

# O N I O N S

ROBIN BURGER

While onions appear to have little or no nutritional value, both ancient Talmudic writings as well as modern scientific research prove that this vegetable has numerous physiological benefits and can be used in the treatment of various ailments.

Onions are indeed an age-old food. Images of the layered root vegetable are illustrated in ancient Egyptian drawings, and references to the onion appear in the documents of the Ur civilization. Onions have been utilized throughout history by a vast array of civilizations across the globe [1].

According to the Babylonian Talmud, onions are beneficial to the heart. The Talmud writes that one may vow that he will not eat onions “because they are injurious to the heart.” Then he is told that this is not an accurate assumption, since “the wild onion is good for the heart.” He is therefore “permitted to partake of wild onions, and not only of the wild onions, but of all onions.” Indeed, “such a case happened before R. Meir, and he gave absolution in respect of all onions” (*Nedarim* 66a).

Thousands of years following the compilation of the Talmud, science has reached similar conclusions regarding onions. Nutritional research has recently released findings to corroborate the statements made in the Talmud. For example, onions are beneficial to the heart. Onions are also sources of dietary flavanoids which have been proven to reduce the risk of heart disease and, in addition, they decrease the risk of blood clots. Onions further reduce the risk of heart disease by increasing the HDL, high-density lipoproteins or “good” cholesterol in the bloodstream; while decreasing LDL, low-density lipoproteins or the “bad” cholesterol [2]. Furthermore, onions lower the risk of a heart attack or stroke. This has been confirmed by a recent study done in the University of Wisconsin. Based on an animal model involving eleven dogs with malfunctioning coronary arteries, medical researchers demonstrated that onions inhibited platelet aggregation, a major factor contributing to atherosclerosis (the build-up of plaque on arterial walls) which often leads to heart disease [3].

The consumption of onions is also correlated with preventing atherosclerosis by lowering blood pressure.

In another experiment, rats that were fed onions, showed significantly lower blood pressure than rats not fed onions. In addition, scientists have recently discovered that onions suppress the production of angiotensin II, a chemical that constricts arteries, and increase the availability of nitrous oxide, a chemical that dilates arteries, to the heart. The combined effect of reducing platelet-derived atherosclerosis and decreasing blood pressure leads to the onion’s beneficial effects on the heart [4].

The Talmud further elucidates the benefits of onions with regard to the treatment of wounds. It states: “To treat a wound, one applies *moch*, translated as cotton or lint, and sponge, as well as garlic and onion peels, which are secured with a thread” (*Tosefta Shabbat* 5:3-4). Not surprisingly, a recent clinical study suggests similar conclusions regarding the ability of a gel derived from onion extract to reduce the appearance of post-operative scars. The scars in the control group appeared to be redder, bumpier, and significantly more marked than the scars of those subjects who applied the onion extract. [5].

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Although the Sages of the Talmud and modern scientists enumerate the many beneficial effects of onions on the human body, there are several instances where both sources assert that onions can be harmful and should therefore be avoided under some conditions. For example, the Babylonian Talmud (*Avodah Zara* 29a) states that eating onions after bloodletting may be hazardous. Another source in *Taanit* (25a) records the story of a man who ate an onion after bloodletting and fainted.

Why should this be? According to some scientists, due to their anti-platelet effect, onions are not a wise food choice after one has lost excessive amounts of blood. Blood

loss can lead to a decrease in blood volume, which in turn may decrease blood pressure. When blood pressure drops, the body reacts by increasing platelet aggregation to prevent further blood loss. However, since onions inhibit platelet aggregation, blood does not clot, which leads to loss of blood volume, and ultimately to the decrease in blood pressure [6]. Onions, can therefore be quite unsafe for someone who has lost a significant amount of blood.

Another Talmudic source (*Nedarim* 26b, 66a) further states that that one should be careful with onions, as they can be injurious to the stomach. It is wise for one to avoid eating onions when suffering from stomach pains. This is corroborated by recent research showing that although onions do not induce acid reflux (heart burn), their ingestion does exacerbate already existing reflux symptoms. Patients suffering from acid reflux who ate onions on a regular basis suffered from more severe symptoms compared to those who did not eat onions. Once again, science agrees with what the Sages of the Talmud advised long ago: if one is experiencing stomach pains due to acid reflux it is wise to avoid onions [7].

It certainly seems as though the many benefits ascribed to onions thousands of years ago by the Sages in the Talmud have recently been rediscovered by modern science. While Science and Torah corroborate on the health gains of onions, the Talmud mentions one advantage that is not mentioned in contemporary scientific research. The Talmud states that the consumption of onions may be helpful in inducing menstruation: "The consumption of garlic or onions or the chewing of peppers can bring forth bleeding in some women" (*Niddah* 63b). Though this has yet to be proven scientifically, the Physicians Desk Reference notes that many women throughout the 20<sup>th</sup> and into the 21<sup>st</sup> centuries ate onions in order to bring about the onset of menstruation [8].

Onions play an important role in our life and are beneficial for the heart, healing of wounds, and perhaps even the induction of menstruation. More than that, current research elucidates the biological processes and chemistry behind why onions have so many health benefits. Onions are just one of many natural beneficial substances which science has come to confirm what our ancestors knew many centuries ago.

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