

## **The Story of Chocolate**

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Let me begin with some chocolate trivia:

- Aztec Emperor Montezuma drank 50 golden goblets of hot chocolate every day. It was thick, dyed red and flavored with chili peppers.
- Chocolate (Bosco) syrup was used for blood in the famous 45-second shower scene in Alfred Hitchcock's movie, Psycho, which actually took seven days to shoot.
- Hawaii is the only U.S. state that grows cacao beans to produce chocolate.
- In Hershey, Pennsylvania, the streetlights along "Chocolate Avenue" are in the shape of Hershey Kisses.
- In the United States, approximately seven billion pounds of chocolate are manufactured each year with Americans consuming on average 12 pounds/capita.
- In 1897 brownies are first mentioned in print, listed for sale in the Sears, Roebuck & Co. Catalogue
- In 1930 Franklin Mars created the Snickers Bar and in 1940 the Mars Company created M & M's for the military

### ***History of Chocolate***

One of the most widely popular and beloved foods in the entire world, chocolate, is a confectionary prepared from the *Theobroma cacao* seeds that has gained popularity throughout the world for its various medicinal uses, its mood uplifting qualities, versatile preparation techniques and, of course, it's decadent and luscious taste. Cacao has been central to the economic, cultural, social, artistic and ritual life of many ancient Mesoamerican cultures throughout history and continues to be vital to the survival of many people through its booming economy and versatile uses. Apart from

being intrinsically linked with pleasure, traditions and festivities, chocolate is also historically linked with the legacies of colonialism, slavery and expanding industrial capitalism.

Indigenous to the New World where its merit as a stimulant containing various alkaloids was originally discovered, chocolate has been a vital component of ancient cultures and many different traditions and rituals. Two of its most crucial molecules, not fully understood until modern science emerged, include caffeine, a stimulant, and theobromine, a molecule slightly different from caffeine but having essentially the same virtues and properties. (Medicinal Chocolate in New Spain, Western Europe, and North America). While many modern historians have speculated that chocolate has been around for about 2000 years, recent historical research suggests that it may be even older than previously thought (Fiegl, 2008).

The history of chocolate is so old, in fact, that anthropological evidence now suggests that cacao beans were produced by cultures living in present-day Mexico as early as 1900 BC. Even more strikingly, recent discoveries found cacao residue on pottery excavated in Honduras that could even date back as far as 1400 BC (Fiegl, 2008). At that time, the cacao beans were strictly prepared as a bitter drink and may have even been fermented into an alcoholic beverage. Cacao seeds during the pre-Hispanic period were simply referred to as beans, and served as a vital component of various rituals including ordinary social ceremonies, formalities surrounding deities and political alliances (Cacao Use In Yucatan Among the Pre-Hispanic Maya).

Chocolate comes from the cacao tree, a tropical evergreen, the native range of which stretches from present-day Central Mexico south through Central America and into northern South America. The largest production of cacao today comes from islands off the West African coast and the continent near the equator (Motomayor, et al., 2008). Whether the tree itself naturally came from

South America or not remains unclear. Some historians have postulated that it spread north long before humans arrived on the scene, and others suggest that a deliberate introduction was made. The cacao tree was originally cultivated and gained its importance as an economic crop in Mesoamerica (Powis et al., 2007).

Various art left behind indicates that the cacao bean was worshipped by both the Mayans and Aztecs. The Mayans worshipped a god of cacao, *Ek Chuah*, and specifically reserved the intake of cacao for rulers, warriors, priests and nobles at various ceremonies (Sharer, 2006). It was believed that cacao was discovered by the gods in a mountain that also contained delectable foods to be used by them. An annual festival was held in April to honor their cacao god, an event which included the sacrifice of a dog with cacao-colored markings on its coat, various other animal sacrifices, offerings of cacao, feathers, incense and an extensive exchange of gifts.

In a similar manner, the Mexica, or the Aztec, worshipped a god *Queztalcoatl* who was believed to have discovered cacao in a mountain filled with other plant foods (Bingham, 2010). Cacao was traditionally offered to a pantheon of Aztec deities in ceremonies with priests lancing their ear lobes, a process of auto-sacrifice, and covering the cacao with blood as a suitable sacrifice to the gods. However, only men were allowed to partake in these rituals, and the cacao beverage was thought to be toxic for both women and children. Cacao was not only used for offerings to the deities in these indigenous cultures. It was also vital component of many ordinary celebrations, such as marriages and births.

In addition to being perceived as an offering to the gods, indigenous Mayan and Aztec cultures also employed cacao as an invigorating, refreshing and healing plant.

Cacao beans were so highly valued that they were also used as a form of currency (Wood & Lass, 2001) used to purchase food, clothing and household items. Additionally, at one point, the Aztec empire required a yearly tribute of 980 loads of cacao in addition to other goods including animal skins, beads, feathers and obsidian, all of which constituted a privileged offering to the gods (Medicinal Chocolate in New Spain, Western Europe, and North America).

Each load itself represented exactly 8,000 beans. The buying power of quality cacao beans was such that 80-100 beans could buy a new cloth mantle. Anthropological records include useful price lists from Spanish colonial times in central Mexico, where a porter earned 100 beans a day, which gave him more buying power than the modern workers of the area. (Cacao Use in Yucatan Among the Pre-Hispanic Maya).

Given the immense importance of fortitude, sacrifice, and penance in Aztec culture, powerful priestly orders (who were expected to be models of austerity) were not only consumers of chocolate, but its ceremonial stewards. Chocolate was symbolically associated with the life force of blood and the military prowess that produced captives and demanded their sacrifice through heart excision at regular calendrical intervals. These ceremonies were believed to sustain the movement of the sun through the heavens and the continued existence of the Aztec civilization itself, demonstrating the vital importance of chocolate to all facets of Aztec life.

The cacao tree itself is native to Mesoamerica and was cultivated only there until Spanish conquistador Hernando Cortes first encountered it in the court of Montezuma in 1519. Legend has it that the Aztec King Montezuma thought that the Spanish explorer was a reincarnated deity instead of a conquering invader, welcomed him to his court and celebrated with banquets that included drinking chocolate, a drink which was reserved for the noble.

It is theorized that Fray Aguilar, a monk on Cortes' expedition, was the first to return to Europe with Cacao, after he took a sample to the abbot of Piedra monastery in Saragossa, Spain (where top quality chocolate is still made to this day). When the residents of the monastery cared for and harvested the plant, it would mark the first time Chocolate had been produced in the Old World. In these early days of European chocolate history, the monks at Piedra kept their method of cocoa production a closely guarded secret (Tejada, 1990).

### ***Post-expansion History***

In the beginning of its takeover of the European pallet, chocolate was – for the most part – a Spanish secret, due largely to Cortes and his fellow Conquistadors. Originally thought of as a food primarily eaten for sustenance, it was only after being mixed with other spices and flavorings that its pleasurable taste became known, and the modern age of chocolate had been ushered in. Fitting in with Spanish culinary trends of the time, these simple changes distinguished the chocolate consumed by the Spanish from the chocolate consumed by the natives, causing demand for chocolate to skyrocket and making it Spain's top export.

It wasn't until the Spaniards added cane sugar to cacao that its true culinary potential was revealed (Fiegl, 2008). This simple, yet effective change to the fundamental ingredients was found to be much more acceptable to the European palate, and is credited with the rapid spread across the continent.

Several generations of different royal families marrying into one another caused chocolate to become the most highly sought-after delicacy by the European aristocracy. Beginning with the first shipment from Mesoamerica in the 16<sup>th</sup> century, chocolate remained an expensive import, an elite

beverage, and a status symbol for Europe's upper classes for the next 300 years. Because of the high price of cacao and sugar, only those with money could afford to drink chocolate. In fact, years later in France, chocolate was a state monopoly that could be consumed only by members of the royal court (Squicciarini & Swinnen, 2016).

While the expensive nature of chocolate made it profitable for the Spanish Crown via taxation, it created a booming underground market as well. When a Royal Decree by Philip V of Bourbon declared all clergy producing cocoa in the New World to be exempt from taxation, production – and subsequent revenue – skyrocketed. His successor, Charles III, was obliged to revoke this prerogative in 1776 due to the abuses perpetrated by ecclesiastics who exported not only their own small yields of cacao but also large quantities produced by lay growers, thereby becoming major smugglers themselves, a crime punishable by death.

### ***The Historical Relationship between Slavery & Chocolate Production***

The high cost of chocolate in 16<sup>th</sup> and 17<sup>th</sup>-century Europe extended all the way down the production line, as cacao and sugar were labor-intensive agricultural products. To keep up with the demand for chocolate, Spain and many other European nations began to establish colonial plantations on islands off the western coast of Africa and on the continent for growing cacao trees. To that end, plantation owners almost exclusively relied on slave labor for harvesting and production, and to maintain the steady supply to Europe's upper class (Kerr, 2007). Inventions such as the wind-powered and horse-drawn mills sped up production and augmented human labor, but the demand for enslaved workers has remained even to this day.

## ***Industrial Revolution***

With the dawn of the Industrial Revolution in the late 18<sup>th</sup> century, new methods for mass production were invented at a rate never before seen in history. Accordingly, chocolatiers around the world over sought innovations that would help them meet the high demand while simultaneously driving the costs of production down. Perhaps the largest change in manufacturing methods came when chocolate was transformed from a beverage to be enjoyed by European elites, into a sweetened paste to be poured into a mold and solidified. Such was the work of the Fry family of Bristol, England. Chocolate has been consumed as a liquid, not a solid, for 90% of its history.

When Joseph Fry started his chocolate company in 1761, he began making chocolate in the traditional fashion. It wasn't until his son, Joseph Storrs Fry, assumed control of the company that the methods of grinding cocoa beans using the recently invented Watts Steam Engine was patented, and production for the masses could commence. Under the leadership of the younger Fry, the chocolate bar was invented, a rough and grainy solid that is quite different than modern chocolate, due to the fact that one crucial step had yet to be discovered: conching.

Conching is the step in the modern chocolate making process whereby hot rollers are used to mix cocoa with cocoa butter in order to create a smoother texture by using frictional heat, which is responsible for the release of volatiles and acids, and oxidation. When Swiss chocolatier Rudolphe Lindt first invented this device in 1879, he noticed that the shape resembled that of a conche shell and named it accordingly (Afoakwa, 2010). This new step produced a chocolate with a superior aroma and melting characteristics when compared to other solid chocolates of the time, such as that being produced by the Fry family in England.

The legend of Rudolphe Lindt holds that during one of his tests, Lindt forgot to turn off the conche when he left the factory, and only realized his mistake when he returned three days later. Expecting the chocolate inside to be burnt and unusable, he was surprised to find the mixture incredibly smooth and shiny (Talbot, 2009). The mixture was easier to mold and melted on the tongue, and was far superior to any chocolate that had been made before. Lindt began to market this new product as chocolate fondant, and before long his chocolate was in high demand across Europe. Thus was beginning of the age of modern chocolate. To this day, conching is still a popular method for producing chocolate, and because the process is so important to the final texture and flavor of chocolate, manufacturers keep the details of their conching processes proprietary.

Mass production was still fairly limited in Europe, but in the United States it was growing at a pace not seen anywhere else in the world. This was largely due to one man in Pennsylvania who took an interest in chocolate after visiting the World's Fair in Chicago and turned that interest into one of the largest chocolate companies in the world, and a household name. Already the owner of the Lancaster Caramel Company, Milton Hershey entered the chocolate industry in 1900 after selling his company for one million dollars (\$864 million today, when adjusted for inflation).

The first Hershey bar was produced in 1900, with the first Hershey Kiss entering the market in 1907. Hershey's adaption of the assembly line method in his own chocolate factories vastly increased production, and this new highly mechanized process lowered the cost of chocolate even further. Advances in various steps of chocolate production during the Industrial Revolution began the transformation of chocolate from an exquisite luxury to the easily affordable snack that it still is today.

### ***Medicinal Benefits and Uses***

The historical literature is filled with accounts of the beliefs about and uses of chocolate for medicinal purposes, dating back centuries. An article in the *Journal of Nutrition* summarizes some of the historical usage; from ‘chocolate mixed with cinnamon to promote urine flow in patients with kidney disorders’ (1648), prevent fainting fits, which some breeding women are subject unto (1672). free the intestines from flatulence and colic, to cause conception in women, hasten and facilitate delivery, and cure consumption (Tuberculosis), plague of the guts and all manner of inflammations and obstructions (1631). It was also noted that persons who drank chocolate grew fat and corpulent (1648).

A study of the Kuna Indians, a population that lives on islands off the coast of Panama questioned why this population is characterized by a low incidence of high blood pressure and cardiovascular disease given their regular weight and salt intake. Additionally, as individuals moved away from the islands they developed high blood pressure and heart disease at rates similar in other parts of the world (Medicinal Chocolate in New Spain, Western Europe, and North America).

Researchers concluded that the higher amounts of cacao consumed, more than 10 times that of most people who lived elsewhere, and the type of chocolate consumed, drinks composed of dried and ground cacao beans, or the seeds, along with a minute amount of added sweetener, compared to the chocolate that modern Americans tend to eat; i.e., from cacao beans that are roasted, processed and then combined with a significant amount of whole milk, was correlated with lower incidences of cardiovascular disease.

The processing of cacao beans extracts two main components: cacao solids and cocoa butter. Powdered cocoa is made using the solids, while chocolate is made from a combination of cacao solids and cocoa butter. The color of chocolate depends on the amount of cocoa solids and other added ingredients, such as milk. In general, the more cocoa solids, the darker the chocolate. Furthermore, the solids found in chocolate are actually where most of the healthy compounds are derived from. Thus, not all varieties of chocolate are created equal.

Chocolate was traditionally viewed as an agent that could cure physical ailments, alleviate emotional discomfort, and bind people through social ties. Modern science has found evidence that consumption of high-cacao-content chocolate has been associated with a number of positive health benefits, mostly ascribed to flavonol antioxidants derived from ground, fermented cacao seeds. (Medicinal Chocolate in New Spain, Western Europe, and North America).

Since chocolate is derived from a plant, it is a producer of polyphenols, or antioxidant compounds believed to mop up free radicals that can damage DNA. Cacao is an abundant source of polyphenols, which possess these potent antioxidant properties. In fact, a single candy bar's worth of chocolate, contains more than 300 milligrams of polyphenols, which is equivalent to a day's worth of fruits and vegetables. If that chocolate bar happens to be dark chocolate, it contains two days' worth of polyphenols found in fruits and vegetables (Nutritional Properties of Cocoa).

Large chocolate manufacturers tend to intentionally remove these health compounds from their products, as they give chocolate its naturally bitter taste, which tends to be difficult to sell. Therefore, if one is consuming chocolate for health reasons, one should stick to the darker

types and not the white or milk counterparts. (Influence of processing conditions on procyanidin profiles and antioxidant capacity of chocolates)

Chocolate has also been shown to possess stress-reducing qualities. In a study published in the International Journal of Food Sciences and Nutrition, it was found that ingesting chocolate enabled subjects who were exposed to a stressful arithmetic task to return to a normal state without psychological stress quicker than those who did not ingest the chocolate. Along with its ability to reduce cognitive stress, chocolate consumption has been associated with a lower risk of cognitive decline. (Alfonso Moreira, Chocolate Consumption is Associated with a Lower Risk of Cognitive Decline) According to a very recent (2016) study conducted at the Institute of Molecular Medicine Lisbon in Portugal, regular long-term consumption of chocolate has a protective effect on cognitive decline in elderly patients. This study is one of the first prospective cohort studies specifically addressing the long-term effects of chocolate consumption on cognitive decline in humans.

Dr. Franz Messerli, in a 2012 publication in the New England Journal of Medicine, reports his study of a country's level of chocolate consumption and its population's cognitive function. He questioned whether the total number of Nobel Laureates per capita of countries could reflect the proportion with superior cognitive function. All Nobel prizes awarded thru 2011 were correlated with per capita annual chocolate consumption of 23 countries. A positive correlation was found. Switzerland was the top performer with 33 Nobel Laureates, also the country with the highest chocolate consumption in the world at 12.5 kg/year/capita, over 25 pounds. The United States ranked 10th of the 23 countries with 12 Nobel Laureates and 5 kg/year/capita (12 pounds).

Dark chocolate in particular contains many biologically active and beneficial components. A number of studies have suggested that cocoa improves blood pressure by reducing

systolic hypertension or diastolic prehypertension (Effects of chocolate, cocoa, and flavanols on cardiovascular health: a systematic review and meta-analysis of randomized trials), and that flavonoid-rich chocolate may exert a protective effect on low-density lipoprotein (LDL), “bad cholesterol” oxidation, which has been associated with a reduced risk of developing atherosclerosis (Effects of chocolate, cocoa, and flavan-3-ols on cardiovascular health: a systematic review and meta-analysis of randomized trials). Furthermore, chocolate has been reported to release phenylethylamine and serotonin into the body, producing aphrodisiac and mood-lifting effects.

### ***Varieties of Chocolate***

The basis of all types of chocolate is chocolate liquor. According to the United States Food & Drug Administration, chocolate liquor (which, despite its name, contains no alcohol) is “the solid or semi-plastic food prepared by finely grinding cacao nibs,” and is created when the cacao beans are fermented, dried, roasted, and separated from their skins. Once the beans are reduced to a fine paste, they are melted down and separated into cacao butter or cacao solids. Cacao solids are the byproduct of compressing chocolate liquor, expelling all cacao butter (and therefore all fat). What remains is then ground into a fine powder.

Unsweetened chocolate, also known as baking chocolate, is pure chocolate liquor that is mixed with a type of fat to produce a solid substance. Like cocoa powder, unsweetened chocolate originates from a paste made from ground cacao beans. Unlike cocoa powder, however, unsweetened chocolate keeps its cocoa butter. Simply put, unsweetened chocolate is a chocolate bar with 0% sugar and 100% cocoa. This type of chocolate is used in the baking process as an ingredient to increase the deep chocolate flavor without increasing the sweetness.

Bittersweet, also known as “semi-sweet” or “extra-dark”, chocolate is that which contains at least 35% chocolate liquor, and cocoa butter and sugar in varying amounts. The higher the amount of cocoa, the less sweet the taste of the chocolate. Sweet chocolate is that which has a chocolate liquor content of around 15%, and a sugar content of at least 50%.

One of the major developments of the industry during the 1800s was the creation of the first ever milk chocolate in 1875 by Swiss chocolate maker, Daniel Peter. Looking for an innovative way to stand out in a competitive big chocolate market, he attempted to mix milk into chocolate, but quickly figured out that the high water content of milk mixed with the high oil content of chocolate made the two ingredients incredibly difficult to blend effectively, and the product resulted in a mixture that went rancid rather quickly.

Peter was able to resolve the issue through the aid of a helpful neighbor, who was none other than Henri Nestle. He encouraged Peter to use an evaporated milk formula instead of regular milk. The result-- the ideal consistency. Thus, the first milk chocolate was produced. Milk chocolate is by far the most popular form of chocolate in the United States, accounting for over 85% of chocolate eaten by Americans every year. Required by the FDA to contain at least 10% chocolate liquor, it is created with the addition of milk (either in the form of powder, liquid, or condensed) to cocoa butter and sugar.

While not technically a type of chocolate as it contains no chocolate liquor, white chocolate is a confection based on sugar, milk, and cacao butter, without the cacao solids. Its connection to “real” chocolate is cacao butter, which is a primary ingredient. The Federal Drug Administration currently includes white chocolate among other types of chocolate in its description of “cacao products.”

According to the World Cocoa Foundation and Euromonitor, a market research firm, more than 3 million tons of cacao beans are consumed worldwide annually, with the chocolate market rising 13 percent between the years of 2010 and 2015, amounting to \$101 billion, and a 30% growth in demand for chocolate projected by 2020. The average European or U.S. consumer eats around 5.2 kilograms, or 11.5 pounds, of chocolate each year, according to Erste Asset Management. Approximately 3.5 million tons of cacao beans are produced on an annual basis, with four West African countries producing more than 70 percent of the supply; Ivory Coast, Ghana, Nigeria and Cameroon. The main source of income for 5.5 million small-scale farmers, cacao is a central component of many cultures and their economies. Unfortunately, cacao farmers make little money from their crops and many continue to live in abject poverty. Widespread use of child labor, and in some cases slavery, has not been uncommon throughout the history of the chocolate industry and continues today. Recent investigations have exposed some of the worst forms of human trafficking, slavery and child labor directly linked to this ever-growing global demand for efficient and cheap cacao bean production.

Media coverage of these child labor practices and conditions under which workers and farmers labor has attracted attention in the United States. Former Sen. Tom Harkin of Iowa, and Rep. Eliot Engel of New York have worked to bring together major chocolate manufacturers in an effort to eradicate some of the worst forms of child labor, human trafficking and various forms of slavery. It is estimated approximately 1.8 million children are still working on cacao farms, mostly in West African countries where more than 70% of the world's cacao is grown (Child Labor and Slavery in the Chocolate Industry).

A number of large chocolate companies have made conscious efforts to alleviate unethical practices including Mars, Mondelez, Nestle, Ferrero and Hershey. In 2009, Mars was the first big chocolate maker to pledge it would buy 100% of its cacao from certified producers, producers whose farmers employ sustainable and ethical practices. Similarly, Mondelez, a \$14.45-billion chocolate giant and owner of Cadbury announced a \$400 million investment to scale up its certified Cacao Life program designed to provide training and support for farmers (Child Labor and Slavery in the Chocolate Industry).

Nestle has committed more than \$100 million over 10 years to its certified Cacao Plan in an effort to address issues such as child labor, gender inequality and poor social conditions, earning industry approval for its holistic approach to training and supporting farmers. Chocolate giant Ferrero, known for Nutella and its Kinder line of chocolate has also joined major chocolate makers and pledged that it will source 100% of its cacao from certified farmers by 2020. Similarly, Hershey has also pledged to acquire 100% of its cacao sources from certified farmers in an effort to invest in small-scale farming and empower the sustainability of the chocolate industry.

Fairtrade agreements and sales are making improvements, but there is a long way to go. There are currently more than 120,000 farmers across 18 countries, including Belize, Bolivia, Cameroon, Colombia, Costa Rica, Côte d'Ivoire, the Dominican Republic and others who participate in Fairtrade measures. In 2010, Fairtrade cacao generated about \$5.1m in Fairtrade Premiums, mainly in West Africa (Fairtrade Foundation Commodity Briefing Cocoa).

### *Now turning to chocolate and wine*

While the pairing of chocolate and wine seems appealing, the flavors are not always compatible. Chocolate has intense flavors, which can often be simultaneously sweet, fruity, bitter and acidic, so the wine it's paired with needs to be equally intense in its taste if it's going to pair well with the chocolate that's picked. A light red or white wine typically will not be particularly distinguishable if it's tasted after a bite of a good quality chocolate bar. Fruity and intense wine, such as Zinfandels or rich red blend wines should be used for pairing instead. If one is tasting chocolate and wine together, the rule of tasting, for both chocolate and wine, from light to dark chocolate, light and dry to bold and sweet wine, should be obeyed, starting with the light milk and white chocolate, moving to the medium intensity chocolate, and ending with the very dark and bitter chocolates in order to match the wines in ascending order of weight and darkness.

For example, extra dark chocolate (70%) is appropriately paired with Cabernet Sauvignon, Bordeaux, Barolo or Malbec. For medium dark (60%) chocolate, a good pairing would be a bottle of Merlot, Shiraz, Zinfandel or Chianti. For a smooth dark (54%) chocolate, a bottle of Riesling, Pinot Noir or a Vintage Port could work well. For milk chocolate (46%) late harvest wines such as Madeira, Sauterne or a Muscat work exceptionally well.

At each table you will find a taster bar of DeBrands chocolate, providing a sampling of different chocolate varieties and flavors. During an interview with Cathy Brand- Beere I learned the following about our locally owned and operated "fine chocolatier":

- The company started in 1987 with about a dozen different chocolates available, today approximately 100 are produced and sold.

- All centers are handmade made from scratch and all recipes are from Cathy and her mother.
- Secret shoppers are employed to assure quality products and quality service.
- A Ph.D. chemist is utilized in analyzing products for ingredients and taste, quality of products, recipes and of sanitation of the production facilities.
- Some specialty chocolates take three days from start to finish.
- Raspberry, caramel and peanut butter candies are the most popular sellers.
- The biggest retail sales season is Christmas, the biggest one day sales is February 13.

Let me leave you with just a few more bites of chocolate trivia:

- Pet parrots can eat virtually any common “people-food” except for chocolate and avocados. Both of these are highly toxic to the parrot and can be fatal.
- The daughter of confectioner Leo Hirschfield (New York) is commemorated in the name of the sweet he invented: Although his daughter’s real name was Clara, she went by the nickname Tootsie, and in her honor, her doting father named his chewy chocolate logs, “tootsie rolls.”
- In 1907, the first penny candy to be individually wrapped in America was the tootsie roll. Sixty-four million tootsie rolls are made every day.
- The theobromine in chocolate that stimulates the cardiac and nervous systems is toxic to dogs and cats and small amounts, particularly of dark chocolate, can be lethal.
- Cole Porter got a kick from fudge. He had nine pounds of it shipped to him each month from his hometown of Peru, IN.

- One of Louis XV's many mistresses, Madame de Pompadour, became a famous chocolate addict and used it as a treatment for her sexual dysfunctions.
- A 2013 study found that the scent of chocolate in a bookstore made customers 40% more likely to buy cookbooks or romance novels, and 22% more likely to buy books of any genre.
- Hershey's makes 70 million Kisses every day and enough annually to make a 300,000 mile-long line of Kisses.
- Chocolate gives you a more intense mental high and gets your heart pounding more than kissing does.

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