

The Eleusinian Mysteries: microbes, enlightenment and spirituality

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Sanctuary of Demeter

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Since before the seventh century B.C. and for more than 1000 years, rites known as *mysteries* were celebrated in Eleusis, a Greek town located twenty kilometers northwest of Athens. They were called mysteries because the most important ceremony took place in the most secret of secrets, since the participants swore not to reveal anything of what they experienced during the celebration. What happened inside that temple and during the rite will always remain in the mist of the occult, although some moments and secrets of that ceremony have been traced.

In the mysteries of Eleusis, the ancient Greeks commemorated an episode in the life of Demeter, goddess of nature and cereals. Her daughter Persephone had been kidnapped by Hades, the patron god of the underworld, and Demeter was looking for her day and night for a long time. Finally, she was warned in Eleusis that her daughter was living with Hades on the other side of the Styx lagoon. The mother goddess went there, accessing the world of the dead through one of the caves that opened to the outside of the earth.

When Demeter found her daughter, she confronted Hades for her custody and it was Zeus who decided that the young girl should stay six months with her new husband, Hades, and six months with her mother. Thus, in autumn and winter the mother goddess of nature and cereals mourned the absence of her daughter, which caused the cold, the absence of vegetation

and crops. In turn, she showed her joy when she received Persephone at home and made the fruits of the earth and plants bloom, spring and summer.

A consequence of this joy was also the foundation of some rites, the mysteries of Eleusis, that would serve to remember the meeting of mother and daughter and the return of Persephone to the earth, the fertility and the rebirth of the fields. Soon its meaning also served to celebrate the rebirth of the human being in another better life after death.



Persephone and Demeter relief,
5th-century BC,
from the Acropolis Museum,
Image by Pepa Antón

The ancient Greeks enjoyed the mysteries of Eleusis at three different times, approximately in the months of September or October: first, the initiates began the rites with the sacrifice of a pig in the agora of Athens; the next day, on the way to Eleusis and in a procession in which hundreds of people participated, a purifying bath took place on the nearby beaches; and finally, once in the sacred precinct of that city, the last rite of initiation began, celebrated in the same sanctuary, specifically in the temple called Telesterion.

Those initiated in the mysteries awaited with faith for this last ceremony, a specific rite of salvation that would transport them to paradise once dead. After issuing the corresponding password, the initiate was admitted to the liturgy. From that moment on, the rituals began. From the preserved texts, it can be deduced that the initiates carried out a symbolic search in the dark for the goddess Persephone, guided by the blows emitted by the priest with a gong, until they finally succeeded in discovering her.

What happened next is more unknown to all of us because it is difficult to demonstrate, but it seems to highlight an element above the others, *the light*. The fact of being able to see the light constituted the culminating moment of the ceremony and was associated precisely with the vision of the world of salvation that awaited the arrival of those who had behaved righteously in life and had participated correctly in the rite. It supposed, in short, a trance from the mortal life, in constant search, to the salvation in the hereafter of those who had led a pious life and who experienced, with the fulfillment of the rites, the vision of the sun, of the light.

The experience was incommunicable, a mystical vision. Research strongly suggests that, to achieve this illumination, a particular drink, the sacred *kykeon*, containing barley, mixed with mint and water, was drunk beforehand. It remains a mystery how the chief priests of Eleusis, the hierophants, prepared this potion so that it would produce the desired effects.

However, although barley was the main ingredient, it was not the cause of the effects of the *kykeon*. In fact, the barley was contaminated with the fungus *Claviceps purpurea*. This fungus, known as ergot, parasitizes rye and other grasses. In humans and animals that ingest contaminated grain it causes the disease known as ergotism, which in the Middle Ages was known as St. Anthony's Fire. Symptoms of the disease can include gangrene, hallucinations, nervous spasms, abortion, convulsions and even death. It is believed that the widespread accusations of witchcraft that occurred in the town of Salem and other New England communities in the late 17th century, which had terrible consequences for those involved, were actually due to outbreaks of ergotism.



Hordeum vulgare (barley) with *Claviceps purpurea*

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The symptoms of ergotism are caused by toxins, ergot alkaloids, which are produced by the fungus and which, in the right dosage, also have pharmacological activities, in yet another example of how natural "poisons" can be harnessed to provide beneficial pharmacological effects. One of these alkaloids is a precursor of lysergic acid diethylamide or **LSD**, one of the most potent hallucinogenic substances known. The impact of ergot alkaloids derived from lysergic acid on humanity has ranged from their role as crop contaminants to their use in synthesizing drugs for the treatment of dementia, migraine and other disorders.

In the case of Eleusis, these effects were used to facilitate enlightenment, in an example of how microbiology can impact different aspects of human nature such as, in this case, spirituality.