A number of beverages enjoyed around the world contain caffeine. Whether it is in their morning cup of coffee or in their late afternoon iced tea, many people rely on this chemical in their drinks to provide them with the energy they need to function daily. However, the common problem that arises with caffeine is that many individuals only consider the positive aspects of caffeine and ignore the harmful effects caffeine may have on their body. This often comes to light during a situation of fasting, when people don’t get their daily dose of the drug.

While the morning adrenaline rush that often accompanies one’s daily cup of caffeinated coffee can help them jump-start one’s day, other considerations apply to an individual who is fasting. There are two commonly known types of headaches: primary headaches and secondary headaches. Primary headaches are usually not attributed to any fundamental conditions, whereas secondary headaches are caused by a present disorder. Fasting, which disturbs the body’s homeostasis, is one of the major causes of secondary headaches. Fasting headaches are usually present in the frontal area of the head and are mild to moderate in their intensity [1].

Fasting is a common ritual in many religions, and is practiced by Jews on Yom Kippur. On this Day of Atonement, fasting is done to “afflict” the body and to create a sense of discomfort, known as ennui [2]. During the Yom Kippur fast, one of the top complaints from fasters is headache. The Department of Neurology at the University of Tel Aviv Medical School conducted a study on the relationship between fasting and headaches. Non-fasters served as a control group; of the 370 participants, 211 fasted for an entire day. When the fast was completed, 29% of the all the participants complained of headache symptoms. This study also revealed that those who normally drink two or more cups of caffeinated tea or coffee a day were more likely to develop a fasting headache on Yom Kippur. The group attributed this headache to a lack of caffeine. However, a fasting headache is the most commonly experienced headache during the fast of Yom Kippur, and its symptoms appear to be similar to a chronic headache, which one may experience year round [3].

There are those who advise [2] that before one fasts, it is crucial to intake a large amount of glucose to provide fuel for the brain. Over the course of glucose consumption, the liver converts excess glucose to glycogen, which is a stored energy fuel for the body. The liver supplies 75% of the glycogen needed for energy when the body is depleted of available glucose. It is highly recommended that before one fasts, one should intake plenty of water to keep the body hydrated so one doesn’t wind up with a headache [2].

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Aside from those who suffer from chronic headaches, short term headaches are most common in those who experience caffeine withdrawal on fast days; therefore, it is recommended for those people to slowly wean themselves off caffeine a few days, or even a week, before the fast to prevent this common discomfort. [2]

The issue of caffeine is discussed in Jewish law when it comes to one who is fasting. Jewish law, or halacha, discusses whether or not one is allowed to eat or drink before morning prayers. In the Shulchan Aruch, hilchot tefillah, siman 69, (Tefillah 89: 22) it is stated that one can drink water before the morning prayer whether during the week, the Sabbath, or one of the holidays. It also stated that one may eat or drink for one’s health. In the Mishnah Brurah, this point is elaborated upon in that one can drink water, as long as that person does not get any personal benefit or pleasure from doing so. And one can definitely not add sugar into one’s drink. It further explains that coffee and tea are allowed before prayer if these drinks are allowed to enhance one’s concentration. However, coffee and tea are only permitted if no sugar or milk is used along with the drink [3]. One can conclude from this ruling that coffee and tea are allowed if they are needed to sharpen one’s mind, due
to the effect caffeine has on an individual’s functional capabilities. Moses Zacuto, a scholar from Italy, was asked a question whether eating or drinking was allowed before morning prayers. He immediately ruled that drinks such as beer and alcohol were prohibited; however, water and medicine were allowed. Along with water and medicine, he also stated that coffee was also placed into that category because of its stimulant effects [4].

The idea that coffee stimulates the mind and promotes wakefulness stems from Muslim mystics of Yemen, known as the Sufis, who relied on coffee to keep them up late at night for their religious rituals. By the mid-16th century coffee became a widely spread phenomenon in the Middle East. In the 18th century, it rapidly spread to the upper and middle classes of Central Europe. Aside from the issue of whether or not one can drink coffee before one has prayed, when coffee first became popular, many poskim argued whether coffee was an issue of bishul akum or bishul nekirim, also known as cooking done by gentiles. In the 16th century, the rabbinic community made the halachic decision that coffee was kosher because it was prepared only for its sole purpose [4].

Aside from coffee’s stimulating effects and contribution to one’s concentration, coffee may have many harmful effects on the body. Studies have found that caffeine can lead to an increase of anxiety in an individual. Caffeine makes people anxious, and for those who already suffer from mental or behavioral disorders, caffeine may aggravate their personal issues. Caffeine increases restlessness and jitteriness. Upon caffeine withdrawal, the level of stress can increase drastically due to lack of its consumption. Withdrawal can also lead to an increase of anxiety and depression, as well as hindering normal sleep patterns and interfering with the duration of sleep. [5]

The negative physiological effects of caffeine are numerous. Not only does caffeine have an effect on the central nervous system, but it also affects the cardiovascular and gastric systems. Regarding the cardiovascular system, caffeine can induce tachycardia, also known as an extremely fast heart rhythm, and can eventually lead to an arrhythmia. Furthermore, caffeine stimulates the central nervous system, thereby causing insomnia by disturbing of the deep stages of sleep. [6]

Various studies have been done on caffeine intake during pregnancy and its effect on fetal growth. A fetus is exposed to caffeine intake because the caffeine passes the placental barrier. Research has shown that maternal caffeine intake may lead to Sudden Infant Death Syndrome (SIDS). Further studies have shown that caffeine intake, especially during the third trimester of pregnancy, causes decreased birth weight or possibly lead to abortion. Mothers with heavy caffeine intake in their first trimester were more prone to babies who died due to SIDS. Heavy caffeine consumption was defined by 400 mg or more a day. Studies also revealed that most caffeine intake was from coffee intake [7]. Another study had shown that only those women who consumed a large amount of caffeine, had children with 105 gram reduced birth weight. However, those mothers who consumed moderate amounts of caffeine a day did not produce babies with reduced birth weight [8].

Aside from the adverse effects of caffeine, various scientific research studies have identified some positive effects of caffeine on the human body. Caffeine increases alertness due to its stimulating activity on the central nervous system. Its stimulating characteristic enhances cognition and causes one to be more attentive. Caffeine also contributes to alertness throughout the day by reducing daily fatigue. Most probably, this explains why so many people throughout society are reliant upon this commonly used drug [9].

Although caffeine may seem like a necessity upon awaking in the morning, there are many other considerations to consider before becoming addicted to this drug. Though caffeine provides one with the stimulant needed, it also has various side effects that are hazardous to life. However, halacha takes into consideration that some may need their morning caffeine intake to have proper respect and meaning while praying; therefore, under various circumstances, one is allowed to consume caffeine before prayer. So for all you coffee drinkers out there, don’t worry, the side effects are not terrible enough to have you stop drinking immediately!

ACKNOWLEDGEMENTS
I would first like to thank my parents for giving me the opportunity to have experienced this wonderful education at Stern College, and for allowing me to pursue my dreams. Secondly, I would like to thank Dr. Babich for helping me with this article and putting it together for this journal.

REFERENCES


