Homer's "Odyssey", one of the oldest works of Western literature, recounts the adventures of the Greek hero Odysseus during his ten-year journey home from the Trojan War.

Though some parts may be based on real events, the encounters with strange monsters, terrifying giants and powerful magicians are considered to be complete fiction.
But might there be more to these myths than meets the eye?
Let's look at one famous episode from the poem.

In the midst of their long voyage, Odysseus and his crew find themselves on the mysterious island of Aeaea. Starving and exhausted, some of the men stumble upon a palatial home where a stunning woman welcomes them inside for a sumptuous feast.

Of course, this all turns out to be too good to be true. The woman, in fact, is the nefarious sorceress Circe, and as soon as the soldiers have eaten their fill at her table, she turns them all into animals with a wave of her wand.

Fortunately, one of the men escapes, finds Odysseus and tells him of the crew's plight.
But as Odysseus rushes to save his men, he meets the messenger god, Hermes, who advises him to first consume a magical herb. Odysseus follows this advice, and when he finally encounters Circe, her spells have no effect on him, allowing him to defeat her and rescue his crew.

Naturally, this story of witchcraft and animal transformations was dismissed as nothing more than imagination for centuries. But in recent years, the many mentions of herbs and drugs throughout the passage have piqued the interest of scientists, leading some to suggest the myths might have been fictional expressions of real experiences.

The earliest versions of Homer's text say that Circe mixed baneful drugs into the food such that the crew might utterly forget their native land. As it happens, one of the plants growing in the Mediterranean region is an innocent sounding herb known as Jimson weed, whose effects include pronounced amnesia. The plant is also loaded with compounds that disrupt the vital neurotransmitter called acetylcholine. Such disruption can cause vivid hallucinations, bizarre behaviors, and general difficulty distinguishing fantasy from reality, just the sorts of things which might make people believe they've been turned into animals, which also suggests that Circe was no sorceress, but in fact a chemist who knew how to use local plants to great effect.

But Jimson weed is only half the story. Unlike a lot of material in the Odyssey, the text about the herb that Hermes gives to Odysseus is unusually specific. Called moly by the gods, it's described as being found in a forest glen, black at the root and with a flower as white as milk. Like the rest of the Circe episode, moly was dismissed as fictional invention for centuries.

But in 1951, Russian pharmacologist Mikhail Mashkovsky discovered that villagers in the Ural Mountains used a plant with a milk-white flower and a black root to stave off paralysis in children suffering from polio.

The plant, called snowdrop, turned out to contain a compound called galantamine that prevented the disruption of the neurotransmitter acetylcholine, making it effective in treating not only polio but other disease, such as Alzheimer's. At the 12th World Congress of Neurology, Doctors Andreas Plaitakis and Roger Duvoisin first proposed that snowdrop was, in fact, the plant Hermes gave to Odysseus.

Although there is not much direct evidence that people in Homer's day would have known about its anti-hallucinatory effects, we do have a passage from 4th century Greek writer Theophrastus stating that moly is used as an antidote against poisons.

So, does this all mean that Odysseus, Circe, and other characters in the Odyssey were real? Not necessarily. But it does suggest that ancient stories may have more elements of truth to them than we previously thought. And as we learn more about the world around us, we may uncover some of the same knowledge hidden within the myths and legends of ages passed.