

Benefits of Fig as viewed by Islam and Modern Medicine¹

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ABSTRACT: In the Holy Quran (80:24), man has been ordered to look carefully at his food and pay enough attention "Then let mankind look at his food". This Islamic command includes close attention to the property and impact of food on human health as well as its material and spiritual cleanliness. Use of medicinal plants as ingredients of natural origin and fewer side effects seem to be more favorable than chemical treatment. Fig can be found among plants mentioned in the Quran and the Islamic teachings in the form of numerous hadiths. In the first surahs of the Quran, e.g. Surah La-Tin, point out the medicinal benefits of fig so that in verses 1 through 4 of this surah, figs and olives have been sworn by. Prophet Muhammad emphasized on eating fig because of its usefulness in treatment of various diseases including hemorrhoids and rheumatism. The fig tree is known with the scientific name of *Ficus Carica* L. It is also known as higo of family Urticacea, the berry family Moraceae and one of the most consumed plants in the world. The fig fruit is sweet containing a large number of pits, often used dry. The dried figs have 29% water, 50% sugar, 4% protein, 5.5% nitrogen, 2% fatty material and a substance called psoralen with formula C₁₂H₆O₃. This study adopted the key words figs, herbs, Islam, traditional medicine, diseases, fruit, plant, medicine, drug and treatment which have been cited by relevant research and analysis published in prestigious scientific journals over recent years, as well as employment of several scientifically validated sites for collecting information. The reports have stated that fig has various vitamins, especially vitamins B6, B2, B1, A and C, which can improve physical strength, nerve capability and treatment of neurological diseases. The traditional medicine sources mentioned various treatment effects of figs. Decoction of dried figs can prevent inflammation of the respiratory tract. The gurgling of fig can be helpful for sore throat and gum infections. Eating fresh and dried figs can eliminate digestive disorders and chronic constipation. In modern medicine similarly, it has been used to prepare a syrupy called Figne for curing constipation in children. It can be useful in treatment of various diseases such as hemorrhoids, gout and epilepsy. Other benefits can be prevention from breast cancer, bone density enhancing, prevention from muscle weakness, improvement in performance of nervous system, and removal of kidney and bladder stones.

Keywords: Figs, herbs, Islam, traditional medicine

INTRODUCTION

In the Holy Quran (80:24), man has been ordered to look carefully at his food and pay enough attention "Then let mankind look at his food". This Islamic(1) command includes close attention to the property and impact of food on human health as well as its material and spiritual cleanliness (2, 3).

Nutrition plays an indispensable role in maintaining and promoting human health. For the importance of this issue, the UN organization has allocated extensive global efforts to the FAO (2).

In 1992, several food pyramid guidelines were proposed. Later in 2001, Professor Willett used epidemiological studies and clinical trials so as to make major changes in the pyramid(2, 4). The changes are rather close to the classification of food mentioned in the Quran and teachings of the Prophet (PBUH)(4).

The use of medicinal plants has long been common in Iran and other countries. At different eras, the amount of using such plants went through dramatic variations(5). Although the use of these plants has been restricted with the development of synthetic drugs and chemicals produced in various forms, great attention is paid

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today all over the world onto the resources available for treating patients, so that the pharmaceutical literature of the twentieth century was dubbed the century of returning to nature and the use of herbal medicines(5, 6). Use of medicinal plants as ingredients of natural origin and fewer side effects seem to be more favorable than chemical treatment(6, 7).

Fig can be found among plants mentioned in the Quran and the Islamic teachings in the form of numerous hadiths. In the first surahs of the Quran, e.g. Surah Al-Tin, point out the medicinal benefits of fig so that in verses 1 through 4 of this surah, figs and olives have been sworn by(8, 9). Fig tree is one of the five plant species mentioned in the Quran, along with olives, grapes, pomegranates and dates(9, 10) (7, 9). According to hadiths, when the Prophet (pbuh) was being served with figs, He divided the fruits among his companions, stating that eating figs can cure many diseases(10). Prophet greatly emphasized on fig consumption because of its usefulness in treatment of various diseases including hemorrhoids and rheumatism(11).

Moreover, fig has been mentioned in the Jewish Scriptures and the ancient Greeks. Hippocrates deemed fig beneficial for inflammatory diseases as well as a laxative effective in increasing the intellect and mental capability(12). In the book of Avicenna titled "Qanun", fig leads to tranquility, sweating, obesity and cough treatment. Moreover, it was mentioned to be helpful whether wet or dry in the treatment of epilepsy(12).

The fig tree is known with the scientific name of *Ficus Carica* L. It is also known as higo of family Urticacea, the berry family Moraceae and one of the most consumed plants in the world(13-17). The main source of fig is the Mediterranean region, but it grows today in most areas of the world. In Iran, it has been spread across most northern forests and the shores of the Caspian Sea, Mazandaran, Azerbaijan, Isfahan, Fars, Khuzestan and Khorasan(14). Historical evidence shows that people in historical eras were well aware of fig tree, used it so that ancient works pointed out the characteristics of this tree and its benefits(14).

The fig fruit is sweet containing a large number of pits, often used dry. The dried figs have 29% water, 50% sugar, 4% protein, 5.5% nitrogen, 2% fatty material and a substance called psoralen with formula $C_{12}H_6O_3$ (16, 17).

The reports have stated that fig has various vitamins, especially vitamins B6, B2, B1, A and C, which can improve physical strength, nerve capability and treatment of neurological diseases(6). Furthermore, there is a high percentage of sugar in the fruit (17-19), so that fig has about 6.7 milligrams per hundred grams of natural sugar. Eating fig can be very useful for intellectual efforts, confirming the efficacy of the fruit on learning and memory(15, 17, 20).

The traditional medicine sources mentioned various treatment effects of figs (6). Decoction of dried figs can prevent inflammation of the respiratory tract. The gurgling of fig can be helpful for sore throat and gum infections. Eating fresh and dried figs can eliminate digestive disorders and chronic constipation(6). In modern medicine similarly, it has been used to prepare a syrupy called Figine for curing constipation in children(6). It can be useful in treatment of various diseases such as hemorrhoids, gout and epilepsy(6, 15). Fig is free of fat, sodium and cholesterol. The fruit has the highest amount of minerals, especially calcium containing a great deal of fiber(21). Also, it can be a good source of potassium, effective in this regard in reducing blood pressure. On the other hand, it causes higher activity of the kidneys where the blood is purified from harmful substances such as urea, cholesterol and uric acid. The presence of this material combined with the acid in the fig can cause secretion of bile and lax, which can be a treatment of liver diseases(6). Other benefits include: Prevention of breast cancer, Enhancing bone density, preventing muscle weakness and improving nervous system function(17). According to the wisdom of ancient sages, fig could reinforce the intellects(6). Another study reported that seems to be effective in fostering intelligence and memory due to high levels of phosphorus(6).

Fig is slightly laxative, soothing, digests juices and produces mucus. The cooked fruit along with other foods can increase mothers' milk and can be energy-boosting. Roasted fruit of fig is laxative applied in the treatment of gingivitis and dental abscesses(9). Dried fig is one of the important commercial goods and fruit juice of this plant has a laxative effect, which is very useful for the young and old people. Fig facilitates the excretion of kidney stones and urinary bladder. Fig can be applied for treatment of indigestion and loss of appetite as well as treatment of hemorrhoid(9, 22).

The consumption of figs together with nuts is allegedly beneficial to enhance memory and thinking(17).

In the past, the fig leaf decoction was used to treat diabetes, hepatic and renal stones(13). The pharmacological properties of fig leaf are probably due to abundant phenolic compounds, the most important of which are: Furanocoumarin, flavonoids, phenolic acids and Phytosterol (14, 23). Recent studies show that decoction and extracts of fig leaf have anti-diabetic and reduce blood glucose levels(14, 18).

Studies show that some parts of the fig tree, including the leaves, fruit and skin have hypoglycemic effects(24, 25). Also, some studies have shown that fig skin, fruit and leaves can reduce blood glucose levels (24, 26, 27). However, it is still unknown which of the compounds in fig leaves lead to decrease in blood glucose levels and how the mechanism works(28, 29).

Fig tree sap is rich in cysteine proteases known as ficin approximately 24-26 kDa of weight and isoelectric point equal to 9.1. Ficin was first adopted by Walt in 1938 for a series of enzymes in the fig juice. This enzyme contains 174 amino acids and has 10 different isoelectric points with various isoenzymes(30-32). The plant proteases such as ficin have numerous application in the meat industry (to tenderize meat) and cheese (31)(, preparation of digestive tablets(33), treatment of some skin wounds and formulation of some worms and also activation of blood coagulation system in medicine(34).

The antimutagenic activity of fig extract and its ability in mouse bone marrow cells and chromosomes have been reported. These studies show the high quality anti-mutagenic function of peroxidases(12, 35). Commercial samples of dried and fresh fig fruit as compared to in vitro studies through colorimetric method with phenolic antioxidants have revealed that eating 40 grams of figs together with or without the carbonate beverage in a hungry person can create a 4-hour plasma antioxidant capacity, while the fig's antioxidant can enhance the concentration of lipoproteins in plasma and protect them from further oxidation. Ultimately, research has shown that the fruit has in vivo antioxidant effect in the human body after consumption(4, 12). It also has been shown that fig leaf can reduce blood sugar through curtailing the oxidative stress(24).

Figs can be consumed as fresh or dried fruit, which can have different properties. For example, a new study by Solomon et al. found that fresh fruit of figs contain a substance called anthocyanin known as cyanidin-3-rhamnoglucoside or C3R(17, 36). This substance has antioxidant properties reducing the free radicals(17). Therefore, it is expected that consumption of fresh fruit of fig can enhance brain function and likely to have a positive effect on learning and memory(17).

Studies show that some parts of the fig tree, including the leaves, fruit and skin are have hypoglycemic effects(24, 25). Also, some studies have shown that fig skin, fruit and leaves can reduce blood glucose levels (37-39).

METHODOLOGY

This study adopted the key words figs, herbs, Islam, traditional medicine, diseases, fruit, plant, medicine, drug and treatment which have been cited by relevant research and analysis published in prestigious scientific journals over recent years, as well as employment of several scientifically validated sites for collecting information.

CONCLUSIONS

The reports have stated that fig has various vitamins, especially vitamins B6, B2, B1, A and C, which can improve physical strength, nerve capability and treatment of neurological diseases. The traditional medicine sources mentioned various treatment effects of figs. Decoction of dried figs can prevent inflammation of the respiratory tract. The gurgling of fig can be helpful for sore throat and gum infections. Eating fresh and dried figs can eliminate digestive disorders and chronic constipation. In modern medicine similarly, it has been used to prepare a syrupy called Ficine for curing constipation in children. It can be useful in treatment of various diseases such as hemorrhoids, gout and epilepsy. Other benefits include: Prevention of breast cancer, Enhancing bone density, preventing muscle weakness and improving nervous system function. According to the wisdom of ancient sages, fig could reinforce the intellects. Another study reported that seems to be effective in fostering intelligence and memory due to high levels of phosphorus. Fig is slightly laxative, soothing, digests juices and produces mucus. The cooked fruit along with other foods can increase mothers' milk and can be energy-boosting. Fig facilitates the excretion of kidney stones and urinary bladder. Fig can be applied for treatment of indigestion and loss of appetite as well as treatment of hemorrhoid. In the past, the fig leaf decoction was used to treat diabetes, hepatic and renal stones. Studies show that some parts of the fig tree, including the leaves, fruit and skin have hypoglycemic effects. Also, some studies have shown that fig skin, fruit and leaves can reduce blood glucose levels. Studies show that some parts of the fig tree, including the leaves, fruit and skin have hypoglycemic effects.

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