



Photo from thebigread.com

I can.

We were sitting on the couch together, cozy underneath a blanket or two. Mom had just closed the last page of *Where the Red Fern Grows*, and I was busy contemplating the probability of us getting a puppy if I begged Daddy hard enough. The odds were not looking good.

Mom took a drink from the huge cream-colored mug she held in both hands and sighed contentedly.

“What’s that?” I asked, frowning that her attention was no longer on Little Anne or myself.

“Would you like to try some?”

The answer was yes, I would like to try some, thank you very much. There was just half a mouthful left, and some of the un-dissolved sugar was swirling in its depths. The milky color didn’t look particularly inviting, but it smelled heavenly. I took a cautious sip as the steam tickled my nose. It was delicious.

I was hooked.

Today, like many other people, I drink a cup or two (or three or four) without thinking. It is no longer the mystical liquid I observed adults drinking as a child, but something I partake of daily. It is a mindless habit, an everyday ritual. It is something we have put on a pedestal, in a way. It is present at every company meeting, every café, every grocery store. It can be found in countries throughout the entire world in one form or another. It is addicting and can be both harmful and helpful to the body. It comes in dozens of shapes, forms, mixes, flavors, colors, and prices—but it can also be a familiar taste of home. For better or for worse, it is here to stay.

“Would you like to try some coffee?” Yes, I would. Thank you very much.



Photo from savoryandsweetnyc.com

The Brew

Background Check

The decision to study coffee grew out of two facts: I love coffee, and so does much of the world. All of my family members are huge coffee drinkers, and I bring a cup or two to school every morning like many of my classmates. Teachers often carry a mug into the classroom, and I know of at least one teacher who snuck a coffee maker into the closet even though it is not strictly allowed.

But above this, there exists a wealth of information concerning coffee. It is

extremely popular, impossibly varied, and present in most of the world. Coffee is one of the

most traded agricultural commodities around the globe. And despite being no more than a common drink, it is also unimaginably complex in regards to history, economy, and science. Honestly, it is a very simple beverage that has somehow evolved to become popular for all-day and year-round consumption.

We have all sorts of specialty juices, mixes, sodas, teas, and flavored drinks—but coffee is as popular today as it has ever been. Take some time to delve into the caffeinated, fragrant, steaming world of coffee, and it is easy to see that there is more to the average cup of joe than meets the eye.

Method to the Madness

How does one begin to research a topic that has been around for ages? Being the 21st century student I am, I turned first to the Internet. A quick Google search for “coffee” brings up over 2 billion results, so I had plenty of information to browse. Books from our local library were my next step, proving to be more reliable than many of the unprofessional websites I visited. Finally, three interviews gave my research a personal and live touch, while also forcing me to exercise my interview skills and overcome fears of meeting with new people.

I naively attempted to get in touch with several of the coffee giants, namely Starbucks, Dunkin Donuts, Folgers, and Caribou Coffee. The response, if any, was that the companies receive too many interview requests and therefore have a

policy to not grant any of them, especially if they come from high school seniors in small towns. Okay, perhaps that last part was only implied, but I can read between the lines. Perhaps this disappointment was for the best, however, because it encouraged me to speak with two ladies from local Dunkin Donuts and Starbucks restaurants. Because I was connected personally with them, I probably received more honest and straightforward answers than any company representative would have been willing to share.

In short, with research in hand, I hope to take this simple drink and discover how it has shaped the modern world. To do this, however, we first have to look to the past. Specifically, fourteenth century Ethiopia.



Photo from savoryandsweetnyc.com

The History of Coffee

Murky Origins

Much like the Loch Ness Monster and Sasquatch, there is much ambiguity surrounding the origins of coffee. One popular legend tells the story of a goatherd named Kaldi in the Ethiopian highlands. According to the myth, “he discovered coffee after noticing that his goats, upon eating berries from a certain tree, became so spirited that they did not want to sleep at night” (“The History Of Coffee”). After trying it himself, Kaldi brought the energy-giving food to the local monks. They, in turn, used it to concoct a drink that would keep them awake for long prayers and worship time. In time, coffee spread with growing swiftness through the Eastern world.

Coffeeshouses in the Arab lands and then Europe “became very popular; however, they were at times deemed immoral because they were accused of drawing men away from their obligations to their homes and religion... it became a Christian drink with the blessing of Pope Clement VIII, who savored the beverage” (Campbell and Smith 17).

One Muslim leader, Kha-ir Beg, prohibited the liquid after literally putting it on trial in a courtroom; however, this trend of outlawing coffee was frequent and never

lasted long. During the Enlightenment, coffee became the intelligent man’s replacement for beer. It was “the great soberer, the drink of clear-headedness, the epitome of modernity and progress—the ideal beverage, in short, for the Age of Reason” (Standage 136).

+ “[Coffee:] that Grave and Wholesome Liquor/ That heals the Stomach, makes the Genius quicker/ Relieves the Memory, revives the Sad/ and cheers the Spirits, without making Mad.”

~ Anonymous 19th century poet, qtd. in Standage 135

Even once this coffee craze reached the New World, it did not take affect until the Boston Tea Party in 1773, “when the colonists revolted against a heavy tax on tea imposed by King George” (“The History Of Coffee”). It is a good thing they did, or perhaps America would be the world’s largest tea consumer, as opposed to the largest coffee consumer (“Coffee”).

And the rest, as they say, is history. Literally.

Brain Food

What do Balzac, Beethoven, Picasso, Bob Dylan, Voltaire, Jean-Paul Sartre, Ernest Hemingway, Bach, and T. S. Eliot all have in common? Why, they all loved coffee, of course (Campbell and Smith 23). So does this mean coffee is a creative superfood? That is hard to prove.

Instead, it seems as though the stimulation resulted from coffeehouses, not the drink itself, as “centers of self-education, literary and philosophical speculation, commercial innovation, and, in some cases, political fermentation” (Standage 157). It is clear, however, that coffee has fostered great

minds for centuries, whether through the effects of caffeine or something else entirely.

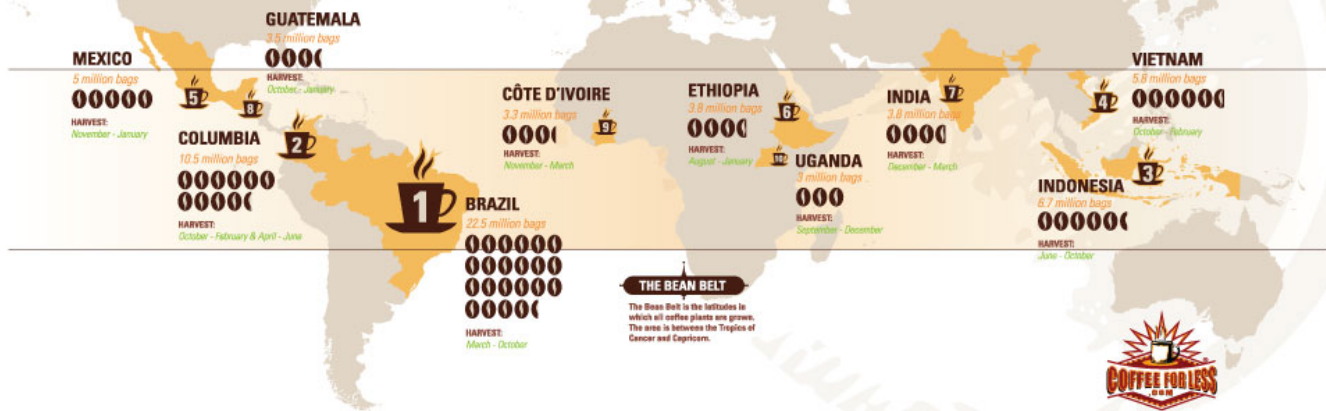
A Frenchman named Honoré de Balzac wrote, “Coffee falls into your stomach and straightaway there is a general commotion. Ideas begin to move like the battalions of the Grand Army on the battlefield... things remembered arrive at full gallop” (qtd. in Braun 133). Any college student will say that a coffee fix keeps their mind active, or at the very least *awake* during long lectures, which is no doubt the work of caffeine. But other creative artists, writers, philosophers, and scientists attribute their genius to coffee itself, and only time will tell if they are right to do so.



Photo from equal-exchange.com

TOP TEN COFFEE-PRODUCING COUNTRIES

(based on the number of 132-pound [60-kilogram] bags produced during the 1997-98 crop year, according to the U.S. National Coffee Association)



Journey to the Center of the Mug

For those who like a homegrown, completely American cup of coffee, they have slim pickings. Only one state in the great USA can boast that it grows coffee beans, that being the tropical Hawaii. This state's temperate climate and rich soil set it apart from the mainland. All coffee is grown within 1,000 miles of the equator in such climates (Orey 12). Most growth happens in more than fifty countries in Africa, South America, Central America, southeast Asia, India, and the Caribbean. The biggest chunk of coffee, thirty to forty percent, comes from Brazil.

The journey from field to mug, however, is more than just growing. There is planting, harvesting, processing, drying, milling, exporting, tasting, roasting, grinding, and brewing ("Ten Steps To

Coffee"). Coffee trees take five years to mature and only produce about one pound of roasted coffee a year, enough to make merely around 40 cups (Orey 12, "Growing"). Moreover, it takes about 4,000 beans to make that pound. If someone drinks two cups a day, that amount wouldn't even last them a month. What it boils down to (sorry, can't resist a pun) is a huge market for coffee in all of its forms.

During each stop from harvest to brew, the coffee is expertly handled to ensure the best quality and quantity is produced because coffee is "one of the world's most profitable export crops" ("The History Of Coffee"). This partially explains how this beverage can have such a large effect on the economies of every country. Which, serendipitously, is our next topic

The Economy of Coffee

Global Grounds

Those steps in coffee production involve perhaps a dozen companies, all of which depend on the world's thirst for a cup of java. Coffee, then, is instrumental in the lives of many workers. And it is not just those directly involved in the coffee-producing business who benefit.

Think of the huge market for coffee accessories, travel mugs, cups, makers, home décor, specialty flavors, syrups, and even coffee-themed apparel. Furthermore, 65 percent of those who drink it add some kind of sweetener, adding money to the wallets of those who produce cream and sugar (Orey 12).

Adults of all ages are increasing their rate of coffee indulgence, which could mean a larger demand for grounds production. Or, it could simply mean that World War III will be fought over bags of coffee. In fact, "approximately seven million tons of green



Photo from goodhousekeeping.com

coffee is produced worldwide each year" ("Ten Steps To Coffee").

Most of their products are funneled into the U.S. because we consume "one-fifth of all the world's coffee" and are "the largest consumer in the world" ("Coffee"). Coffee is one of the most-traded products in the entire human race, second only to petroleum (Orey 12). Bottom line: more than a beverage, coffee is a star player in the game of worldwide economics.

+ "The whole purpose of places like Starbucks is for people with no decision-making ability whatsoever to make six decisions just to buy one cup of coffee. Short, tall, light, dark, caf, decaf, lowfat, non-fat, etcetera. So people who don't know what the hell they're doing or who on earth they are can, for only \$2.95, get not just a cup of coffee but an absolutely defining sense of self: Tall. Decaf. Cappuccino."

~ Tom Hank's character in *You've Got Mail* (qtd. in Orey 74).

Last Brand Standing

Fierce brand loyalty is a phenomenon that affects many Americans, and coffee is not exempt from this mindset. Folgers, Eight o’Clock, Maxwell House, Yuban, Chock full o’Nuts, Dunkin Donuts, Starbucks, and Millstone are all huge names in the coffee industry, listed here from oldest to newest in terms of establishment. Between excellent marketing and longevity, most people can name a few of their slogans. Legend has it that Maxwell House’s “Good to the last drop” line came directly from a comment

schemes of the brands, one bright and cheery, the other reserved and comforting, display their differences.

Yet the two businesses, and many of the other big-name coffee franchises, share countless similarities. So in a world that is full of coffee shops, how do they all survive?

Local Wisconsin wife and mother Mackenzie Angulo has worked at two



made by President Theodore Roosevelt in 1907, but again, that could be the marketing talking (Orey 31). Of the brands listed earlier, Starbucks and Dunkin Donuts have one of the largest rivalries.

Dunkin is the more casual and welcoming establishment, while Starbucks strives to be seen as sophisticated and modern. Dunkin dominates the Eastern coast of America; Starbucks, the Western. Even the color

different Starbucks stores and remains a regular customer there. Angulo said that Starbucks has been able to revolutionize the coffee industry through their total makeover of coffee stores. This includes new vocabulary (sizes are tall, grande, and venti), higher prices, and improved research behind each product (Angulo).

Besides that, there is also the appeal of carrying around a well-known brand as a

status symbol for teenagers. “It’s a fad, and it’s marketed extremely well. Kids have pocket money now, and they’re spending it on caffeine sources,” said Mary Carroll, a registered dietitian and certified diabetes educator (Carroll).

■ Shona Bonney, Dunkin Donuts general restaurant manager for Antioch, Illinois, shared that she drinks nearly 20 cups of coffee a day (Bonney). She said it gives people a “boost in the morning,” which ties in nicely with the Dunkin slogan “America runs on Dunkin.” Bonney credits Dunkin’s careful product quality and cheaper prices with its success.

All employees have to go to “Dunkin University,” online classes that teach workplace etiquette. Grounds are meticulously measured and weighed throughout a workday, a fresh pot is brewed every 18 minutes, and the water stays at a constant 200 degrees Fahrenheit.

“Dunkin Donuts has grown excessively,” she shared, and projecting that it would continue to increase in its amount of stores and influence in the coffee market. It is clear that the major companies will continue to compete for business worldwide, flaunting their differences and covering up their similarities.

Close to Home

Besides big-name companies competing for customers, there is also the little guy to consider. Local coffee shops and cafés showcase another side to coffee, one that is focused on relaxed atmospheres and familiarity—or perhaps the diversity of individual shops, each one unique instead of a cookie-cutter chain franchise. Gourmet coffee accounts for 37 percent of total coffee consumed, and stylish, local coffee shops are the perfect place to get it (Orey 13).

However, it takes constant work to keep local businesses popular and they have to be able to compete with the prices and services of powerful franchises. Oftentimes, patrons visit both local and chain restaurants depending on what kind of service they are in the mood for. A small

café offers more privacy and intimacy, besides unique drinks and homemade treats—but the product may not be as consistent or quickly made. Any way you brew it, both types of coffee shops aren’t going anywhere for the foreseeable future.



Photos from galinabella.files.wordpress.com and arizonacoffee.com

Fair and Square

Conscientious coffee-drinkers have lately been reaching for a distinct type of grounds labeled Fair Trade, causing a shift in sales worldwide. This growing Fair Trade trend is a “voluntary program utilized by coffee importers and food companies to create an alternative market for traditionally disadvantaged producers in developing countries” (“What Is Fair Trade Coffee?”). Coffee grounds that have the fair trade seal are guaranteed to be justly produced and distributed by companies that pay fair wages to farmers. This keeps workers from toiling “in what can be described as ‘sweatshops in the fields’ ...a cycle of poverty and debt” (“Coffee”).

“With world market [wholesale coffee] prices as low as they are right now, we see that many farmers cannot maintain their families and their land anymore. We need Fair Trade now more than ever,” said Jerónimo Bollen (qtd in “Coffee”). Bollen is the director of a Fair Trade program in



Photo from static.guim.co.uk

Guatemala, where coffee farmers have been struggling under the plummeting Starbucks and Procter & Gamble—although unfortunately not their Folgers brand—have begun to offer Fair Trade grounds after grassroots efforts by organizations like Global Exchange put pressure on the companies. However unless more of the public begins to demand Fair Trade coffee, it will not generate enough revenue to be sustainable. Happily, “today some 10,000 retail outlets and 200 universities across the U.S. offer Fair Trade coffee.”



Photo from green-mom.com

The Science of Coffee

The Buzz

Caffeine: part of a healthy diet, or the bane of modern society? The answer is not clear, so this major ingredient of coffee remains a controversial one. According to various studies, coffee can supposedly reduce a person's risk of type 2 diabetes, heart failure, depression, muscular pain, coronary artery disease, stroke, certain types of cancer, and lengthen life (Abrams).

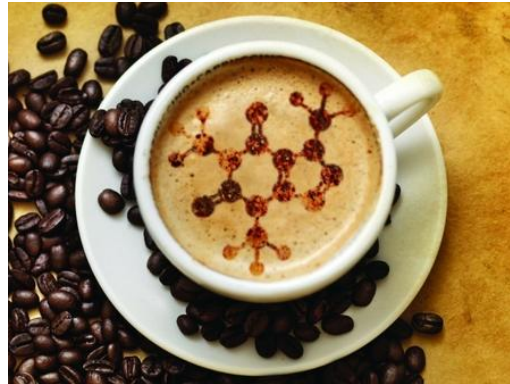


Photo from [images.wookmark.com](https://www.images.wookmark.com)

Other benefits include improved mental performance, “especially on alertness, attention, and concentration” (“Coffee and the Mind”). Some say it could even lower one’s risk for Alzheimer’s Disease and Parkinson’s Disease, two serious conditions that affect many Americans. If you think this sounds too good to be true, you are not alone.

Mary Carroll, the aforementioned registered dietitian and certified diabetes educator,

+ “Coffee, the sober drink, the mighty nourishment of the brain, which unlike other spirits, heightens purity and lucidity.”

~Nineteenth century historian Jules Michelet, qtd. in Standage 133

explained, “There’s a lot of benefits to drinking coffee, but just like anything else, too much is too much” (Carroll). She compared the drink to red wine, another beverage that can be part of a healthy diet only in moderation. She herself drinks two cups every day.

“Coffee is a drug, it is a stimulant, so people get addicted to the stimulant affects of it,” continued Carroll. “If you have too much of a stimulant, it actually works in reverse.” This was echoed by the same article that praised coffee’s mental benefits, which added the disclaimer that “higher intake may decrease performance.” Besides, we have all heard from Mom that coffee will stunt your growth. But is there an even more sinister side to caffeine?

The Bad and the Ugly

Caffeine is a drug, and therefore you may develop a tolerance for it. Just like tobacco or alcohol, caffeine's effects are less pronounced in regular coffee drinkers ("Coffee and the Mind"). However, be cautious about lumping those drugs together. According to one source, "there is no evidence to suggest that caffeine use has comparable physical and social consequences to addiction."



Photo from monkeyworks.com

This means that even though withdrawal symptoms may stem from caffeine, it is very different from those a smoker or alcoholic would experience.

Still, Carroll cautioned that a high caffeine intake could lead to heart attack or stroke for people with at-risk cardiovascular systems. Not only does caffeine affect the cardiovascular system, it also has dehydrating effects and may cause sleeplessness; Carroll recommends switching to decaffeinated java after noon. Plus additives like cream, artificial flavors, and sweeteners carry with them unhealthy saturated fats and sugars.

The truth about the benefits of coffee cannot be ignored, however. "It tends to get us started in the morning; it makes us think a little bit clearer. There is some research indicating it might help guard against diabetes and heart disease if it's taken in small quantities," said Carroll. "They've been drinking it for centuries. In moderation, it's part of a healthy diet."

What's in a Name?

Studying the menu in front of you, your palms begin to sweat and your eyebrows draw together in confusion. *Mocha, arabica, medium grade, dark roast, French pressed, decaf—what in the world? I just wanted a simple cup of coffee!*

Never fear, my simple coffee friend—the answers lie ahead. There are two main kinds of coffee, those being *Coffea arabica* and *Coffea canephora (robusta)*. The former has more quality, flavor, smell, and less caffeine while the latter is cheaper because it is extremely resistant to disease and

insects and it grows at lower altitudes. There are also several “grades” of coffee, from expensive supreme to cheap robusta (Campbell and Smith 38).

First of all, coffee grounds are roasted many ways to heat “the green coffee bean to different temperatures, which breaks down fats and carbohydrates into an aromatic oily substance.” A longer roast time produces a less acidic taste, less caffeine, and less dense grounds. There are five main types of roasts: light, medium, full, high, and Italian. Each one is darker, stronger, and more bitter than the last. Coffee, like chocolate, is graded on these qualities of the bean: “firmness, flavor, aroma, and blending ability” (Campbell and Smith 38). During roasting, flavoring oils or powders such as hazelnut, Irish cream, or French vanilla may be added.

To make decaffeinated coffee, which makes up around 20 percent of the coffee



consumer market, the beans are steamed before roasting. They then undergo one of a few different methods of caffeine removal, some of which involve more chemicals and are therefore shunned by consumers. Generally, however, decaf coffee from any process, either direct, indirect, or with supercritical carbon dioxide, is perfectly safe. Aside from the fact that it is not going to keep anyone awake for an all-nighter.



Photo from [coffeebrewguides.com](https://www.coffeebrewguides.com)

TYPES OF COFFEE MAKER



Drip

The American Standard of coffee makers, these coffee machines use filters, ground coffee, and gravity to fill a pot or carafe with coffee, often keeping it hot with a warming plate.



Single Cup

Quickly becoming the most popular coffee makers, single cup coffee makers use prepackaged coffee inserts (K-Cups, T-Discs, or coffee pods) to produce a single serving of coffee on demand.



Percolator

Once the favored coffee pot, percolators heat water and repeatedly run it through coffee grounds to produce an often strong cup of coffee.



French Press

The go-to coffee maker in much of Europe and the U.K., this manual coffee pot lets you do the brewing with boiled water and a plunger apparatus.



Espresso Machine

These generally expensive machines are very specifically designed to produce authentic espresso using heat and pressure on water that is forced through tightly packed fine-ground coffee.



Photo from mcdn.coffeeforall.com

The Daily Grind

After roasting, the beans are minced by hand or machine so that the coffee will contain their full flavor. The final product is tiny chunks of grounds that are anywhere from extra fine to extra coarse in texture, depending on which brewing method will be used. For that French press we mentioned earlier, coarse grounds are best (“The 3 Basic Elements”). The French press method falls under the “Infusion” category, where near boiling as opposed to boiling water is used. Other Infusion techniques include steeping, percolation (drip), vacuum, filter, or espresso machines.

Speaking of espresso, this little wonder is the key ingredient in many java drinks. Machines that produce it “require a finer grind and yield a smooth yet strong, rich, heavy-bodied brew” (Campbell and Smith 65).

Keep in mind that whichever way you choose to brew it, coffee is very dependent on other factors as well. Beans should be freshly purchased and freshly ground. The drink is 99 percent water, so fresh, clean water is essential, and un-distilled water is preferable (“The 3 Basic Elements”). It should be brewed between 195 and 205 degrees Fahrenheit, using about 1-2 tablespoons of ground per 6 ounces of water—although this ratio varies greatly depending on desired taste and brewing method. Finally, serve coffee immediately because over-brewed coffee grows bitter and stale.

Don’t let these facts and figures overwhelm you; the most important thing is that you enjoy the coffee you drink. However if they do frighten you, then it would be wise to avoid the following activity.

Slurping with Style

Cupping is like wine tasting for people of all ages. In the search for the perfect cup of coffee, cupping is “a means for evaluating and comparing different coffees on a level playing field” (“Cupping for Beginners”). This is a serious scientific and intelligent process to compare and rate grounds, allowing “the coffees being tasted to compete on the basis of their own intrinsic merits.”

First, brew several types of coffee using precise measurements of water, grounds, and brew time, cleaning equipment as they go to prevent cross-contamination. Then the “cupper” carefully smells the aroma of each coffee sample before “slurping” a taste that coats the

entire tongue. Professional cuppers may not even swallow their perfect drink; instead, they spit it out after dissecting its flavor and move onto the next brew.

Choice words are then used to describe each sample in order to convey its exact taste. Bad coffee may be acidic, astringent, bitter, briny, fermented, flat, or harsh, while excellent coffee may be full-bodied, bright, tangy, clean, mellow, neutral, or smooth (Orey 75).

There are countless cupping worksheets online to help with the grading of each kind—and keep in mind this can be a fun, social activity as well as a professional one. So grab a few friends and take a chance on cupping.

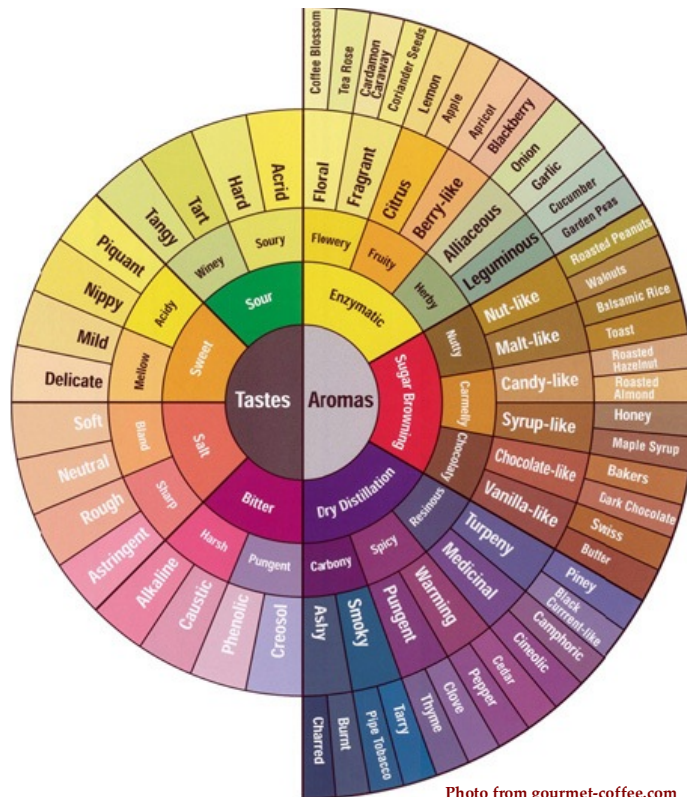


Photo from gourmet-coffee.com



Photo from gourmet-coffee.com



Photo from italiangoodnews.com

It is time for a little review. We have determined that coffee is historically significant, economically powerful, and scientifically influential. And you know what? If all the information about coffee was contained in a single cup, we have only gotten the tiniest whiff of it. This is the rough outline, the bare minimum, the skeleton of coffee! Truly, there is more to a cup of java than meets the eye.

I spent approximately three months pulling together facts and figures about coffee, and doing some research of my own. Personally, I believe what made this project so difficult was that the “updates” were not long enough and their due dates came too close to the final project deadline. Three two-page updates do not a fifteen page paper make,

so if you followed the timeline we were given, you would really only have a week to pull the project together after three months of short updates. But despite all of this, it was still a fun and eye-opening activity.

So what? you say. So what? So I could have chosen any food, drink, object, place, or person to research, and I would have been just as astounded at the amount of information I unearthed! That is what makes this project so amazing. Look at how many bodies and histories and lives are affected by a *bean*. Then take a second look at a simple cup of coffee. A simple *anything*.

It’s not so simple after all, and that is a wonderful thing. ■

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