both in the past and in the present. Chemically, cacao contains two alkaloids that have significant stimulant effects on humans: caffeine and theobromine, a compound found in only nineteen other plants (Coe & Coe 29). On average, chocolate products contain only a small amount of caffeine (0.071 mg/g) but a fair amount of theobromine (0.695 mg/g) (Craig & Nguyen, 1984). Besides acting as a stimulant, cacao also has other popular therapeutic uses. For instance, chocolate is considered to be an aphrodisiac and an anti-depressant, as well as to contain antioxidants that prevent “bad” cholesterol from forming (Coe & Coe 31).

Though ancient peoples who consumed cacao were not explicitly aware of its chemical composition, their perpetual use of cacao for medicinal purposes is consistent with the fact that cacao contains these stimulants. The Mayans, for example, equipped warriors with cacao, and as a result were considered invincible and under spiritual protection. In reality, it is likely that the

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**The Biological and Medicinal History of Cacao**

February 19, 2015  Multimedia Essay 1  Bernardino de Sahagún, cauliflory, chocolate, medical, medicinal, *Theobroma cacao*, therapeutic

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Bernardino de Sahagún was responsible for the Florentine Codex, which detailed many Aztec medical practices.

The stimulating nature of the alkaloids in cacao were beneficial during battle. The Aztecs also had therapeutic purposes for cacao, in that they believed serving cacao to people before sacrificing them would comfort them (Dillinger et al., 2000). In addition, The Florentine Codex, put together by Bernardino de Sahagún, described Aztec cultural and medical practices, with highly detailed information on the various medicinal uses for cacao: “Chocolate was drunk by the Mexica to treat stomach and intestinal complaints, and when the cacao was combined with liquid from the bark of the silk cotton tree (Castilla elastic), it was said to cure infections,” (Dillinger et al., 2000).

The medicinal use of cacao occurred in the Old World as well; before modern medicine, treating illness in Europe was based on Galen’s system of humors. This system divided diagnoses into hot, wet, cold, and dry, and treated by balancing opposites. Similarly, Aztec medicine also used a method of contrasting treatments, such as hot vs. cold, that was lost in history but picked up on by Europeans. This led to the use of chocolate in European medicine, which could treat sickness differently in its different product forms. For example, native chocolate flavorings were considered “hot” and could warm the stomach to aid in digestion (Coe & Coe, 2013).

In conclusion, chocolate is made from Theobroma cacao, a plant native to the Amazon River Basin with high specific growing conditions. Cacao contains the alkaloids caffeine and theobromine, which have popularized the use of chocolate in today’s world as a therapeutic with stimulant properties. However, before the chemical composition was understood, the Aztecs and the Mayans both consumed cacao for its medicinal and therapeutic purposes. Europeans, too, picked up on this fact and used cacao as a part of their Galenic humoral system.

References


