MANNA
THE ANCIENT VEGETAL PRODUCT BETWEEN
FAITH AND MEDICINE

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Abstract

The pharmacist, along with the priest, the doctor and the teacher, has always been not only a supplementary prepared professional but a man of culture, whose daily bread was always Science, religion and Philosophy. The present article, conceived almost exclusively by pharmacists, with the support of the doctor but also of the priest, aims to deepen the information on the renowned biblical product Manna - the food of the Jews banished from Egypt, on their way to the Holy country. Today by no means of coincidence, it is one of the most elected post-operation medicine, considered to be an ingredient with osmotic powers. The study paves the way for a discussion between the medical party and the priest about a resin product of the Fraxinus excelsior species - regarding the deep way in which nature creates the medicines of a world, nevertheless giving them just to the ones who truly have faith, respecting the need of using them. This is one face what we are calling ‘clerically healing’ concept - medicine for body and soul.

Keywords: manna, path, faith, Fraxinus ssp., convalescence

1. Biblical Medicine - healing through prayer and matter

The question that is often asked in this work is if our faith is enough to heal ourselves? Or has Medicine replaced even God? In the early speed era healing is considered possible even if God says in the Bible that everything is possible if we believe in Him.” If you shall ask anything in my name, that will I do.” (John 14.14) What is the faith of today man? [1]

….. We will try to answer these questions in that which follows …..

God spoke: YOU SHALL FIND PEACE. He also told to the people: “Take my yoke upon you and learn from me, for I am gentle and humble in heart, and you will find rest for your souls” (Matthew 11:29).

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With such words Jesus has addressed Himself to each human being. All are weary and burdened, whether they know it or not. All are bent with burdens that only Christ can remove. The heaviest burden we carry is the sin. If we were left to bear it, it would crush us. But He without sin was put in our place. The Lord has laid on Him the iniquity of us all (Isaiah 53.6) [1, p. 142].

Christ has borne the burden of our guilt. He shall take the burden off our shoulders. He shall give us rest. He will bear the burden of care and sorrow. He calls us to lay all our worries onto Him, for He carries us in His heart. The big brother of our race is before the eternal throne upon every soul who turns his face toward Him as Saviour. Are you weak? He shall give you strength. Are you ignorant? He shall enlighten you. Are you hurt? He shall heal you. God counts the number of stars; He heals the broken-hearted and binds their wounds (Psalms 147.3-4). Whatever your anxieties and trials may be, open your heart to the Lord. Your spirit will be encouraged to handle. The way will be open for you to free yourself from the embarrassment and distress of your difficulty. The weaker and helpless you are, the more powerful you will become in His Strength. The more heavy the burdens, the more blessed rest when you put them on the Burden Bearer.

Circumstances can break up friendships. But no situation and no distance can separate us from the Saviour. Wherever we are, He is at our right hand to keep, support and cheer us. The love of Christ for His redeemed is greater than the love of a mother for her child. It is our privilege to rest in His love, to say I trust Him because He gave His life for me. Healing the soul is to know that the Son of man hath power on Earth to forgive sins. Many of those who came to Christ for help had caused their own illness. However, He did not refuse to heal. And when His powers (LIGHT) entered their souls, they were convinced of their sin, and many were healed of all spiritual and physical diseases [2].

Still to this day the substance/matter is more important than prayer. Weak faith leads man to the brink thoughts of physician that have already gone hopelessly thoughtless on how to heal.

God left ‘matter’, better said plants. Another question that arises on faith would be: why faith helps you cure diseases faster with plants left on Earth than man-made chemicals? Man tries to be perhaps more than is necessary above all, trying to replace both faith and nature but often fails. Believing is the key to balance and with it comes healing.

One of the most important presentations of divine power is presented in the book of Exodus where faith unites medicine and gives birth to something that people call it miracle.

2. The food of the Hebrews in the dessert

Is it possible for an entire nation to survive in the dessert just with Manna? And the answer, which we have already found out is YES, and not just a day but 40 years. This is present in the Exodus, Talmud, Mishnah, and some vegetarians also confirm it [3-6].
2.1. The ‘Path’ and its historical meaning

Distance between Mount Sinai and Kadesh-Barnea is between 250 and 350 km - for that time, a journey of 11 days (Deuteronomy 1.2). Israelites spent 30 days in Kibroth. It took 40 years for a trip that would normally take 40 days. From a sociological point of view this period is the length of one generation, the estimated time required also by psychoanalysis and regarded as the trans-generational cleansing. This symbolizes the exchange of generations from a generation who disobeyed God to one who obeyed God. The children of Israel have not advanced an inch from Kadesh-Barnea, at the end of their wandering they were back where they started (Numbers 20.1) [1].

The exodus of the Hebrew people out of Egypt was not an easy journey even if it was led by God. Leaving Egypt meant leaving an unpleasant reality, but a known one, and gave birth to a period of chaos. The journey had its trials: absence of food, water and even trust. Common people suffer but by faith can overcome anything. “For everything that was written in the past was written to teach us, so that through the endurance taught in the Scriptures and the encouragement they provide we might have hope.” (Romans 15.4) And “these things happened to them as examples and were written down as warnings for us, on whom the culmination of the ages has come” (1 Corinthians 10.11). Saint Paul details: “All these people were still living by faith when they died. They did not receive the things promised; they only saw them and welcomed them from a distance, admitting that they were foreigners and strangers on Earth.” (Hebrews 11.13) While Saint Peter also mention: “Dear friends, I urge you, as foreigners and exiles, to abstain from sinful desires, which wage war against your soul” (1 Peter 2.11)

In the Hebrew bible, manna is described twice: once in Exodus 16.1-36 with the full narrative surrounding it, and once again in Numbers 11.1-9 as part of a separate narrative [5].

In the description in the Book of Exodus, manna is described as being ‘a fine, flake-like thing’ like the frost on the ground. It is described in the Book of Numbers as arriving with the dew during the night. Exodus adds that manna was comparable to hoarfrost in size, similarly had to be collected before it was melted by the heat of the sun, and was white like coriander seed in colour. Numbers describes it as having the appearance of bdellium, adding that the Israelites ground it and pounded it into cakes, which were then baked, resulting in something that tasted like cakes baked with oil. Exodus states that raw manna tasted like wafers that had been made with honey. The Israelites were instructed to eat only the manna they had gathered for each day. Leftovers of manna stored up for the following day “bred worms and stank”: the exception being the day before the Sabbath (Preparation Day), when twice the amount of manna was gathered, which did not spoiled overnight. “This is what the Lord commanded: ‘Tomorrow is to be a day of rest, a holy Sabbath to the Lord. So bake what you want to bake and boil what you want to boil. Save whatever is left and keep it until morning’. So they saved it until morning, as Moses said was commanded,
and it did not stink or get maggots in it." (Exodus 16.23-24) The biblical Sabbath is on the seventh day of the week which was made for rest and worship of God. It is respected differently in Judaism and a small number of Christians and it is informed similar in many cultures [7].

Some scholars have proposed that manna is cognate with the Egyptian term menna, meaning ‘food’. At the turn of the twentieth century, Arabs of the Sinai Peninsula were selling resin from the tamarisk tree as man es-simma, roughly meaning ‘heavenly manna’. Tamarisk trees (particularly Tamarix gallica) were once comparatively extensive throughout the southern Sinai, and their resin is similar to wax, melts in the sun, is sweet and aromatic (like honey), and has a dirty-yellow colour, fitting somewhat with the Biblical descriptions of manna. However, this resin is mostly composed from sugar, so it would be unlikely to provide sufficient nutrition for a population to survive over long periods of time, and it would be very difficult for it to have been compacted to become cakes [7, 8].

Another variety of manna widely spread is the manna of liches (Lecanora esculenta L.). This source of food is used as a substitute for corn in Asia. The material is light, often drifting in the wind, and has a yellow outer layer with a white interior, like the Biblical description of manna. It requires extra drying, but it taste like honey.

In the Mishnah, manna is treated as a supernatural substance, created during the twilight of the sixth day of Creation, and ensured to be clean, before it arrives, by the sweeping of the ground by a northern wind and subsequent rains. According to classical rabbinical literature, manna was ground in a heavenly mill for the use of the righteous, but some of it was allocated to the wicked and left for them to grind themselves [4].

Until they reached Canaan, the Israelites are implied by some passages in the Bible to have eaten only manna during their desert journey, despite the availability of milk and meat from the livestock with which they travelled, and the references to provisions of fine flour, oil, and meat.

As a natural food substance, manna would produce waste products; but in classical rabbinical literature, as a supernatural substance, it was held that manna produced no waste, resulting in no defecation among the Israelites until several decades later, when the manna had ceased to fall [9]. Modern medical science suggests the lack of defecation over such a long period of time would cause severe bowel problems, especially when other food later began to be consumed again. Classical rabbinical writers say that the Israelites complained about the lack of defecation, and were concerned about potential bowel problems.

Many Christian vegetarians say that God had originally intended man not to eat meat because killing plants would not be sinful: manna, a nonmeat substance, is used to support this theory [7].

According to the Talmud, manna was found near the tents of those with strong belief in God, and far from the tents of those with doubts. Indeed, one classical midrash says that manna was intangible to Gentiles, as it would inevitably slip from their hands. The Midrash Tanhuma holds that manna
melted, formed liquid streams, was drunk by animals, flavoured the animal flesh, and was thus indirectly eaten by Gentiles, this being the only manner that Gentiles could taste manna. Despite these hints of uneven distribution, classical rabbinical literature expresses the view that manna fell in very large quantities each day. It holds that manna was layered out over 2,000 cubits square, between 50 and 60 cubits in height, enough to nourish the Israelites for 2,000 years and to be seen from the palaces of every king in the East and West, probably a metaphorical statement [5, 6].

Exodus states that the Israelites consumed the manna for 40 years, starting from the fifteenth day of the second month (Iyar 15), but then ceased to appear once they had reached a settled land, and once they had reached the borders of Canaan. Form critics attribute this variation to the view that each expression of the manna ceasing derives from different lore. The ‘settled land’ is attributed to the Priestly tradition, and ‘Canaan’s borders’ to the Yahwist tradition, or to a hypothetical later redaction to synchronize the account with that of the Book of Joshua, which states that the manna ceased to appear on the day after the annual Passover festival (Nisan 14), when the Israelites had reached Gilgal. The duration from Iyar 15 to Nisan 14, taken literally, is 40 years less one month [http://en.wikipedia.org/wiki/Manna].

Despite the eventual termination of the supply of manna, Exodus states that a small amount of it survived within an omer-sized pot or jar, which was kept facing the Testimony (possibly, adjacent to the Ark of the Covenant). It indicates that Yahweh instructed this of Moses, who delegated it to Aaron. The Epistle to the Hebrews states that the pot was stored inside the Ark. Classical rabbinical sources believe the pot was of gold; some say it was only there for the generation following Moses, and others that it survived at least until the time of Jeremiah [7].

3. Scientific description of Manna

Manna is the materialized juice obtained by incisions practiced on the trees of Fraxinus ornus variety Rotundifolia (Oleaceae Family) [10].

Today the main places producing manna are marked on the map create by us (Figure 1). As we can see, the most important places are in the Middle Orient and around the Mediterranean Sea.

Fraxinus ornus L. is a tree to 10 m tall, with opposite leaves, imparipenate, composed with 7-9 leaflets, oval ribbed lanceolate. The flowers are produced in dense panicles 10–20 cm long after the new leaves appearance in late spring. Each flower has four slender creamy white petals 5–6 mm long. They are pollinated by insects. The fruit is a slender samara [10].

Fraxinus species originate from Asia Minor and spread across the Mediterranean basin. Manna from trade is exclusively derived from cultures of southern Italy (Sicily, Calabria).

In Bulgaria, the stem bark is used to treat inflammation, arthritis and dysentery.
It is mild laxative, tonic, nutritive. It is usually prescribed for its purgative effect. *Fraxinus ornus* syrup should not be taken with other syrups purgative. For children it is laxative if using 1 part syrup *Fraxinus ornus* to 10 parts water. In some cases it produces flatulence and pain.

In silviculture it is used for the reforestation of poor, arid, limestone and clay zones.

*Fraxinus excelsior* L. is a genus of plants in the family Oleaceae, native to temperate regions of the northern hemisphere. It comprises about 65-75 species of trees and some shrubs [10].

Common species in Europe, widespread in Romania, is *Fraxinus excelsior* L. It reaches a height of 40 meters. Strain presents in the young bark a colour of gray-green, and in the basal a blackish gray colour. Leaves imparipenate are composed of 7-13 leaflets which are sessile. It blooms in April, before the leaves. The flowers have neither calyx nor corolla and the stamens are reduced to two. The same individual flowers are male, female and hermaphrodite. The fruit is winged shaped (samara).

**4. Obtaining Manna**

Harvesting is done on a shaft, having a diameter of 4-6 cm, in which incisions are made transverse to the cambiu. Every day is made a fresh cut at 5-10 cm above the previous. The first incisions are made in the flowering period and continue throughout the summer until the beginning of the rainy season. The following year, the incisions are practiced elsewhere on the tree and so they remain productive over 30 years.
Manna

The juice which flows through incisions is a white to brown liquid with a bluish fluorescence and a bitter taste. In contact with the air, it soon turns into a whitish mass, which strengthens the drain and strain, taking shapes of stalactites, constituting the most valuable pharmaceutical product called Manna cannelata. Manna that leaks through the cracks of branches or insect stings (*Cicada orni*) is forming a spontaneous crust and falls to the ground. It is softer, less crystalline and is considered inferior. The quality of manna depends on the time of harvesting and vegetation. The best quality is obtained if the harvest is made during high heats. It should be avoided practicing incisions during the rainy season, because water could wash the stalks of manna. In trade there are several varieties of Manna.

4.1. Manna cannelata

The most valuable pieces are presented as stalactites (10-15 cm long), hollow on the inside, irregular convex on the opposite side, white to yellowish-white interior surface breaking whitish, granular, porous and crystalline. At first is tastes sweet, then it becomes sour and bitter and smells similar to honey. It is soluble in 6 parts of water to give a hazy solution close to neutral.

4.2. Manna in lacrimis or granis

Debris comes from the hand or hand grooved which flows spontaneously through natural cracks, or insect stings of *Cicada orni*.

4.3. Manna comunis

Consists of blocks formed from small granules or irregular fragments, agglutinated by a soft waxy material, yellow or yellow-brown, mixed with plant debris, pieces of bark, straw, leaves. It has a sweet mucilaginous taste and smells like fermented honey.

The chemical composition of Manna is formed from 75% mannitol, 2-3% glucose, 3% levulose, and 12% mannotetraose-manninotriose. It also contains a heteroside, fraxine with dextrin, resin, etc. Manita is a hexitol spread in plants. Natural Manita is dextrorotatory.

Syrup preparations of manna have in composition Aqua laxative infusion in association with *Sennaia Vienensis*.

5. Interactions

5.1. Digoxin (*Lanoxin*)

Interaction rating of manna with Digoxin is moderate. It is necessary to be cautious with this combination because manna is a laxative and some laxatives
can decrease potassium levels in the organism. Low potassium levels can increase the risk of Digoxin (Lanoxin) side effects [11].

5.2. Warfarin (Coumadin)

Interaction rating of manna with Warfarin is moderate. Precautions are necessary with this combination. Manna can work as a laxative. In some cases manna can cause diarrhea. Diarrhea can increase the effects of Warfarin and increases the risk of bleeding. While using Warfarin, manna should not be consumed in excess [11].

5.3. Water pills (diuretic drugs)

Interaction rating of Manna with diuretic drugs is moderate. We have to be cautious with this combination because manna is a laxative and some laxatives can decrease the potassium level in the body. ‘Water pills’ can also decrease the potassium level in the body. Some ‘water pills’ that can decrease potassium include chlorothiazide (Diuril), chlorthalidone (Thalitone), furosemide (Lasix), hydrochlorothiazide (HCTZ, HydroDiuril, Microzide), and others. Under the name Dulcinol a mixture of manna and common salt has been recommended by Steinberg in 1906 as a sweetening agent in diabetes (dose of 1/2 to 1 teaspoon) [11, 12].

6. Conclusions

Accept Albert Einstein’s quote “a problem is never solved at the same level of thinking that produced it”. The move to another level of thinking, besides quitting the old one, takes a period of transition, of ‘emptiness’.

Enjoy creativity! The period of chaos is most beneficial for creativity; we are finally free from old patterns and can think freely. Now we can imagine the options without remaining in the previous model. It is a unique moment to imagine the future without having to point toward the past experience. When energy and spirituality balance the problems will solve themselves even if health problems that we suffer today are caused by our inability to control the life we desire. Learn to fly! Periods of chaos remind us, more subtle or brutal, how little we can control ourselves! Thus, instead of trying to hold the ‘chains’ of our lives, we have to learn to fly and be in harmony with the Divine.

Manna was a real help for transiting such a hard period. We similarly consider that there are hard moments in one’s life, such as a disease (body suffering) or periods when people use drugs (the suffering of the conscience) where manna is considered a treatment. Probably not coincidental at all, exactly in the area of the main Manna producer, Italy, this vegetal product is used now like a real ‘food’ for diuretic purpose but also to replace cocaine in the so-called ‘cutting cocaine’ process. In other words, Manna, having the same aspect
as the drug known as cocaine, but a bigger molecular weight than the later, it is often used for ‘diluting’ the drug in order to slowly reduce the doses.

Hermes Trismegistus in the Emerald Tablets (Tabula Smaragdina) affirms: ”That which is above is from that which is below, and that which is below is from that which is above, working the miracles of one as all things were from one. And as all things have been and arose from one by the mediation of one (God): so all things have their birth from this one thing by adaptation. The Father of all perfection in the whole world is here.” Thus we can argue that faith and Medicine work miracles together. We call this concept ‘clerically healing’.

Acknowledgement

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References