

Grapes in Medicine: From the Talmud Until Today

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The medical benefits of grapes have come under recent scrutiny, with hundreds of published papers exploring different aspects of this fruit's role in human health. Many biochemical studies on the reactive chemicals within grapes, in addition to clinical and epidemiological studies on the consumption of grapes, have analyzed the health effects of grapes on several medical conditions, joining the multiple research studies already in the field. In fact, a quick search on the National Institute of Health's scientific research search engine "PubMed" for articles published within the last five years yields over 400 results for the key term "grape and health" and over 750 results for the key term "wine and health." However, the current interest in grapes does not mark the beginning of their role in human health: The medicinal properties of grapes have been utilized over the course of Jewish history for thousands of years and have been documented as such in Jewish sources as early as 500 CE with the publication of the Talmud Bavli.

Grapes were used to treat various maladies during the Talmudic era, ranging from inflammation to intestinal problems. In Gittin 69b, the Gemara mentions that eating grapes whose vines were grown trailed on palm trees was a treatment for internal fever and inflammation [1]. Written roughly around the same time period, Genesis Rabbah 34:15 states that in the town of Gabath Shammai, unripe grapes were used to ward off insect bites and were therefore rubbed on the heads of newborn babies [2]. Grapes are assigned another health benefit in Mishna Nedarim 9:8, where old grape juice is listed as a beverage beneficial for intestinal health [2].

Although there are several references to grapes in the Talmud, most medicinal references specifically discuss grapes' most famous product, wine. Wine was considered the ultimate cure for disease in the time of the Talmud, as noted in Bava Basra 58b, "At the head of all cures am I, wine: in a place where there is no wine, medicine is required." Many detailed remedies requiring wine are listed throughout the Talmud, ranging from cures to heart problems, digestive disorders, and skin diseases. In Gittin 67b, it recommends eating lean meat with watered down wine to cure a three-day fever and eating fatty meat and drinking undiluted wine to cure a chill. Strong wine is listed as the remedy for drinking water poisoned with snake venom, and, when mixed with red aloe, wine is mentioned as the cure for abscesses. Differing strengths of wine were judged effective against different heart ailments: Heaviness of the heart was cured with watered down wine and spiced barley bread, palpitations of the heart were cured with full-strength wine and honeyed wheat bread, and Eiruvin 24b mentions that weakness of the heart was cured with diluted wine and roasted meat [1]. Wine was considered beneficial to the heart in general, as noted in the verse in Psalms 104:15, "wine gladdens the heart" [2]. The Talmud also mentions that wine opens closed hearts, as seen in Bava Basra 12b, a statement that is still under study today in current heart

health research [1,11]. After medicinal bloodletting during the time period of the Talmud, wine was deemed crucial for healing, and in Shabbos 129a, it states that one was required to sell the shoes off one's feet to obtain red wine after bloodletting. The Talmud explains that the red wine was necessary to replace the missing red blood and describes several scholars who drank excessive amounts of wine for healing purposes after bloodletting [3].

The Talmud describes two cures involving wine for a swollen spleen: one through drinking dried water leeches in wine for three days and another through opening a barrel of fine wine for the patient's personal use (Gittin 69b). Stomach pains were cured by drinking 100 kernels of long pepper in wine for three days, and intestinal worms were remedied by drinking wine with a laurel leaf [1]. The Talmud (Shabbos 134a) also mentions wine as a cure for dysentery: One would rub his stomach with a mixture of oil and wine for its healing effects. The Gemaras Yerushalmi Shabbos (14, 14d) and Yerushalmi Avodah Zarah (2, 40d) state that the life-threatening colon disease "kolos" could be cured by drinking crushed cress in aged wine, another mention of wine's beneficial effects in the digestive system [2]. Gittin 70a notes that eating fatty meat with undiluted wine helps lengthen the time remaining before death for one stabbed with a poisoned Persian spear. It writes that to cure the disease "achilu" (fever of the bones), one had to eat a porridge of lentils and aged wine on a full stomach and then sleep wrapped in blankets until recovery. Wine boiled with saffron is listed as a male fertility treatment (Gittin 70a), and a contraception potion is described containing Alexandrian gum, liquid alum, and garden saffron, all powdered and mixed in wine (Shabbos 110a) [1]. The Talmud also suggests that wine is beneficial for lactation (Kesubos 65b) [3].

There are many other medicinal usages of wine listed in the Talmud, both for internal and external healing. The Talmud (Shabbos 109a) states that a knocked hand or foot could be rubbed with warm wine for healing and that wine-soaked bread could be used as an effective eye compress. In Talmudic times, an eye-remedy paste known as "collyrion" was based in a healing liquid such as wine, and a mixture of wine and vinegar was used as a lotion to cure pain of the loins [2]. The Mishnaic supplement Tosefta Shabbos lists a similar lotion of wine and vinegar to cure the skin disease "chatatin" and notes that when extraordinary healing was necessary, children were bathed in wine [2]. Other claims of the Talmud regarding the beneficial effects of wine include the restoration of memory and giving "strength to the body and light to the eyes" [2]. In Pesachim 42b, old wine is given the ultimate recommendation: It is deemed "good for one's entire body" [1].

Jews continued to use grapes for healing purposes throughout the ages, even after being dispersed throughout the world following the destruction of the Temple. Centuries after the Talmud's medicinal

recommendations, Maimonides, a Torah scholar and prominent physician in Egypt during the Middle Ages, expounded on the health benefits of grapes in his medical writings, praising them as one of the healthiest fruits [4]. Maimonides believed that most raw fruits were harmful to the body, but wrote in his *Treatise on the Regimen of Health* that “there [we]re some [fruits] which [we]re less bad, [and were] close to being good, like... grapes” [4]. In another book on Jewish Law, *Mishneh Torah Hilchos De’os*, Maimonides is even more complimentary to grapes, calling them “the most beneficial of fruits,” and writing that they are valuable both when eaten fresh and dried [5]. In his *Treatise on Asthma*, Maimonides lists several medicinal usages for grapes: He writes that unripe grapes can be used for loose stools and that an opium potion in a liter of grape juice can be used to prevent catarrh (a condition characterized by inflammation of the mucous membranes), bring sleep, thicken thin material, and assist in expectoration [6]. Maimonides also records a poultice containing congealed grape juice as a treatment to “sooth [the] severe pain of acute inflammation of external parts of the body,” another mention of grapes’ anti-inflammatory effects [7]. Maimonides additionally praised raisins for their health benefits, writing that their consumption is good for the liver, eliminates heartburn, cleanses the lungs, and provides a calming effect [6].

Maimonides also extolled the health benefits of wine, listing many medicinal uses throughout his writings. In his work *The Medical Aphorisms of Moses*, Maimonides writes that wine strengthens the weak and enfeebled [8]. He mentions that diluted wine can be used to cure ulcers, while undiluted wine can help relieve dizziness, because it dissolves the gases that have filled the head [7]. Maimonides writes that wine mixed with cold water tranquilizes fainting spells, spiced wine helps those with syncope, and undiluted wine cures strong headaches because of its warming and blood-thinning effects. Maimonides lists many beneficial roles of wine diluted by half with water, writing that it “neutralizes bad liquids and warms the stomach, aids digestion, dissolves cold gases, and helps combat shivering.” It “warms the entire body and stimulates all limbs to more rapid movement... [and] also improves or moistens the liquids of the body and eliminates the bad thereof.” Maimonides also writes that wine “give[s] rise to good blood, normalize[s] the body constitution, and digest[s] that which is in the stomach and blood vessels. [It] also improve[s] the function of organs, extract[s] superfluties, and promote[s] their excretion to the outside” [8].

In his *Treatise on the Regimen of Health*, Maimonides states that wine is “the best of all nutriments or nourishing foods” because “it is abundantly nourishing, good, thin, and rapidly digested” [4].

He specifies that wine becomes more beneficial as a person grew older, becoming more effective in the elderly [4]. Maimonides quotes Tana debay Eliyahu Zutra, who proclaims that wine restores the vision of the old, similar to the claim of the Talmud that wine brings “light to the eyes” [2,4]. In his *Treatise on the Causes of Symptoms*, Maimonides mentions that a small amount of wine “assists digestion, helps the elimination of superfluties through increased urine flow, [and] cleans the blood of the gaseous vapors.” He later describes a medicinal beverage made of sugar and wine, which was “extremely praiseworthy in fortifying the stomach and the heart” [4]. Maimonides mentions that wine can help cure liver afflictions that do not contain inflammation and, when mixed with larch fungus as an antidote against poison, it produces “a marked effect and cleansing of the brain so much so that it overshadows all other medications” [7]. Many of these prescriptions mirrored those mentioned in the Talmud, such as grapes’ uses against inflammation, stomach pain, chills, poison, and digestive problems, and grapes’ restorative properties on the eyes, heart, and blood. In Maimonides’ admission that wine “overshadows all other medications,” one sees a clear echo of the Talmud’s statement that wine is “at the head of all cures,” showing a strong adherence to tradition and a chain of medical advice going back hundreds of years [7].

Today, scientists are beginning to study the medicinal values of grapes that have been reported throughout ancient Jewish writings, focusing on details that the Talmud and Maimonides discussed many years earlier. Although more research is still required, grape products, including wine and grape seed extract, have been correlated with many positive health benefits. Polyphenols, natural compounds found in grapes, have been shown to inhibit inflammation by decreasing inflammatory cytokines of the immune system [9], protect against Alzheimer’s cognitive deterioration [10], induce coronary vasodilation [11], and prevent carcinogenesis [12]. Resveratrol, one particular grape polyphenol, has demonstrated cardioprotective effects and effects in improving metabolic health [13], prevents cardiac hypertrophy and ischemic injury [14], increases endothelium-dependent vasodilation [15], activates a known regulator of aging [16], and inhibits ocular inflammation [16]. Grape seed extract has additionally been proven to protect against ethanol- and aspirin-induced ulcers [17], normalize blood pressure in individuals with hypertension [18], and reduce ventricular tachycardia and ventricular fibrillation after reperfusion [19]. These health benefits, more detailed references to the cures in the Talmud and Maimonides’ writings listed above, are among the myriad uses of grapes in medicine that are being studied today. Grape products have been used for healing for centuries, and as current research validates those practices, the world seems likely to see more treatments utilizing grapes in the future.

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1. Cardiac hypertrophy is problematic thickening of the heart muscle.
 2. Ischemic injury is damage that results when blood supply to the tissues is restricted.
 3. Endothelium-dependent vasodilation may help prevent cardiovascular disease.
 4. The activation of the known regulator of aging aids longevity.
 5. The inhibition of ocular inflammation prevents vision-threatening retinal diseases, such as diabetic retinopathy and age-related macular degeneration.
 6. Ventricular tachycardia and ventricular fibrillation after reperfusion are deadly heart problems that occur when the blood supply returns to the tissues after a period of restriction.
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