Pomegranate and the Mediation of Balance in Early Medicine

Abstract: Different elements of the pomegranate, both tree and fruit, had a wide range of uses in premodern therapeutics. Pomegranate also had a rich symbolic role in the art, literature, and religion of numerous cultures. In nearly every part of the globe where the pomegranate grew, it came to represent fundamental dualities: life and death, inside and out, many and one. The medicinal purposes for which healers recommended pomegranate at times reflected broader symbolic associations, and those associations are an important part of the therapeutic tradition. The dualistic symbolism that attended the pomegranate in various cultural traditions synergized with dualistic medical concepts, reinforcing the therapeutic power of pomegranate in otherwise diverse contexts. Reflecting this duality, pomegranate was both an astringent and a laxative, an emmenagogue and an antimenorrhagic, an expectorant and an antiemetic, a pyrogen and a febrifuge, a restorative and a soporific. In both literary and medical traditions, the pomegranate mediated transitions—or maintained balance—between opposing states. This essay provides an overview of the rich and sundry uses of pomegranate in premodern therapeutics, revealing how cultural associations both reflected and informed medical practices.

Keywords: pomegranate, Punica granatum, medicine, materia medica, religion, duality, balance.

Introduction

Different elements of the pomegranate, both tree and fruit, had a wide range of uses in premodern therapeutics. Pomegranate was employed to regulate the stomach and bowels, reduce fevers, staunch bleeding, prevent putrescence, and promote expectoration. It was a common ingredient in topical applications for abscesses, chilblains, ulcers, carache, and ocular afflictions. The root bark expelled tapeworms, and the tree bark repelled insects and vermin. The tough rind of the fruit had numerous uses as a pessary in the treatment of prolapses. Women (and likely men) employed the fruit in contraceptive applications, which was perhaps one of its earliest uses.

What distinguishes the pomegranate from the hundreds of other plants that filled ancient herbals and formed the core of nonsurgical therapeutics was its symbolic importance in numerous religious and cultural contexts. The pomegranate is one of the seven fruits with which the Promised Land was blessed (Deuteronomy 8:7–8), Christians regarded it as a symbol of both Mary’s chastity and the resurrection of Jesus, and the ripening of the fruit is a sign for true believers in the Quran (VI:99). Pomegranates were frequently used in Zoroastrian rites as symbols of prosperity and the immortality of the soul. The pomegranate is one of the three abundances (三多) in Buddhism, and it is a totem of the Hindu god Ganesha, lord of beginnings. In literature, the pomegranate often symbolized fundamental dyads: life and death, mortality and immortality, fertility and barrenness, growth and decay, inside and out, many and one.

These symbolic associations, which were common in numerous and diverse cultures, synergized with an equally diverse range of medical practices. In both literary and medical traditions, the pomegranate mediated transitions—or maintained balance—between opposing states. Maintaining or restoring the balance between opposites, such as hot and cold, wet and dry, or retention and expulsion, was nearly universal in premodern medical epistemologies, as was the management of fertility (and infertility). The dualistic symbolism that attended the pomegranate in various literary and religious traditions synergized with dualistic medical concepts, reinforcing the therapeutic power of pomegranate in otherwise diverse contexts. Reflecting this duality, pomegranate served a wide range of often opposing functions in medical recipes. It was both an astringent and a laxative, an emmenagogue and an antimenorrhagic, an expectorant and an antiemetic, a pyrogen and a febrifuge, a restorative and a soporific. Furthermore, ingesting pomegranate was at times both helpful and harmful, and like many fruits, it occupied an ontological position somewhere between food and drug in many physiological theories.

It is perhaps unsurprising that premodern medical texts displayed such homology with literary and religious texts.
Literate physicians and clergy were educated in similar ways in many cultures, and there was often considerable overlap in writing styles across genres, both scholastic and artistic (Longrigg 1963; Oppenheim 1962; Selby 2005; Sluiter 1994). But in the case of pomegranate, there are particularly clear connections between cultural or religious symbolism and medicinal use. Despite the pomegranate’s inclusion in nearly all major therapeutic systems, from the earliest written records to the early modern period, there was remarkable consistency in how it was employed in medicinal recipes. This can be explained in part by the extensive transmission and appropriation of medical texts, even across different cultures, languages, and epistemological frameworks, but it also suggests that the pomegranate, because of its consistent symbolism across numerous cultures, was an intelligible remedy in diverse medical systems. This is not to suggest that there are no biochemically active compounds in pomegranate that produce observable effects in the body. But the medicinal efficacy of a substance is based not on essential properties but on cultural and social understandings of its use in therapy or prevention. This essay provides an overview of the rich and sundry uses of pomegranate in premodern therapeutics, revealing how cultural associations both reflected and informed medical practices.

Cycles: The Duality of Life and Death, Fertility and Barrenness

The pomegranate’s oldest and deepest symbolic associations are with life, fertility, and reproduction. Both the fruit and the tree were common totems of maternal deities in particular. Inanna, a goddess worshipped by the Sumerians as the “Lady of Fruitfulness and Sexuality,” was depicted on a vase from circa 3100 BC adorned with wheat and pomegranates (Riddle 2010: 5 ff.). Kubaba, a Hittite mother goddess better known by her Phrygian name, Cybele, was at times portrayed holding a pomegranate, as were Tanit, Astarte, Hera, Athena, and Aphrodite (Muthmann 1982: 13–14, 34–38). Even the Homeric word for pomegranate, ροιά, may have been etymologically related to Rhea, the daughter of Uranos and mother of six Olympian gods. Like Cybele and Gaia, Rhea was first revered as a universal mother goddess. Hariti, a Gandharan demoness who devoured children, became in Buddhist tradition a beneficent guardian who eased childbirth, promoted familial harmony, and protected the young; in some stories, it was the consumption of a pomegranate that turned her from eating the young to guarding them. She was invoked to cure disease, and was often depicted in Buddhist art with a child in her arms and a pomegranate, her personal symbol (Olson 1994: 86).

The ancient and widespread association between pomegranate and fertility is not particularly surprising. Pomegranate fruit has numerous, prominent seeds, and it is the seeds and arils, the reproductive matter, that are eaten. The pomegranate tree was also the source of life-giving waters in Mesopotamian religion (Muthmann 1982: 13–14), and NeoAssyrian seals often depicted pomegranate, the “tree of life” (Avigad 1990: 165). Scholars have suggested that the Tree of Life from the book of Genesis was a pomegranate because of this symbolic history, though of course many fruit-bearing trees have auditioned for this role. Nonetheless, the connection between pomegranate and the creation of life remained common in later Christian and Islamic traditions (Goor and Nurock 1968: 73).

The pomegranate later became a dualistic symbol, as numerous ancient authors employed the fruit not only to...
represent fertility but also to suggest fundamental connections between fecundity and barrenness, life and death. The Hymn to Demeter, composed in Greece in the seventh century BC, introduced this more complex symbolism, for the pomegranate instigates not fertility or life but the suppression of it. Persephone, the daughter of Zeus and Demeter, is kidnapped by Hades and taken into the underworld. Although Demeter is able to secure the return of her daughter, Persephone eats some pomegranate seeds given to her by Hades before leaving his realm, condemning her to spend half the year in the world above and half in the world below. Ingestion of the pomegranate seeds leads not to fertility but to cyclical barrenness. (In some later versions, Persephone spends a month in Hades for each seed consumed, suggesting a more direct correlation between pomegranate and infertility or death.) This story is variously interpreted as an allegory of the agricultural cycle of growth and decay, of death and resurrection, of the onset of menarche and the transition into womanhood, of the mother-daughter relationship, of the parallels between rape or marriage and death, and of fertility rites and sacred marriage (ἱερός γάμος), but regardless of interpretation, the pomegranate had come to represent more than simple fecundity (Arthur 1977; Bonner 1939; Myres 1938; Suter 2002; Tsiafakis 2001).

The historian John Riddle has argued that the prophylactic properties of pomegranate were widely known by that time, for pomegranate “kept the virgin goddess Persephone from being fertile” (Riddle 1992: 26). Pomegranate was a traditional symbol of fertility and life, but ancient medical writers recommended it as a contraceptive. Soranus of Ephesus (fl. ca. AD 100) gave six recipes for contraceptive suppositories that contained pomegranate. For example, a woman could “grind the inside of a fresh pomegranate peel with water, and apply [it]” (Soranus’ Gynecology 1.62). The Byzantine healer Aetius of Amida (fl. ca. AD 500) gave several formulae for vaginal suppositories that induce sterility, some of which involved pomegranate. (These were quite similar to the recipes given by Soranus.) Furthermore, he suggested that a man could rub his penis with pomegranate rind before coitus to prevent conception (Gynaecology and Obstetrics XVII). Such recipes were likely well known to women in the ancient world, and they were widely used and adapted thereafter (Totelin 2011). But while the pomegranate was symbolic of the loss of virginity (after the tale of Persephone), it could also be used to restore it. In the Trotula, a twelfth-century Latin compendium of women’s medicine and cosmetics, a powder prepared with pomegranate rinds (presumably included as a source of red color) and other ingredients, dissolved in warm water, could be applied to the opening of the uterus to create the illusion of virginity (Trotula 307).

Despite the application of pomegranate as a contraceptive and its association with death and barrenness in the tale of Persephone, the fruit remained a common token of love and fertility. “Let us go early to the vineyards,” wrote the author of the Song of Songs, “and if the pomegranates are in bloom, there I will give you my love” (Song of Songs 7:12). Roman artists juxtaposed embracing lovers with pomegranates (Riddle 2010: 51). In the Egyptian Jewish folktale “Romana,” an early version of the Snow White story, a mysterious old woman gives a childless queen an enchanted pomegranate. If the queen eats half, the woman tells her, and her husband eats the other half, the queen will give birth to a girl within a year. The woman’s only condition is that they name the girl Romana (ﺭﻣﺎﻧﺍ, the Egyptian Arabic word for pomegranate (Schwartz 1986: 67–78). Pomegranates were also a common symbol of fertility in the wedding rites of the Bedouin, Chinese, Greeks, Indians, Persians, and Romans, among others. In Buddhist tradition, the pomegranate is one of the three abundances, along with the peach and the Buddha’s Hand citron, and it represents the abundance of offspring. The Chinese expression 多子 means both “many seeds” and “many sons,” a pun linking the fruit to fecundity.

Although used as a contraceptive in suppositories and topical applications, medical writers at times promoted ingestion of pomegranate as an aphrodisiac, reflecting its complex metaphorical relationship with fertility. For example, the Tacuinum Sanitatis, a widely copied thirteenth-century work
on the nonnaturals adapted from an earlier work by Ibn Butlan, claimed that ingestion of sweet pomegranate promotes coitus (Liége: f. 4v, Paris: f. 5). Of course, virtually all foods were deemed to have aphrodisiac properties at one time or another—encouraging copulation, it turns out, is not particularly difficult. But in the case of the pomegranate, this further emphasized the fruit’s role in the mediation of fertility.

The intricate relationship between pomegranates and (in)fertility was widely adopted and developed in Western literature. In a second-century AD version of the story of Side (σίδη is the Bocotian word for pomegranate), she is a young virgin who commits suicide to avoid being raped by her father; the blood she sheds on her mother’s grave yields a pomegranate tree (Dionysius Periegeta, De Auctupio I.7). In this inversion of the Hymn to Demeter, the reunion of mother anddaughter in death produces pomegranates, the very fruit that prevented Persephone from reuniting with Demeter. Persephone’s consumption of the seeds, which can create life, instead condemns her to a living death; Side’s death, in contrast, becomes the seed of new life. In both stories, the pomegranate mediates the transition between life and death, girl and woman, fertility and infertility.

“The Tale of Pomegranate-Flower and Badr Basim” from the Arabian Nights collection employs a similar construction, creating a complex correspondence between marriage and rape, life and death. A childless king receives a virgin slave who does not speak, even after he spends a year with her to the exclusion of his wives and duties as a ruler. When she does finally speak, it is to tell him that she is pregnant. Julnar (جُنْنار, pomegranate blossom) informs the king that she is the daughter of the lord of the sea. She came onto the land in search of a new life, and the first thing she did was fight off a would-be rapist. She tells the king that his first “violence” nearly compelled her to throw herself back into the sea, but she remained out of pride. As her brother remarks later in the story, “For a girl there is but marriage or the tomb” (The Tale of Pomegranate Flower: 35). This theme is even more pronounced in Romeo and Juliet. In Act III, the nightingale sings in a pomegranate tree (III.5: 1–5), suggesting a parallel between Juliet and Persephone. Juliet had already drawn an association between death and marriage in the first act, when she says of Romeo, “If he be married, / My grave is like to be my wedding-bed” (I.5: 134–35), and the imagery of the pomegranate tree reinforces the connection between the loss of virginity and death (Watson and Dickey 2005: 140ff.).

The juxtaposition of the pomegranate with marriage or rape (which are not always distinct events in early literature) reveals further intricacies in the fruit’s symbolic uses. Sexual intercourse in this context represented both life (the potential to conceive) and death (the loss of innocence). Indeed, pomegranates were used in both wedding and funeral rites in a number of ancient cultures (Bennett 2011). What unites Persephone, Side, Julnar, and Juliette is not their circumstances, per se, but their ages; each of them is faced with a sexual experience, namely the loss of virginity, that represents their transformation from girls into women. In each of the stories, the pomegranate suggests transition, couched in the duality of maiden and matron, and the protagonist must choose between remaining a child or becoming a woman.

In addition to life, fertility, and birth, pomegranates also represented immortality and resurrection or rebirth. The Babylonians ate pomegranate seeds, an agent of resurrection, for longevity (Mahdihassan 1984: 37). According to Herodotus, the elite Persian soldiers known as The Immortals carried weapons adorned with pomegranates when the armies of Xerxes invaded Greece in 480 BC. One thousand warriors bore spears “with golden pomegranates instead of spikes” on the butts; another nine thousand carried spears with silver pomegranates (Herodotus, The Histories VII.41). Aaron’s robe in the book of Exodus is adorned with pomegranates and golden bells, and if he wears it when he ministers, he will not die (Exodus 28:33–35). Chinese scholars during the Six Dynasties period (AD 222–589) referred to pomegranate blossoms as longevity flowers (延年花), and Daoists associated the fruit with immortality (Fang 2004: 154; Harper 1986: 143). When Isfandiyar eats a pomegranate consecrated by the prophet Zaratus in the Zaratus Name, a thirteenth-century Zoroastrian poem, he becomes invincible like “stone and bronze” (Boyce 1984: 60). The pomegranate symbolized eternity in Zoroastrianism, and it was “the most highly prized of the fruits that are blessed” (Boyce 1975: 281).

The association between pomegranate and resurrection, or the cycle of life and death, was already strong in the tale of Persephone, and it became even stronger in the art and literature of European Christians. Sandro Botticelli’s Madonna della Melagrana depicts the Virgin Mary and an infant Jesus jointly holding a pomegranate. The pomegranate connects Mary to the ancient mother goddesses as an icon of divine fertility, but paradoxically it also represents her chastity. Furthermore, the pomegranate references the resurrection of Jesus. Like Persephone, who inhabits both the land of the living and the land of the dead, Jesus has two natures for Christians, one mortal and one divine. The pomegranate also reflects the torments of Jesus on the cross, for the fruit “bleeds” when opened. In Juan de Dios y Antón Martín, a play written by Lope de Vega circa 1610, the split pomegranate is the fruit of Juan’s life from the seeds of Christ’s death, seeds that are but drops of blood (esta granada partida / tiene el fruto de tu
vida / por los granos de mi muerte, / que gotas de sangre son (Graf 2007: 114). The last of The Hunt of the Unicorn tapestries depicts the bleeding and immobilized unicorn sitting beneath a stylized pomegranate tree, a clear reference to the suffering of Jesus. In many pagan mythologies, however, the unicorn represented virginity and purity, and so the tapestry also suggests the associations between the pomegranate and the loss of innocence, recalling the Hymn to Demeter and other stories.

In numerous cultures, the pomegranate symbolized cyclical, dualistic relationships between life and death, fertility and barrenness, childhood and motherhood. Importantly, the pomegranate often mediated these dualities, serving to govern the transition from one part of a dyad to the other. Medicinal use of the pomegranate as both a contraceptive and an aphrodisiac reinforced and was reinforced by this transformative narrative. But while pomegranate mediated transitions between mutually exclusive states, it also established balance between antagonistic forces.

Balance: The Duality of Hot and Cold, Retention and Expulsion

Pomegranate enflamed the passions and represented the heat of sexual ardor, but healers also employed it as a cooling agent, especially in the treatment of deadly fevers. Acid pomegranates were more cooling (ψυκτικώτεραι) than sweet pomegranates according to Hippocratic healers (On Regimen II.55, Littre VI.562), who employed the juice to treat fevers (Epidemics VII, Littre V.436).9 Aulus Cornelius Celsus, a Roman physician who flourished in the early first century AD, wrote that pomegranate repressed and cooled (reprimunt et refrigerant) (De Medicina II.33:2). This attribute was particularly helpful in the treatment of smallpox and other deadly febrile diseases.

The Persian polymath and physician Al-Razi (Muhammad ibn Zakariya al-Razi, AD 865–925) recommended that those who had not yet contracted smallpox “frequently eat acid pomegranates, and suck the inspissated juices of acid and styptic fruits, as of pomegranates,” to dissipate heat (A Treatise on the Small-Pox and Measles V.2). A maceration containing rose water, vinegar, pomegranate peels, and pomegranate flowers reduced heat in the blood and the liver, the organ widely
regarded as the source of blood (V.9–10). Acid pomegranate juice, when dripped into the eyes of a patient just having contracted smallpox, prevented the development of pustules in the eyes (VII.1–2). The latter treatment recalled a much older Assyrian prescription: “If a man’s eyes are full of yellow rheum, thou shalt bray pomegranate-skin [and apply it]” (Thompson 1926: 44). In Abolqasem Ferdowsi’s Shahnameh, the Persian Book of Kings, the physician Khorad-Borzin uses pomegranate juice and cress to cure the empress’s daughter of a “fever in her brain” (Shahnameh, “The Reign of Khosrow Parviz,” 795).

Such practices were embraced even beyond the healing encounter. Sitala, the North Indian goddess of smallpox, was at times depicted with a pomegranate, which symbolized cooling. Typically called Mata, or mother, women prayed to her and offered her cooling drinks to protect their children from the ravages of smallpox, especially the intense heat of fever, which was the symptom most likely to cause death. In India, Pakistan, Bangladesh, and Nepal, many believed that Sitala used her hosts (those with smallpox) to rid herself of heat and restore her coolness, the very action that pomegranate achieved in the fevered body (Arnold 1993: 121–25; Slusser 1972: 100–4). The pomegranate’s antipyretic properties were a different aspect of the duality of life and death. In this context, the fruit maintained the balance between hot and cold, a common element of all ancient medical epistemologies. Pomegranate allowed the goddess to shed her heat, and thus live, while saving the smallpox victim from death.

Pomegranate was employed to regulate balance in other ways as well, particularly in the regulation of the stomach and bowels, the treatment of hemorrhage, and the expulsion of tapeworms. The fruit was either a laxative or an astringent, depending on which parts were ingested. In the Hippocratic treatise On Affections, the pomegranate, when eaten with its seeds, was astringent, but taken without them, it was laxative (On Affections, Littere VI.264). Pomegranate was also a common ingredient in Ayurvedic remedies for severe diarrhea (Sharma 1996: 179). In fact, the use of pomegranate to regulate the bowels was so common that even in regions where the tree did not grow particularly well, such as Britain, it was included in materia medica. The fifteenth-century Middle-English translation of the Compendium Medicinae, originally composed by Gilbertus Anglicus in Latin sometime in the early thirteenth century, relates that the bark of a pomegranate tree (psidie) treated “a flux of dissenterie” (f. 258v–259), suggesting that pomegranate was a remedy important enough to remain in the text even after redaction (Healing and Society 1993).

The astringent properties of pomegranate also made it a valuable antihemorrhagic. The Hippocratic author of On Affections recommended sweet pomegranate for poultices used to treat inflamed wounds (ἡ φλεγμαίνοντα) (On Affections, Littere VI.248), and this may have been Assyrian practice as well (Thompson 1926: 63–64). Dioscorides suggested that pomegranate blossoms (κύτινοι) would achieve the same end (De Materia Medica I.110: 3), and Celsus regarded the flowers as gentle corrosives that arrested putrefaction (De Medicina V.22: 2; cf. Al-Kindi, Medical Formulary 86, f. 109b; 128, f. 119b).

Furthermore, pomegranate reduced menorrhagia. According to Aetius, wild pomegranate blossoms were one of the “stronger” remedies for heavy menstruation, and a bath with decocted pomegranate rinds treated red uterine discharge (Gynaecology and Obstetrics LXIV). Nicholas Culpeper’s seventeenth-century herbal, perhaps the most widely used in the English language, recommended pomegranate seeds and rinds, “whether the powder or the decoction be taken,” to “stay...women’s menses” (Culpeper 2000: 301). As with the regulation of the bowels, though, the pomegranate was also used to induce menstruation. The Hippocratic treatise On the Nature of Women, for example, gives numerous recipes containing pomegranate to treat amenorrhagia (On the Nature of Women, Littere VII.324, VII.356).

Controlling the retention and expulsion of fluids, the balance of hot and cold, and other fundamental relationships in the body was a central element of Greco-Arabic humoral, Ayurvedic, Siddha, and traditional Chinese and Tibetan medical systems, suggesting one reason for the pomegranate’s widespread adoption. In some Ayurvedic systems, for example, health and illness were based on the interrelationship of the three vital elements (धातु), the seven bodily constituents (आयु), and the three waste products (चालुक); maintaining the balance of these within the body as well as the balance between the body and its environment was a central goal of medical practice (“Vagbhata’s Heart of Medicine” 2003: 268). Of course there were many concepts of balance, even within the same tradition. In Hippocratic medicine, the authors of On Regimen and Diseases IV characterized the body as being in a perpetual state of flux, with health being a state of dynamic equilibrium and disease a state of exaggerated or prolonged disequilibrium. The author of On the Nature of Man, in contrast, suggested that the body remained in a state of static balance until something disrupted it. Pomegranate, which depending on application could induce either the retention or expulsion of fluids, heating or cooling, was a particularly powerful therapeutic agent across otherwise diverse medical frameworks in part because the maintenance or restoration of balance was such an important element of health in the medical theories of the premodern world.
Perhaps the oldest and most common use of pomegranate involved the expulsion of tapeworms. The Ebers Papyrus, composed in Egypt around 1550 BC, recommended a concoction involving pomegranate root to kill hefat-worms. The specific kind of intestinal worm referred to by hefat is not known, though presumably it was a tapeworm (Nunn 1996: 72). According to Dioscorides, the decoction of pomegranate root killed and expelled tapeworms (σπόρος πολύτοιχι πολόν έκτυπον καὶ ἐποκτεῖνα) (De Materia Medica I.110: 3; cf. Paul of Aegina IV.57), and the remedy was widely repeated in pharmacopias.

The use of pomegranate root as a vermifuge was nearly universal. The Compendium of Materia Medica (本草綱目), composed by Li Shizhen (李時珍) in the late sixteenth century, contained numerous cures for tapeworms (寸白虫病). In one, Li suggested harvesting a handful of eastward-growing sour pomegranate roots that were not cut with an iron tool. After boiling the roots in three pints of water until only about one-sixth of the liquid remained, the resulting drink, if taken just before dawn, would completely expel all the worms. (The admonition against use of an iron tool when harvesting the roots may have ensured that the astringent tannins were not affected [Read 1931: 645–46, 651 n. 4].) The pomegranate (安石榴), introduced to China no later than the third century AD, was likely used in such treatments long before the sixteenth century. According to Tao Hongjing (陶弘景, AD 456–536), a botanist of some repute, healers in the Six Dynasties period were already using the roots of sour pomegranate in their work (Harper 1986: 140).

Some remedies, however, particularly those that had crossed cultural boundaries, were not as reliable. The Roman naturalist Pliny (AD 23–79), who received most of his information from travelers and other secondhand sources, reported that both the fruit and the blossoms of the pomegranate neutralize scorpion stings (Natural History XXIII.59–60). Unbeknownst to Pliny, this was not a medical practice but rather a religious ritual. During the Zorastrian festival of Isfandgaian, a festival celebrating women, pomegranate seeds and raisins were mashed together and eaten to nullify scorpion poison, but this was not a medical antidote, only a symbolic one (Flatters and Schwartz 1989: 79). Nonetheless, such remedies were widely repeated in pharmacopias (cf. Culpeper 2009: 301), particularly in areas where scorpion stings were an unlikely occurrence. Although the pomegranate’s cultural roles and medical applications often shared common elements, which may have encouraged use of the pomegranate across many medical systems, the conflation of symbolic and therapeutic practices also led to misappropriations.

The ubiquity of concepts of balance in most premodern medical systems and the pomegranate’s symbolic role as a mediator between opposites enabled the pomegranate to bridge the medical and the literary even across cultures. But while the homology between cultural and medical practices lent the pomegranate therapeutic intelligibility across time and place, it also at times blurred the distinction between ritual and therapy, as the example of scorpion antivenom reveals. The similarly blurry distinction between food and drug—and between drug and poison—in premodern medical systems also aligned with symbolic uses of the pomegranate, whose many prominent seeds in a single rind was often employed to represent synecdochal relationships.

**Synecdoche: The Duality of Inside and Out, Many and One**

The pomegranate’s wide range of medicinal uses stemmed from its numerous parts (the roots, bark, and blossoms of the tree and the rind, arils, and seeds of the fruit), each of which had different properties in premodern therapeutics. Among its other symbolic associations, the pomegranate represented the superposition of inside and out, many and one. John Chrysostom, one of the Nicene fathers, likened vainglory (κενόδοξε) to a pomegranate: “Vainglory...has a fair semblance and the beholder, as he views it, receives the impression of wholesome fruit. But if he takes in his hand a pomegranate or apple, straightaway it is soft to his fingers and the rind that covers it outside is crushed and lets the fingers light upon dust and ashes” (John Chrysostom 1951: 87). Although the metaphorical duality of life (the “wholesome fruit”) and death (the “dust and ashes”) was already ancient in the fourth century AD, John employed a different dimension in the traditional trope by using the pomegranate to symbolize that which is one thing without and another within. The Spanish rabbi Moses de León (fl. ca. 1280) suggested that all Jews contain the commandments as the pomegranate contains seeds, and the pomegranate also represented the Shekhinah (שכינה), the divine presence, which similarly contains all the commandments (Book of the Pomegranate 1088: 19).

This use of the fruit to symbolize part-to-whole relationships was especially pronounced, as the literary scholar E. C. Graf has argued, in late medieval and early modern Spain. In 1492, Queen Isabella and King Ferdinand ended the Reconquest of Spain when they conquered Granada, the last Islamic stronghold in Andalusia. Just before the city fell, Ferdinand allegedly swore, “I will take down one by one the seeds of that pomegranate” (Yo arrancaré uno a uno los granos de esa granada), a linguistic pun on the name of the city (which,
being of Arabic origin, had no etymological relationship with “pomegranate”). The Reconquista unified Spain politically but did nothing to stem cultural strife and interethnic violence. Once the most cosmopolitan region of Europe, Spain became instead a cauldron of conflict. In *Don Quijote (El Ingenioso Hidalgo Don Quijote de la Mancha)*, Graf argues, Cervantes used the pomegranate as a symbol of both the cultural and ethnic diversity of Spain and the Christian concept of “social harmony through sacrifice,” the idea that unity can emerge from diversity, to suggest that unification should celebrate rather than suppress dissimilar parts to create a better whole (Graf 2007: 105, 113).

This use of the pomegranate as a symbol for the unity that can arise from diversity was well established in the writings of the early Catholic Church fathers. “What is signified by pomegranates other than the unity of faith?” posed Pope Gregory the Great in AD 591. “For just as in the pomegranate many inner grains are covered by a single exterior peel, even so countless members of the Holy Church are covered by the unity of the faith, members held within by a diversity of merits” (Letter I.24, addressed to John of Constantinople et al.).

In medicine, too, the pomegranate represented multiplicity in unity. Many ancient languages did not contain clear demarcations between substances that nourish, those that heal, and those that harm. Much like the modern “drug,” which has both positive and negative connotations, words like φάρμακον, venenum, and 藥 connoted alternative powers with no intrinsic valuation, either good or bad. In cases where “poison” and “medicine” were linguistically distinct, as in Sanskrit and the Semitic languages, the underlying connotative distinctions depended on context. As the Sanskrit word विद्युत्सु (to poison, but also to use a poison as medicine) suggests, linguistic distinctions did not necessarily connote conceptual ones. The divisions that separated food, medicine, and toxin were neither categorical nor crudely quantitative (Amigues 2001; Flint-Hamilton 1999; Gibbs 2009; Touwaide 1991). Manipulation of the diet was a key element of both the maintenance and the restoration of health in every ancient medical system, and the linkage between “food” and “nourishment” was typically fluid and contingent. In many cases, the pomegranate occupied a more significant role as a medicine than as a food, its benefits transcending the merely nutritive.

Indeed, medical authorities disagreed about whether pomegranate provided any nourishment at all. The *Bundleshišn*, a Zoroastrian cosmology and cosmogony, regarded pomegranates as fit to eat (Laufer 1919: 192), and they were used extensively in Persian, South Asian, Arab, and Near Eastern cuisines. But a number of ancient medical writers were openly dubious about the nutritive value of the fruit (and, indeed, of fruits more generally). Celsus considered pomegranates one of the many foods that were good for the stomach (*stomachos autem aptissima sunt*) (De Medicina I.24); it is unclear whether he meant this in the nutritive or the medicinal sense, though it was most likely the latter. Less equivocally, Dioscorides claimed that the fruit was good for the stomach but not nourishing (εὐστάμασας ἀόρωπος) (De Materia Medica I.110: 1), a view adopted by Galen and repeated by Oribasius and Moses Maimonides (Galen, *On the Properties of Foodstuffs* 605; Oribasius, *Medical Compilations* I.51; Maimonides, *The Regimen of Health* IV.14). The Persian scholar and physician Ibn Sina (ca. 980–1037) deemed the pomegranate, like all fruits, to offer only “fickle” nourishment (Canon of Medicine I.539–60). This view remained common into the early modern era, as Culpeper’s herbal suggests: “[pomegranates] yield but slender nourishment; they are very helpful to the stomach” (Culpeper 2009: 301).

In Chinese medicine, pomegranate had complex effects on the body that were neither exclusively medicinal nor exclusively nutritive. The Six Dynasties dietitian Cui Yuxi (崔禹錫) warned that ingestion of the seeds would reduce one’s vitality (精), and Tao Hongjing reported that the seeds were better left uneaten (Harper 1986: 140, 142). The *Synopsis of Prescriptions of the Golden Chamber* (金匮要略), attributed to Zhang Zhongjing (張仲景, AD 150–219) but first published during the Northern Song Dynasty (AD 960–1127), proscribed immoderate consumption of fruits, which could lead to pathologic conditions. Pomegranates, if eaten to excess, would harm the lungs (損人肺) (Synopsis of Prescriptions of the Golden Chamber XXV.12; cf. Hu, *What Is Desirable and Appropriate in Food and Drink* III.35A). However, the distinction between food and medicine remained blurry. The dietary treatise *What Is Desirable and Appropriate in Food and Drink* (飲膳正要), written during the Yuan Dynasty (1271–1368) by the Turkic court physician Hu Sihui (忽思慧), was both cookbook and pharmacopia. One of the recipes, a pomegranate soup with mutton, cardamom, cinnamon, and ginger, “treats a cold void in the primary receptacle, cold pain in the belly, and aching pain in the lower spine” (治元藏虛冷腹內冷痛腰脊酸疼) (I.41A). Hu also noted that pomegranates lack poison (毒) and stem leaking vitality (止漏精) (III.35A). This provides yet another example of the complexity intrinsic to the pomegranate’s therapeutic uses. Where Cui Yuxi regarded the fruit as a food that reduces vitality, Hu Sihui suggested that it prevents such reduction.
Pomegranate fruit, characterized by its bountiful seeds, lent itself to religious and literary metaphors linking the one and the many, the part and the whole. As food or medicine, pomegranate had complex effects on the body in premodern therapeutics. Depending on the part of the plant used and the preparation method, pomegranate could produce different, even opposite, therapeutic effects. The plant and the fruit it bore were a veritable pharmacopia unto themselves, one source of numerous remedies—a source that has continued to fascinate those seeking new therapeutic agents in old practices.

Conclusion

Interest in the medicinal properties of pomegranate continued into the modern era, both as a result of the sustained popularity of traditional healing systems and because colonization, exploration, and global traffic expanded the transmission and appropriation of medical and botanical knowledge. As late as the 1880s, for example, English physicians were still “discovering” uses for pomegranate. “I found that whenever a young child lost its appetite, had more or less irregular bowels, somewhat timid belly, was peevish by day and restless by night, when it was wasting in flesh, and the symptoms were negative as to worms or fevers,” wrote Brigade Surgeon Edward Nicholson who served in India, “the decoction of pomegranate root invariably effected a cure” (Nicholson 1886: 364). Soldiers in the American Civil War also were aware of the pomegranate’s medicinal properties. “A decoction of the blackberry root and the rind of the pomegranate fruit boiled in milk,” wrote a pharmacist from Atlanta in 1898, “was a common remedy in diarrhoea” (Jacobs 1905).

Today, this interest in the medicinal properties of pomegranate is experiencing something of a renaissance. Fewer than thirty scientific or medical papers were published on pomegranate in the late twentieth century, but nearly double that number now appear every year. Studies of pomegranate extracts in vitro have revealed a wide range of bioactive compounds. Chemicals that have antithrombogenic, antioxidant, anticarcinogenic, anti-inflammatory, antioxidant, astrigent, estrogenic, neuroprotective, spermatogenic, and vermifuge properties have been isolated, and the actions of many of these compounds reflect medical practices thousands of years old (Jurenka 2008; Lansky and Newman 2007; Seeram et al. 2006). Researchers worldwide are now seeking to learn if pomegranate can play a significant role in yet one more medical system: twenty-first-century biomedicine.

Indeed this interest, both ancient and modern, in the medicinal properties of pomegranate has led to its use as a symbol of medicine itself. Along with the staff of Asclepius, the caduceus, and the red cross, the pomegranate is a widely employed device in medical iconography. The insignias of the British Medical Association, the Royal Colleges of Physicians, Anaesthetists, Midwives, and Obstetricians & Gynaecologists, the Royal Australasian College of Physicians, the Brothers Hospitallers of St. John of God, and the U.S. Army’s 61st Surgical Hospital all feature pomegranate, and the fruit was the logo for the Millennium Festival of Medicine. This use of the plant and its fruit in medical iconography reflects the historical role of the pomegranate both in therapeutics and as a religious and political symbol, as well as the current revival of interest in pomegranate-based therapeutics.

Although the medical evidence is at best inconclusive, the concept of “superfoods” with intrinsically healthful properties has captured the popular and scientific imagination. Everything from berries to yogurt, liver to mushrooms, phytoplankton to microgreens, and of course pomegranate, has been labeled at one time or another a superfood, with spending on research in the botanic pharmaceutical industry well over $20 billion a year worldwide. But while many premodern writers regarded pomegranate as a medicine yet doubted its nutritive value, today the fruit is a nutritious food whose medicinal properties are investigated and debated. In bridging historic and modern anxieties about health and diet, the pomegranate is even now a symbol of duality. As in Gregory’s...
metaphor of the Catholic Church, whose members were held together by a “diversity of merits” like the seeds in a pomegranate, scientists and physicians continue to seek a “diversity of merits” in the pomegranate’s many bioactive compounds.

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Notes

1. A pessary is a rigid or semi-rigid spheroidal object inserted into the vagina to treat and provide support for a prolapsed uterus.
2. Astringents reduce the discharge of fluid from the digestive tract, and laxatives increase it; emmenagogues stimulate the flow of menstrual blood, and antimenorrhagics reduce it; expectorants encourage the discharge of fluid from the respiratory tract, and antieptic science prevent the discharge of fluids from the digestive tract; pyrogens induce fevers and febrifuges reduce them; restoratives reinvigorate the body and soporifics induce sleep.
3. Wherever possible, I cite accessible, modern editions of the texts to include as wide a base of source material as possible. I leave it to others with expertise in the respective cultural-linguistic traditions to explore issues of paleography, textual criticism, and manuscript tradition. Translations are my own unless otherwise noted.
4. Riddle argues that the Tree of Knowledge was a pomegranate (and thus so was the fruit that Eve ate), but he provides no direct evidence for this assertion, and the circumstantial evidence is unconvincing.
5. An alternate version of the story can be found in Ovid, Metamorphoses V:357–65. In Ovid’s version, Proserpina eats seven pomegranate seeds (the number is unspecified in the Hymn to Demeter). In the unfinished De Raptu Proserpinae (fl. ca. 140), Zeus gives Persephone to Hades as a bride to prevent war between the gods above and the underworld. Zeus warns her not to eat anything, but she eats pomegranate anyway. The Persephone stories also recalled elements of the myth of Atis, whose mother conceived by putting to her breast a pomegranate grown from the severed penis of the intersex being Agdistis. In these stories, too, the pomegranate was explicitly linked to the cycle of fertility and infertility.
6. In Goddesses, Elixirs, and Witches, Riddle argues that there is evidence for the use of pomegranate as a contraceptive in Mesopotamia and Near Eastern cultures as far back as there are written records.
7. The use of pomegranate as a contraceptive appears in the works of Al-Razi, Ibn Sina, and Al-Jurjani, among others.
8. Lorenzo di Credi painted a similar work, the Madonna and Child with a Pomegranate, sometime between 1475 and 1480, and it became a common theme in Renaissance art.
9. Paul of Aegina considered acid pomegranates more cooling than sweet pomegranates and the seeds more astringent than the juice or rind (The Seven Books of Paulus Aegineta, 519).
10. To bray is to grind up or crush, as with a mortar and pestle. Ibn Ridwan (fl. 908–ca. 1065) devised a recipe using both sweet and sour pomegranates that “preserves the body in the time of a pestilence.” He also cited a recipe composed by Ibn Masawayh that “is useful for high fevers in an epidemic and opens obstructions” and another by Ibn al-Jazzar that “is astonishing in its effect during a pestilence and for cryspelas, smallpox, and measles”; both recipes employed the juice only of sour pomegranates (Medieval Islamic Medicine 1984: 444–46).
11. See also Epidemics VII, Litrét 450; Dioscorides, De Materia Medica I:110–2; Celsus, De Medicina IV: 269; Pliny, Natural History XX.53:149–50, XXIII.57–60; Al-Razi, A Treatise on the Small-Pox and Measles XII.1, XIII.1.
12. A decoction is a liquid concentrate produced by boiling something in liquid.
13. The three elements are air, bile, and phlegm; the seven bodily constituents are lymph, blood, flesh, fat, bone, marrow, and semen; and the three waste products are urine, feces, and sweat.
14. Interestingly, such fluidity does not appear to have existed in Sanskrit or the Semitic languages (Hebrew, Aramaic, Syriac, and Arabic), which maintained linguistic separations between words meaning “medicine” and those meaning “poison.”
15. The word 精 (vitality) can also mean semen in some contexts. There is no evidence that pomegranate was used as a contraceptive in China, but this passage raises questions about the relationship between the fruit and fertility.
16. In traditional Chinese medicine, there were two structural-functional categories of “organs,” i.e., yin organs (藏) and yang organs (腑). It is not entirely clear in this context what the “primary receptacle” was, though it was likely the kidneys. The kidneys were central to the regulation and circulation of qi (氣), and lumbar pain was a sign of kidney ailments.

References


