

Some Like It Hot (and They're Right)

I'm a barista at a coffee shop.

Even though I've been enjoying coffee for about a decade¹, I've only been serving people fancy mochas and traditional macchiatos for about three months. I'm what many coffee aficionados (and my manager) would call a "baby barista", but in the short time I've been working in, and learning about, coffee I've noticed some interesting trends in what caffeine consumers seek out when they visit us:

So. Many. People. Order. Cold. Brew.

Even when the temperature outside drops, and they're swaddled in long, velvety coats and giant beanies with tiny fluffy poms on the ends, our customers still order cold drinks! A lot of my co-workers only drink cold coffee as well; in fact, I think I may be one of the only two baristas at my shop who drinks hot coffee regularly on shift. This led me to wonder: is cold coffee better than hot coffee?
Is my taste in joe becoming increasingly less popular?
Am I becoming a hipster or an old man?!

To combat this identity crisis I did some research, and I've compiled it for you to consider. Even if the overwhelming majority in Austin, Texas prefers cold coffee, I believe science is on my side. Here's why, scientifically speaking, hot coffee is better than cold coffee.

Let's start, though, with how coffee is made. If you're not a barista or a coffee snob, you may not even know what the difference is between hot-brewed coffee and cold brew^{**}. This hazel bean juice we know and love is the result of a chemical reaction produced by a combination of different factors like bean roast, grind type, and temperature; any variation in these ingredients will create a different drink, so (as you may have guessed) contrasting temperature methods produce a different chemical reaction, and thus create a significantly different flavor. With so many different coffee drinks to choose from, cold brew's quick and overwhelming popularity is notable and impressive, even if I intend to disparage it in the next few pages.

For the most part, hot coffee is made by pushing hot (~200o F) water through coffee grounds into a pot or some other receptacle. This includes your run-of-the-mill coffee maker, French press, pour-over, and espresso to name a few of the most popular java methods. All those processes have one very important thing in common: they're fast. Hank Green from the SciShow YouTube channel²¹ says that's because:

¹ I hated coffee until I learned that you could add milk and sugar to it; after that my adolescence free from coffee was over. I acknowledge that this probably wasn't great for my little middle-school self.

^{**} No, cold brew is not hot coffee cooled down in the fridge or poured over ice.

²¹ [SciShow YouTube Video](#)

“Hot water has more energy, so it dissolves things more easily. It speeds along the diffusion of the molecules from inside the beans out into the water and accelerates the chemical reaction that break down compounds when they come into contact with water. All that means lots of flavor in a matter of minutes, whether it’s espresso, French press, Chemex, or just plain drip.”

Drip’s trendy counterpart, which may date as far back as the 1600s³², comes to be when room-temperature or cold water (~72o F and below) is poured over ground coffee and is left to soak for hours and, in some cases, days. As far as my research has shown me, cold brew is unique in being the only coffee-making method using lukewarm or cold water. According to, once again, John Green’s brother:

“Cold brew...trades temperature for time. Since the water isn’t hot, extracting deliciousness from the coffee grounds takes a lot longer. And while you’re probably getting most of the same compounds, you’re not getting the same ones, or the same amounts. Some bitter plant molecules, for instance, take a lot longer to extract, or need higher temperatures, which could explain why a lot of people say cold brew tastes smoother and less bitter or acidic.”¹ So, if you have cold water and the time to wait, cold brew is very practical.

Now that we have a foundational understanding of how our favorite bean juice is made (hot or cold), we can truly delve into what exactly gives hot coffee the edge °. ✧ s c i e n t i f i c a l l y ✧ °. I found, consistently between resources on the internet, that there are three major health benefits to drinking coffee hot. When thinking about the benefits of hot coffee, I want you to remember this acronym*: TBF. In other spheres it may stand for *The Boston Foundation* or the *Turkish Basketball Federation*, but here in this essay (and the world I like to live in), it will stand for *Taste, Body, Fast*.

taste

A 2005 study testing how the temperature of food affects taste concluded that tastebuds exposed to higher temperatures function at a higher level than when exposed to cold ones³: in short, the hotter the drink, the more intense the flavor will be (up until you burn yourself of course). The taste of a fresh hot **** latte will be stronger and more flavorful than any cold coffee you can enjoy, which might keep you from adding unnecessary milk, cream, or sugar that add to the ever-dangerous empty drink calories that many daily coffee drinkers fall prey to.

The shop that I work at demonstrates this theme poignantly; we offer four signature cold brew drinks, and two of them are versions made with a lot of condensed milk (or vegan milk) and a moderate dosing of simple syrup. Many customers order the cold brew black, but just as many (if not more) order these much sweeter, creamier versions that could have long-term negative effects on the health of the consumer.

³² [The history of cold-brew coffee is fascinating. \(An 1840s Algerian fortress is involved.\)](#)

* I know what you’re thinking: “That’s a made-up acronym. why should we abide by this crazy barista’s ramblings?” And I would contend that all acronyms are made up.

body

The phrase “your body is a temple” originates from the Bible**, but it doesn’t take a theologian to see why. Your body houses your soul and, even though I’m here to convince you why hot coffee is best (and not why your body is a temple), it’s important to treat your body well.

One way you can treat your body for all that it does for you is by helping your muscles and internal organs relax. Columbia Family Acupuncture asserts: “Drinking warm water relaxes muscles and internal organs, improving blood circulation, which then brings more oxygen and nutrients to the cells of the body.”⁴⁴ Conversely, “...cold water causes muscles and tissues to contract,” which “just strains the system and impairs digestion.” There’s no definitive scientific evidence that drinking cold water in cold temperatures like my cold brew customers do is dangerous, but it might be counterproductive to digestion and cause your body to work harder than necessary to maintain its normal functions. Hot coffee also has a stronger antioxidant presence than cold brew does⁵, aiding in heart health, eye health, and even possible cancer prevention.⁶

While on my quest to find all the answers to my coffee questions, I noticed several articles claiming that drinking a warm beverage in a hot, dry climate will cool down your body faster than a cold drink would. Unfortunately, this revolutionary information doesn’t benefit our region as much since we live in a glorified swamp (say: “hey Shrek!”). In spite of that, if you live in a dry climate drinking hot liquids might help you cool down faster than a chilly drink, even if it seems crazy.

fast

This one is simple; hot coffee is just straight up faster. Depending on your coffee set-up and the amount you want to make, hot coffee brews within 12 minutes at the longest. On the other hand, the shortest recommended time for letting your cold brew steep is 8 – 16 hours.⁷ At our own shop we let the coffee grounds sit in the water for at least 24 hours before finishing it and serving it to customers. Any way you spin it, the best value for your time is hot coffee.

⁴³ [Scientists Reveal Food Temperature Affects Taste](#)

* Lattes can be made cold, and I’m incredibly familiar with this affordance as many of our customers are just as fond of an iced coffee as they are of cold brew.

** ¹⁹ *Or don’t you know that your body is a temple of the Holy Spirit who is in you, whom you have from God? You are not your own,* ²⁰ *for you were bought with a price. Therefore glorify God in your body and in your spirit, which are God’s.* 1 Corinthians 6:19 – 20, WEB

⁴ [Why Does Food Taste Different When It’s Cold Vs. When It’s Hot?](#)

⁵ [Acidity and Antioxidant Activity of Cold Brew Coffee](#)

“it’s less acidic”

As I mentioned in the “how cold brew is made” section, most people who prefer it to hot coffee are fond of its less bitter taste. They might describe it as sweeter, smoother, and less acidic, but it’s interesting to note that both hot and cold brew have the same pH range (4.8 to 5.13) regardless of roast and grind type.⁵⁸ In short, it may taste less astringent but, in reality, it will have the same effect on your body as hot coffee. Cold brew presents a unique danger to people concerned about acid reflux, gastric ulcers, or IBS because it tastes smoother; you might accidentally drink more than your body can handle because the actual acidity of the drink isn’t indicated in the taste. If you’re worried about acidity exacerbating any related health issues, your best bet is to cut down on coffee altogether (despite many websites inaccurately insisting cold brew as a panacea for the negative health effects of coffee in general.)

“it has more caffeine”

Turns out, determining how much caffeine is in any cup of coffee is tricky. Caffeine levels are dependent on several factors like “coffee type, grind size, brew time, dwell time, roast level and blend.”⁹ Here’s the kicker: cold brew has less caffeine than hot coffee. I’ll let Joseph Rivera from Coffee Chemistry tell you why: “Caffeine’s solubility is primarily driven by temperature, such that at higher temperatures, significantly more caffeine will dissolve in solution than at cooler temperatures. If you are using the same brew-to-water ratios, the cold brew will definitely have less caffeine than hot.”⁸ Notably, cold coffee is actually brewed with a much higher coffee grounds to water ratio (~2 to 2.5 times more), so if you don’t dilute it with water or milk it would be much stronger than your typical cup of joe.⁹

“cold brew lasts longer than hot coffee”

You got me here: it does. Hot coffee without milk can last up to about 4 hours, while cold brew concentrate can last up to 10 days (diluted cold brew will last 3-4 days).¹⁰ Now, I’m going to go ahead and cut you off at the pass; that’s great and all, but that only works if you have the time to make it or the money to shell out to buy it. Cold brew concentrate from the grocery store is exorbitant in general and at our shop, a 16oz cold brew is almost twice the price of the same size drip coffee (tax included).

In short, hot coffee is good for your body, makes your tastebuds happy, and can be enjoyed in a much shorter time. Moreover, cold brew is masquerading as a healthier drink with a jolt of caffeine when in fact it’s an overpriced, weak, and deceptive coffee that takes much longer to make: all sparkle, no substance.

⁵⁸ [Health Benefits of Antioxidants](#)

⁷ [How long should you brew cold coffee?](#)

⁸ [Cold Brew Coffee vs Hot Coffee](#)

⁹ [Does Cold Brew Coffee Contain More Caffeine than Hot Coffee](#)

As for me and why I'm so furiously advocating for hot coffee, well to demonstrate, I'd like to contribute an addition to my earlier imposed imaginary acronym: cozy^{6*}

Admittedly I didn't include this initially (if you feel deceived or betrayed, I understand and I apologize), but I feel this essay would be incomplete without mentioning this essential (though anecdotal) aspect of hot coffee.

It's simple, comforting, and familiar.

As a chronically ill person, I start each morning in an achy pain that I just can't seem to get rid of, and I crave comfort after hauling my sore bones out of bed each morning. A freshly-brewed hot cup of coffee is a fitting reward for my hard work, and a gentle good-for-you treat is almost as rare as a good synonym for the word 'coffee'.

^{6* 10} [How Long does Coffee Last?](#)

* So if you're keeping track, that's now TBFC, which I now realize I have created ineptly, considering you could easily confuse it with the completely unrelated *TCBY*.