The ancient fruit *Punica granatum*, better known as the pomegranate, is thought to have first been cultivated in the Middle-East nearly 5,000 years ago. Archaeologists have been able to place its origin in southwestern Asia, 3000-2000 BCE, where fragments of pomegranate have been recovered in the caves of the Judean Deserts and in the wadis near Ein Gedi [1].

Throughout the Biblical period (1200-445 BCE), the pomegranate was seen as symbol of the Hebrews. This comes to no surprise since the pomegranate appears as a representative sign for many important aspects throughout our *Tanach* and Talmud. According to Rabbinic tradition, the pomegranate has exactly 613 seeds, corresponding to the 613 *mitzvot*. Although not every pomegranate has 613 seeds as the tradition connotes, in many cultures, the pomegranate has long been seen as a symbol of fertility, due to its large number of seeds [2]. Throughout *Tanach*, the pomegranate is seen as a special fruit, symbolizing health and beauty. Pomegranates were placed as decorations on the clothes of the *Kohanim* (Exodus 39:24-26) and as ornaments for the pillars of the *Beis Hamikdash* (Kings I 7:18). The pomegranate was among the fruits that the spies brought back from Israel (Numbers 13:23), symbolizing the greatness of the land. In Song of Songs (6:7), the pomegranate is an icon of beauty as it is written, “As a piece of pomegranate are thy temples…” Pomegranates are also among the fruits liable for the agricultural *mitzvot* of *Peah* (*Mishna Peah* 1:5) and *Ma’aser*, (*Mishna Maasarot* 1:2) as well as *Orla* and *Shmita* (*Mishna Shvi’it* 7:3) [1]. Most importantly, in Deuteronomy (8:8), the pomegranate is listed as one of the *Sheva Minim*. This designation seems to have been given because of its beauty, since the pomegranate was not an integral part of people’s diet at the time like the other six species.

With its status as one of the *Sheva Minim*, the pomegranate is inherently distinctive. Pomegranates can be brought to the temple as one of the first fruit offerings, and eating a pomegranate requires the special *bracha achrona* of *Me’ein Shaloh*. However, the pomegranate has additional attributes which contribute to its uniqueness. Already in Ancient Egyptian times, pomegranates were thought to have medical health benefits. The rind of the fruit was used as a remedy for tapeworm and other intestinal illnesses [1], and the peels were commonly used to form dyes. This method was utilized by our ancestors as well, as evidenced in *Mishna Shabbat* (9:5), “pomegranate peels… enough to dye with them a small garment in a headdress.” The pomegranate is an integral part of Ayurvedic medicine, a traditional form of Indian medicine, where it is used for stomach illnesses as well as a treatment for leprosy [3]. Although it has been traditionally recognized, with the availability of new technology and experiments, scientists have only recently been able to unlock the pomegranate’s true medical potential.

It is interesting that one of the first fruits to be examined for these unique health benefits is also one of our *Sheva Minim*.

Pomegranates contain many different chemical compounds such as aldehydes, linear-hydrocarbons, and alcohols, which give the pomegranate numerous health benefits [2]. It has been discovered that pomegranates, due to their high content of polyphenols, have high antioxidant activity, a factor which can reduce the risks of cardiovascular disease and cancer. Phenols are organic compounds containing a six-membered aromatic ring, directly connected to a hydroxyl group (-OH). Polyphenols are therefore capable of antioxidant activity because of their ability to lose the hydrogens of their hydroxyl groups, thereby becoming oxidized and acting as reducing agents. This property allows the polyphenols to neutralize free radicals produced during mitochondrial oxidation reactions, thus protecting cells from a high free-radical content that has been associated with cancer. The most common polyphenols found in pomegranates are anthocyanins, catechins, ellagic tannins, and gallic/ellagic acids [2]. The antioxidant behavior of pomegranates is mostly due to the high content of hydrolysable tannins. Punicic acid, the main constituent of the pomegranate seed, has the ability to induce apoptosis and inhibit cell growth in cancer cells [4]. Pomegranate juice has also been shown to reduce the progression of atherosclerosis [5].
Recent *in vitro* studies administering pomegranate extract at different concentrations to normal and cancerous cells have shown additional chemical activity of the pomegranate, namely its ability to also act as a prooxidant. The antiproliferative mechanisms of pomegranate extract to cancer cells is additionally caused by the induction of oxidative stress through the generation of hydrogen peroxide. This behavior marks pomegranate extract as an important prooxidant as well as an antioxidant, in regards to its actions towards cancer cells [6]. A unique aspect of the prooxidant behavior of pomegranate extract is that it preferentially targets and kills the cancer cells. Cancer cells, because of their deficient antioxidant defense systems, are hypersensitive to oxidative stress, whereas normal healthy cells, with their fine-tuned antioxidant defense systems are left unharmed. Apparently, the pomegranate is an exceptional nutraceutical, a food that is nutritious and can be used medicinally.

The chemicals found in pomegranates responsible for the medical processes mentioned above can also be found in green and black teas, as well as other types of plant-derived foods. Studies of nutraceuticals provide an extremely interesting and potentially inexpensive way of preventing harmful diseases. It is interesting that one of the first fruits to be examined for these unique health benefits is also one of our *Sheva Minim*. Although we, as Jews, pray to G-d for *refuah*, we still understand the importance of putting in our own *hishtadlut*, our own efforts. The secrets of the pomegranate demonstrate that the Torah is an excellent first step in our research.

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