

CHAPTER I

COFFEE

Black Puddle Water or Panacea?



Throughout coffee's history, critics have accused the drink of causing horrendous health problems, while those who love the brew have espoused its almost miraculous curative powers. This extreme devotion and condemnation continues today.

Coffee grows wild on the mountainsides of Ethiopia. It is likely that the seeds of *bunn*, as coffee was called there, were at first ground and mixed with animal fat for a quick-energy snack, while the leaves were brewed to make a weakly caffeinated brew. Tribesmen made wine out of the fermented pulp as well as a sweet beverage called *kisher* out of the lightly roasted husks of the coffee cherry. At some point during the fifteenth century, someone roasted the beans, ground them, and made an infusion. Coffee as we know it finally came into being.

At first, coffee was apparently used primarily by Sufi monks in Ethiopia and across the Red Sea in Yemen, where coffee trees were cultivated by the fifteenth century. The drink helped them stay awake for midnight prayers, and it added zest to the whirling dance of the mystic dervishes. The drink became a kind of communion wine for the Islamic Sufis, for

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whom alcoholic beverages were forbidden. In Yemen, the monks sometimes recited the traditional *ratib*, the repetition 116 times of the phrase “*Ya Qawi*” (“O possessor of all strength”), while sharing ritual cups of coffee. The reference was to Allah, but coffee itself was also seen as possessing much strength. The word “coffee” probably derives not from *Qawi* but from *qahwa*, the Arab word for wine, since coffee similarly seemed to possess some kind of stimulating drug.

The Sufis carried coffee beans throughout the Arab world, including Mecca. The beverage quickly spread beyond the monasteries and into secular use. Thus, while coffee was at first considered a medicine or religious aid, it soon enough became an everyday habit. Wealthy people had a coffee room in their homes, reserved only for ceremonial imbibing. For those who did not have such private largesse, coffeehouses, known as *kaveh kanes*, sprang up. By the end of the fifteenth century, Muslim pilgrims had introduced coffee throughout the Islamic world in Persia, Egypt, Turkey, and North Africa, making it a lucrative trade item.

As the drink gained in popularity throughout the sixteenth century, it also gained its reputation as a troublemaking social brew. Various rulers decided that people were having too much fun in the coffeehouses. “The patrons of the coffeehouse indulged in a variety of improper pastimes,” Ralph Hattox notes in his history of the Arab coffeehouses, “ranging from gambling to involvement in irregular and criminally unorthodox sexual situations.”¹

When Khair-Beg, the young governor of Mecca, discovered that satirical verses about him were emanating from the coffeehouses, he determined that coffee, like wine, must be outlawed by the Qur’an, and he induced his religious, legal, and medical advisors to agree. Thus, in 1511 the coffeehouses of Mecca were forcibly closed.

The ban lasted only until the Cairo sultan, a habitual coffee drinker, heard about it and reversed the edict. Other Arab rulers and religious leaders, however, also denounced coffee during the course of the 1500s and into the next century. The Grand Vizier Kuprili of Constantinople, fearing sedition during a war, closed the city’s coffeehouses in 1633. Anyone caught drinking coffee was soundly cudged. Offenders found imbibing a second time were sewn into leather bags and thrown into the Bosphorus. Even so, many continued to drink coffee in secret, and eventually the ban was withdrawn.

Why did coffee drinking persist in the face of persecution in these early Arab societies? The addictive nature of caffeine provides one answer, of



course; yet there is more to it. Coffee provided an intellectual stimulant, a pleasant way to feel increased energy without any apparent ill effects.

Coffeeshouses allowed people to get together for conversation, entertainment, and business, inspiring agreements, poetry, and irreverence in equal measure. So important did the brew become in Turkey that a lack of sufficient coffee provided grounds for a woman to seek a divorce. “O Coffee!” wrote an Arab poet in 1511 (the same year the drink was banned briefly in Mecca), “Thou dost dispel all care, thou are the object of desire to the scholar. This is the beverage of the friends of God.”² Even though Mohammed (ca. 570–632) never drank coffee, a myth arose that the Prophet had proclaimed that under the invigorating influence of coffee he could “unhorse forty men and possess forty women.”³

Europeans Discover Coffee

At first Europeans didn’t quite know what to make of the strange new brew. German physician Leonhard Rauwolf published *Travels in the Orient* in 1582, describing “a very good drink, by them called *Chaube* that is almost as black as ink, and very good in illness, chiefly that of the stomach; of this they drink in the morning early ... as hot as they can; they put it often to their lips but drink but little at a time, and let it go round as they sit.”⁴

The Venetian Gianfrancesco Morosini wrote disapprovingly in 1585 about the “time sunk in idleness” in drinking coffee in Constantinople. “They continually sit about, and for entertainment they are in the habit of drinking in public in shops and in the streets, a black liquid, boiling [as hot] as they can stand it, which is extracted from a seed they call *Caveé* ... [that] is said to have the property of keeping a man awake.”⁵

In 1610 British poet Sir George Sandys noted that the Turks sat “chatting most of the day” over their coffee, which he described as “blacke as soote, and tasting not much unlike it.” He added, however, that it “helpeth, as they say, digestion, and procureth alacrity.”⁶

In a book published in Germany in 1656, Adam Olearius, an astronomer and surveyor who had traveled to Persia, wrote about coffee, warning that “if you partake to excess of such kahave water, it completely extinguishes all pleasures of the flesh.”⁷ He claimed that coffee had rendered a Sultan Mahmed Kasnin impotent. His book, translated and published in France in 1666, helped fuel anti-coffee sentiment there.



By the time Olearius's book was published, Europeans were already discovering coffee. Pope Clement VIII, who died in 1605, supposedly tasted the Moslem drink at the behest of his priests, who wanted him to ban it. "Why, this Satan's drink is so delicious," he reputedly exclaimed, "that it would be a pity to let the infidels have exclusive use of it. We shall fool Satan by baptizing it and making it a truly Christian beverage."⁸

In the first half of the seventeenth century, coffee was still an exotic beverage, and like other such rare substances as sugar, cocoa, and tea, initially was used primarily as an expensive medicine by the upper classes. Over the next fifty years, however, Europeans were to discover the social as well as medicinal benefits of the Arabian drink.

Surprisingly, given their subsequent enthusiasm for coffee, the French lagged behind the Italians and British in adopting the coffeehouse. In 1669 a new Turkish ambassador, Soliman Aga, introduced coffee at his sumptuous Parisian parties, inspiring a craze for all things Turkish. Male guests, given voluminous dressing gowns, learned to loll comfortably without chairs in the luxurious surroundings, and to drink the exotic new beverage. Still, it appeared to be only a novelty.

French doctors, threatened by the medicinal claims made for coffee, went on the counterattack in Marseilles in 1679, no doubt encouraged by French winemakers: "We note with horror that this beverage ... has tended almost completely to disaccustom people from the enjoyment of wine."⁹ Then, in a fine burst of pseudoscience, a young medical student named Colomb blasted coffee, asserting that it "dries up the cerebrospinal fluid and the convolutions ... the upshot being general exhaustion, paralysis, and impotence."¹⁰

Six years later, however, Sylvestre Dufour, another French physician, wrote a book strongly defending coffee, claiming that it relieved kidney stones, gout, and scurvy, while it also helped mitigate migraine headaches. "Coffee banishes languor and anxiety, gives to those who drink it, a pleasing sensation of their own well-being and diffuses through their whole frame, a vivifying and delightful warmth."¹¹ By 1696 one Paris doctor was prescribing coffee enemas to "sweeten" the lower bowel and freshen the complexion.

The French historian Michelet described the advent of coffee as "the auspicious revolution of the times, the great event which created new customs, and even modified human temperament."¹² Certainly coffee lessened the intake of alcohol while the cafés provided a wonderful intellectual stew that ultimately spawned the French Revolution. The coffeehouses of continental Europe were egalitarian meeting places where, as



the food writer Margaret Visser notes, “men and women could, without impropriety, consort as they had never done before. They could meet in public places and talk.”¹³

Coffee and coffeehouses reached Germany in the 1670s. By 1721 there were coffeehouses in most major German cities. For quite a while the coffee habit remained the province of the upper classes. Many physicians warned that it caused sterility or stillbirths. In 1732 the drink had become controversial (and popular) enough to inspire Johann Sebastian Bach to write his humorous *Coffee Cantata*, in which a daughter begs her stern father to allow her this favorite vice: “Dear father, do not be so strict! If I can’t have my little demitasse of coffee three times a day, I’m just like a dried-up piece of roast goat! Ah! How sweet coffee tastes! Lovelier than a thousand kisses, sweeter far than muscatel wine! I must have my coffee.”¹⁴ Later in the century, coffee-obsessed Ludwig van Beethoven ground precisely sixty beans to brew a cup.

By 1777 the hot beverage had become entirely too popular for Frederick the Great, who issued a manifesto in favor of Germany’s more traditional drink: “It is disgusting to notice the increase in the quantity of coffee used by my subjects, and the like amount of money that goes out of the country in consequence. My people must drink beer. His Majesty was brought up on beer, and so were his ancestors.” Four years later the king forbade the roasting of coffee except in official government establishments, forcing the poor to resort to coffee substitutes. They also managed to get hold of real coffee beans and roast them clandestinely, but government spies, pejoratively named *coffee smellers* by the populace, put them out of business. Eventually coffee outlived all the efforts to stifle it in Germany. *Frauen* particularly loved their *Kaffeeklatches*, gossipy social interludes that gave the brew a more feminine image.

Every other European country also discovered coffee during the same period. Nowhere did coffee have such a dynamic and immediate impact, however, as in England.

The British Invasion

Like a liquid black torrent the coffee rage drenched England, beginning at Oxford University in 1650, where Jacobs, a Lebanese Jew, opened the first coffeehouse for “some who delighted in noveltie.”¹⁵ Two years later in London, Pasqua Rosée, a Greek, opened a coffeehouse and printed



the first coffee advertisement, a broadside touting “The Vertue of the *COFFEE* Drink,” described as “a simple innocent thing, composed into a Drink, by being dryed in an Oven, and ground to Powder, and boiled up with Spring water.”¹⁶ Rosée’s ad asserted that coffee would aid digestion, cure headaches, coughs, consumption, dropsy, gout, and scurvy, and prevent miscarriages. More practically, he wrote: “It will prevent Drowsiness, and make one fit for business, if one have occasion to *Watch*; and therefore you are not to Drink of it *after Supper*, unless you intend to be *watchful*, for it will hinder sleep for 3 or 4 hours.”¹⁷

By 1700 there were, according to some estimates, two thousand London coffeehouses, occupying more premises and paying more rent than any other trade. They came to be known as *penny universities*, because for that price one could purchase a cup of coffee and sit for hours listening to extraordinary conversations. Each coffeehouse specialized in a different type of clientele. In one, physicians could be consulted. Others served Protestants, Puritans, Catholics, Jews, literati, merchants, traders, fops, Whigs, Tories, army officers, actors, lawyers, clergy, or wits. The coffeehouses provided England’s first egalitarian meeting place, where a man was expected to chat with his tablemates whether he knew them or not.

Before the advent of coffee the British imbibed alcohol, often in Falstaffian proportions. In 1774 one observer noted that “coffee-drinking hath caused a greater sobriety among the nations; for whereas formerly Apprentices and Clerks with others, used to take their mornings’ draught in Ale, Beer or Wine, which by the dizziness they cause in the Brain, make many unfit for business, they use now to play the Good-fellows in this wakefull and civill drink.”¹⁸

Not that most coffeehouses were universally uplifting places; rather, they were chaotic, smelly, wildly energetic, and capitalistic. “There was a rabble going hither and thither, reminding me of a swarm of rats in a ruinous cheese-store,”¹⁹ one contemporary noted. “Some came, others went; some were scribbling, others were talking; some were drinking, some smoking, and some arguing; the whole place stank of tobacco like the cabin of a barge.”²⁰

The strongest blast against the London coffeehouses came from women, who unlike their Continental counterparts were excluded from this all-male society (unless they were the proprietors). In 1674 *The Women’s Petition Against Coffee* asked, “[Why do our men] trifle away their time, scald their Chops, and spend their Money, all for a little base, black, thick, nasty bitter stinking, nauseous Puddle water?”²¹ The women were



convinced that the drink was emasculating their mates. “We find of late a very sensible *Decay* of that true *Old English Vigour*.... Never did Men wear *greater Breeches*, or carry *less* in them of any *Mettle* whatsoever.”²² This condition was all due to “the Excessive use of that Newfangled, Abominable, Heathenish Liquor called *Coffee*, which ... has so *Eunucht* our Husbands, and *Crippled* our more kind *gallants*.... They come from it with nothing *moist* but their snotty Noses, nothing *stiffe* but their Joints, nor *standing* but their Ears.”²³

The *Women’s Petition* revealed that a typical male day involved spending the morning in a tavern “till every one of them is as Drunk as a Drum, and then back again to the Coffee-house to drink themselves sober.” Then they were off to the tavern again, only to “stagger back to *Soberize* themselves with Coffee.”²⁴ In response, the men defended their beverage in their own broadside publication. Far from rendering them impotent, “[coffee] makes the erection more Vigorous, the Ejaculation more full, adds a spiritualescency to the Sperme.”²⁵

On December 29, 1675, King Charles II issued “A Proclamation for the Suppression of Coffee-Houses.” In it he banned coffeehouses as of January 10, 1676, since they had become “the great resort of Idle and disaffected persons” where tradesmen neglected their affairs. The worst offense, however, was that in such houses “divers false malicious and scandalous reports are devised and spread abroad to the Defamation of his Majestie’s Government, and to the Disturbance of the Peace and Quiet of the Realm.”²⁶

An immediate howl went up from every part of London. Within a week, it appeared that the monarchy might once again be overthrown – and all over coffee. On January 8, two days before the proclamation was due to take effect, the king backed down.

Ironically, however, over the course of the eighteenth century the British began to drink tea instead of coffee for various reasons. While the black brew never disappeared entirely, its use in England diminished steadily until recent years have seen a coffee renaissance.

Postum and Coffee Neuralgia

The arguments over coffee and its effects on the human body continued unabated throughout the eighteenth and nineteenth centuries. In the late eighteenth century, King Gustav III of Sweden conducted an experiment



to show that coffee was a poison, forcing a convicted murderer to drink it every day, while another prisoner drank tea. Both prisoners outlived the king and their observing doctors.

The isolation of caffeine in 1819 did not substantially alter the tenor of the debate, although with the decline of the theory of the “four humours,” experts stopped talking about whether coffee was too dry, wet, hot, or cold in nature.

After the Boston Tea Party of 1773, coffee surpassed tea in the colonies and the young United States to become the patriotic beverage of choice. Of course, the pragmatic North Americans also appreciated the fact that coffee was cultivated much nearer to them than tea and was consequently cheaper.

In late nineteenth-century America, coffee was challenged by new health concerns. In 1890 Charles W. Post, an energetic entrepreneur, suffered a nervous breakdown and joined other sufferers in Battle Creek, Michigan, at the famed Sanitarium, or “San,” of Dr. John Harvey Kellogg.

Kellogg had made himself the impresario of health faddism, and one of his particular dislikes was coffee. “The tea and coffee habit is a grave menace to the health of the American people,” he intoned, adding that the drinks caused arteriosclerosis, Bright’s disease, heart failure, apoplexy, and premature old age. “*Tea and coffee are baneful drugs* and their sale and use *ought to be prohibited by law*,” wrote Kellogg. He even alleged that “insanity has been traced to the coffee habit.”²⁷

Post’s nine months at the San failed to cure his indigestion or nervous disorder, so he left. By 1892 Post had recovered sufficiently to open his own Battle Creek alternative to Kellogg’s Sanitarium, which he christened La Vita Inn. In 1895 Post first manufactured Postum, a grain-based coffee substitute that bore a suspicious resemblance to Kellogg’s Caramel Coffee (served at the San).

By May 1897 sales were booming, largely due to scare ads that depicted harried, desperate, and dissipated people hooked on caffeine. They warned of the hazards of “coffee heart,” “coffee neuralgia,” and “brain fag.” Abstaining from coffee and drinking Postum would effect the promised cure. “Lost Eyesight through Coffee Drinking,”²⁸ one headline blared. “It is safe to say that one person in every three among coffee users has some incipient or advanced form of disease.”²⁹ Coffee was a “drug drink” that contained “a poisonous drug – caffeine, which belongs in the same class of alkaloids with cocaine, morphine, nicotine, and strychnine.”³⁰ One ad featured coffee spilling slowly from a cup,



accompanied by an alarming text: “Constant dripping wears away the stone. Perhaps a hole has been started in you.... Try leaving off coffee for ten days and use Postum Food Coffee.”

When he wasn’t frightening his readers Post buttered them up, appealing to their egos. He addressed an ad to “highly organized people,”³¹ telling them that they could perform much better on Postum than on nerve-wracking coffee. Post also addressed the modern man, asserting that Postum was “The Scientific Way To Repair Brains and Rebuild Waste Tissues.”³² Coffee was not a food but a powerful drug. “Sooner or later the steady drugging will tear down the strong man or woman, and the stomach, bowels, heart, kidneys, nerves, brain, or some other organ connected with the nervous system, will be attacked.”³³

Post was not alone in damning coffee. Most doctors of the era warned against the beverage’s habitual use. In 1906 a London doctor – perhaps more loyal to tea – stated, “Coffee drunkards, as I may call them, are greatly increasing in number.” He added that the coffee habit produced “palpitations of the heart, an irregular pulse, nervousness, indigestion and insomnia.”³⁴

Even American physicians such as George Niles had harsh words for the drink so beloved by his countrymen. True, he thought that “strong coffee, either alone or with a little lemon juice, is often useful in overcoming a malarial chill or a paroxysm of asthma.”³⁵ But he went on to warn that “it is easy to form a coffee habit, which, yielded to, may lead into muscular tremors, palpitation, a feeling of praecordial oppression, tinnitus aurium, hyperesthesia, muscular lassitude, vertigo, heartburn, vague symptoms of indigestion, constipation and pronounced insomnia.”³⁶ On the whole, coffee came in for an inordinate amount of criticism in the first two decades of the twentieth century.

The beleaguered coffee industry responded with anecdotal stories to illustrate the drink’s beneficial effects on longevity. For instance, Mrs. Christine Hedin of Ironwood, Michigan, celebrated her hundredth birthday by “drinking coffee all day long,”³⁷ as was her normal habit (from four to ten cups daily). A centenarian Frenchman was told that coffee, which he drank to excess, was a poison. “If it is poison,” he said, “I am a fine example of the fact that it is a very slow poison.”³⁸

In 1911 Harry and Leta Hollingworth conducted groundbreaking double-blind experiments on caffeine’s effects on humans, the first really scientific effort to look at the issue. The experiments indicated that caffeine, in moderate amounts, improved motor skills while leaving sleep patterns relatively unaffected.



Birth Defects and Pancreatic Cancer

Health concerns about the effects of coffee and caffeine continued to simmer, however, and in the 1960s they began to receive support through a series of epidemiological studies. “A new problem for the coffee industry is rearing its ugly head,” wrote Samuel Lee, the technical editor of the *Tea & Coffee Trade Journal* in 1966. “Serious scientific workers are trying to demonstrate that prolonged, continued or excessive consumption of beverage coffee may be deleterious, or even a serious health hazard.”³⁹

In November 1979 Michael Jacobson of the Center for Science in the Public Interest (CSPI) filed a petition with the Food and Drug Administration (FDA) asking for warning labels on coffee and tea packages reading: “Caffeine May Cause Birth Defects.” At a press conference, he presented a woman who claimed that her heavy coffee consumption offered the only “reasonable explanation” for her child’s deformities.

In response, the National Coffee Association (NCA) pointed out that experimental rats were being forced to ingest the equivalent of thirty-five cups of coffee all at once. The International Life Sciences Institute (ILSI), founded in 1978 with soft-drink money, joined the NCA to conduct epidemiological studies on caffeine. Coca-Cola was particularly concerned about saving caffeine’s reputation, since it sold both coffee and Coke. Caught in the political riptide, the FDA waffled. “We’re not saying caffeine is unsafe,” Sanford Miller of the FDA said. “We’re just not saying it’s safe.”⁴⁰ The agency issued a warning against caffeine consumption by pregnant women, but it did not demand a warning label.

The next year, an epidemiological study appeared to link coffee to pancreatic cancer, triggering widespread media attention and sick jokes about coffee being “good till the last drop dead.” Then a new study purported to link caffeine with the formation of benign breast lumps. Yet another claimed that coffee produced heart arrhythmia, while a Norwegian survey found higher cholesterol levels in heavy coffee drinkers.

The 1980 edition of the *Diagnostic and Statistical Manual of Mental Disorders*, bible of the American Psychiatric Association, included “cafeinism” as a diagnosis, making the consumption of too much coffee a bona fide psychiatric disorder. In 1981 Charles Wetherall published *Kicking the Coffee Habit*, calling coffee “Public Health Enemy Number One,” which was waging “a pathological war on this country.”⁴¹



The NCA moved vigorously to counter the calumnies against its drink, funding more studies and assembling a file of thousands of articles from the medical and scientific literature. Many other independent scientists and doctors also pointed out flaws in the anti-coffee findings, and a 1982 study of twelve thousand pregnant women revealed no detectable ill effects from coffee consumption. Nonetheless, the damage was done. During the 1980s, coffee was associated with over one hundred diseases and disorders and, though subsequent studies threw every negative finding into question, the implanted fears led more consumers to decaffeinated alternatives or away from coffee completely.

The Pendulum Swings Back to Pro-Coffee

Today the debate over coffee and caffeine rages on, though for the moment the pendulum has swung to the positive side. Caffeine is the most widely taken psychoactive drug on earth, and coffee is its foremost delivery system. “Today, most of the world’s population ... consumes caffeine daily,” wrote Jack James, author of two books and many articles on caffeine.⁴² He estimates that global consumption is the approximate equivalent of one caffeine-containing beverage per day for every person in the world. In the United States, around 90 percent of the population habitually takes caffeine in one form or another.

Humans clearly crave stimulating concoctions, drinking, chewing, or smoking some form of drug in virtually every culture in the form of alcohol, coca leaves, kava, marijuana, poppies, mushrooms, qat, betel nuts, tobacco, coffee, kola nuts, yoco bark, guayusa leaves, yaupon leaves (cassina), maté, guaraná nuts, cacao (chocolate), or tea. Of those in the list above, caffeine is certainly the most ubiquitous, appearing in the last nine items.

Caffeine is one of the alkaloids: organic (carbon-containing) compounds built around rings of nitrogen atoms. Alkaloids are the pharmacologically active chemicals produced by many tropical plants. Because they have no winter to provide relief from predators, tropical plants have evolved sophisticated methods to protect themselves. In other words, caffeine is a natural pesticide. It is quite likely that plants contain caffeine because it affects the nervous system of most would-be consumers, discouraging them from eating the plants. Of course, that is precisely the attraction for the human animal.



Caffeine, $C_8H_{10}N_4O_2$, readily passes through biological membranes such as the gastrointestinal tract. The human liver treats caffeine as a poison and attempts to dismantle it, stripping off methyl groups. It can't cope with all of them, so quite a few whole caffeine molecules make it past the liver and eventually find a docking place in the brain.

The caffeine molecule mimics the neurotransmitter adenosine, which decreases electrical activity in the brain and inhibits the release of other neurotransmitters. In other words, adenosine slows things down. It lets us rest and probably helps put us to sleep once a day. When caffeine gets to the receptors first, however, it doesn't let adenosine do its job. Caffeine doesn't actively keep us awake – it just blocks the natural mental brake.

The brain isn't the only place caffeine affects. There are receptors throughout the body, where adenosine performs varied functions. Thus, caffeine constricts some blood vessels. In low doses, it appears to slow the heartbeat, while larger amounts cause the heart to beat more rapidly. Caffeine causes certain muscles to contract more easily. At the same time, however, it can relax the airways of the lungs and *open* other types of blood vessels. Caffeine is a diuretic, and small amounts of calcium float away in the urine, leading to concern over possible bone loss. The latest research indicates that this is a potential concern only for elderly women with low calcium intake.

As Stephen Braun concluded in his book *Buzz*: “The effects of caffeine on such things as breast cancer, bone loss, pancreatic cancer, colon cancer, heart disease, liver disease, kidney disease, and mental dysfunction have been examined in ... detail and, to date, *no* clear evidence has been found linking moderate consumption of caffeine ... with these or any other health disorder.”⁴³

Most authorities recommend “moderate consumption.” There are many anecdotal and clinical reports that drinking too much caffeine can cause problems. The lethal dose for humans is about ten grams, though it would be virtually impossible to consume that much quickly by drinking coffee, requiring more than one hundred cups. Initial signs of toxicity include vomiting, abdominal cramps, and a racing heartbeat. The fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) includes *caffeine intoxication* as a bona fide ailment.

Yet moderate caffeine intake has benefits. As Harry Hollingworth found in his 1911 double-blind studies, caffeine can minimally improve motor skills and reaction time while leaving sleep patterns relatively unaffected. Coffee boosts athletic performance (perhaps through stimulation of more adrenaline) to the point that the International Olympic



Committee used to call caffeine a “doping agent.” Caffeine can help those who suffer from asthma and is given to infants suffering from neonatal apnea (cessation of spontaneous breathing). Some adults with allergies find that caffeine allays symptoms. It can mitigate the pain of migraine headaches (though withdrawal from caffeine *causes* other headaches). For those who need a diuretic or laxative, coffee provides relief. Some studies even commend the drink’s use as an antidepressant to prevent suicide.

Caffeine has been shown to increase sperm motility, so it may prove useful in artificial insemination programs (though others fear it may harm the sperm while speeding it on its way). There doesn’t seem to be any truth to the centuries-old calumny that coffee causes impotence, however. Combined with analgesics such as aspirin, caffeine appears to help alleviate pain. While coffee often is accused of providing no nutrition, it provides traces of potassium, magnesium, and manganese. Like red wine, it is an important source of antioxidants.

Caffeine has a paradoxical effect on hyperactive children with attention-deficit disorder: Coffee seems to calm them down. Coffee consumption can apparently help prevent Parkinson’s, Alzheimer’s, liver cancer, colon cancer, type 2 diabetes, and gallstones.

I am somewhat skeptical about these findings. All too often, we hear that what caused cancer ten years ago is now supposed to cure it, or vice versa. Yet many of the recent coffee studies are epidemiologically sound, following huge numbers of people for many years and carefully weeding out possible confounding factors. For example, a 2006 study on liver disease, published in the *Archives of Internal Medicine*, tracked 125,580 people. It suggested that for each cup of coffee they drank per day, participants were 22 percent less likely to develop alcoholic cirrhosis. A study in the *Journal of the American Medical Association* the previous year followed 193,473 participants. It found not only that coffee protected against type 2 diabetes, but also that the more cups you drank, the less risk there was of diabetes.

Surprisingly, there is little evidence that caffeine harms children. Like adults, however, children are subject to withdrawal symptoms – from soft drink deprivation more frequently than from coffee. Many doctors have expressed concern about pregnant and nursing women who drink coffee. Caffeine readily passes through the placental barrier to the fetus, and it turns breast milk into a kind of natural latte. Because premature infants lack the liver enzymes to break down caffeine, it stays in their systems much longer. By the time they are six months old, most



children eliminate caffeine at the same rate as adults, with a blood-stream half-life of around five hours.

Research has failed to prove that caffeine harms the fetus or breastfed infant, but some studies appear to implicate caffeine in lower birth-weights. Jack James has urged pregnant women to abstain completely from drinking caffeine beverages. On the other hand, the NCA (which certainly has a vested interest in the matter) has asserted that “most physicians and researchers today agree that it’s perfectly safe for pregnant women to consume caffeine.” For those who choose to “err on the side of caution,” the NCA recommended one or two cups daily.

Some people can drink dozens of cups of coffee a day without bouncing off the walls because they have developed a caffeine tolerance. If they quit cold turkey, however, they can suffer exquisite withdrawal symptoms, which include headaches, drowsiness, fatigue, decreased performance, and, for extreme cases, nausea and vomiting. The symptoms can last up to a week. As addictions go, it is a relatively harmless one.

And that brings us around to the question with which we began this historical review of pro and con health claims for coffee. Why has this particular beverage always inspired such fervent advocates and detractors? I can only hazard an educated hypothesis, but my earlier analogy with communion wine seems reasonable to me. We have all heard the truism, “You are what you eat,” but even more so, “You are what you drink.” We are, after all, composed primarily of water, and psychologically we appear to identify more deeply with our beverages than anything else we consume.

Among such drinks, the drug-laced beverages seem to have the most powerful impact, not only on our bodies, but also on our psyches. Of all animals, humans appear to have an inherent thirst for mood-altering liquids. Jonathan Swift believed that “coffee makes us severe, and grave, and philosophical,” although it seems to make many people excited and light-hearted. At any rate, we often like to share coffee communally, to laugh over it, to do business, to tell stories, to philosophize, and perhaps to plan a revolution or two.

And because we are understandably concerned with anything upon which we are dependent, we tend to demonize or glorify such beverages. Thus, while I may not have any provable answers to my question of why coffee has always caused such conflicting opinions, I suspect that the arguments over the “black, thick, nasty bitter stinking, nauseous Puddle water,” that “beverage of the friends of God,” will continue into the indefinite future.



NOTES

- 1 Ralph S. Hattox, *Coffee and Coffeehouses: The Origins of a Social Beverage in the Medieval Near East* (Seattle: University of Washington Press, 1986), p. 6.
- 2 Mark Pendergrast, *Uncommon Grounds: The History of Coffee and How It Transformed our World* (New York: Basic Books, 1999), p. xv.
- 3 *Ibid.*, p. 6.
- 4 Bennett Alan Weinberg and Bonnie K. Bealer, *The World of Caffeine: The Science and Culture of the World's Most Popular Drug* (London and New York: Routledge, 2001), p. 99.
- 5 *Ibid.*, p. 19.
- 6 Pendergrast, *Uncommon Grounds*, p. 8.
- 7 Weinberg and Bealer, *World of Caffeine*, p. 85.
- 8 Pendergrast, *Uncommon Grounds*, p. 8.
- 9 *Ibid.*, pp. 8–9.
- 10 *Ibid.*, p. 9.
- 11 Weinberg and Bealer, *World of Caffeine*, p. 105.
- 12 *Ibid.*, p. 9.
- 13 Margaret Visser, *Much Depends on Dinner: The Extraordinary History and Mythology, Allure and Obsessions, Perils and Taboos of an Ordinary Meal* (New York: Grove Press, 1999), p. 207.
- 14 Pendergrast, *Uncommon Grounds*, p. 11.
- 15 *Ibid.*, p. 12.
- 16 *Ibid.*
- 17 *Ibid.*
- 18 *Ibid.*, p. 13.
- 19 *Ibid.*
- 20 *Ibid.*
- 21 *Ibid.*, p. xv.
- 22 *Ibid.*, p. 13.
- 23 *Ibid.*
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- 25 *Ibid.*
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- 28 *Ibid.*, p. 99.
- 29 *Ibid.*
- 30 *Ibid.*
- 31 *Ibid.*, p. 100.
- 32 *Ibid.*
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